

The Systems Change Lab (SCL): Accelerating Transformational Change Needed to Safeguard the Global Commons for All

Part I: Project Information

GEF ID 10923

Project Type MSP

Type of Trust Fund GET

CBIT/NGI CBIT No NGI No

Project Title

The Systems Change Lab (SCL): Accelerating Transformational Change Needed to Safeguard the Global Commons for All

Countries Global

Agency(ies) CI

Other Executing Partner(s) World Resources Institute (WRI)

Executing Partner Type Others

GEF Focal Area Multi Focal Area

Taxonomy

Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Demonstrate innovative approache, Stakeholders, Capacity, Knowledge and Research, Focal Areas, Biodiversity, Mainstreaming, Fisheries, Agriculture and agrobiodiversity, Forestry - Including HCVF and REDD+, Climate Change, Climate Change Mitigation, Land Degradation, Sustainable Land Management, Integrated and Cross-sectoral approach, Improved Soil and Water Management Techniques, Sustainable Forest, Sustainable Agriculture, Restoration and Rehabilitation of Degraded Lands, Land Degradation Neutrality, Beneficiaries, Communications, Behavior change, Awareness Raising, Education, Private Sector, Financial intermediaries and market facilitators, Capital providers, Large corporations, Type of Engagement, Information Dissemination, Partnership, Consultation, Participation, Civil Society, Non-Governmental Organization, Academia, Gender Equality, Gender Mainstreaming, Gendersensitive indicators, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Knowledge Generation and Exchange, Capacity Development, Integrated Programs, Sustainable Cities, Buildings, Municipal waste management, Energy efficiency, Urban Resilience, Transport and Mobility, Food Systems, Land Use and Restoration, Sustainable Food Systems, Sustainable Commodity Production, Landscape Restoration, Food Value Chains, Enabling Activities, Knowledge Generation, Learning, Theory of change, Indicators to measure change, Knowledge Exchange, Innovation, Targeted Research

Sector Mixed & Others

Rio Markers Climate Change Mitigation Climate Change Mitigation 1

Climate Change Adaptation Climate Change Adaptation 0

Submission Date 2/14/2022

Expected Implementation Start 4/1/2022

Expected Completion Date 3/31/2024

Duration 24In Months

Agency Fee(\$) 180,000.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	Mainstream biodiversity across sectors, as well as landscapes and seascapes, through biodiversity mainstreaming in priority sectors	GET	750,000.00	1,473,925.00
CCM-3-8	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through enabling activities	GET	250,000.00	491,308.00
LD-2-5	Create enabling environments to support scaling up and mainstreaming of sustainable land management (SLM) and land degradation neutrality (LDN)	GET	1,000,000.00	1,965,234.00

Total Project Cost(\$) 2,000,000.00 3,930,467.00

B. Project description summary

Project Objective

To help enable decision-makers1 to accelerate the systemwide transformations2 needed to safeguard the global commons for all. 1Decision-makers include policymakers across all sectors and at all levels of decision-making; funders and investors channelling climate and nature-related finance through bilateral aid agencies, multilateral institutions, private philanthropies, and impact investing firms; leaders across the private sector; and those at the helm of international non-governmental organizations, civil society movements, and United Nations agencies. 2 Limiting global temperature rise to 1.5?C and halting biodiversity loss will require transformations across socio-technical systems (power, industry, transport, the built environment, and sustainable production and consumption) and social-ecological systems (food, terrestrial ecosystem management, freshwater ecosystem management, and marine ecosystem will also be required, such as how we will finance the transition to a net-zero GHG emissions and nature-positive future, measure economic well-being, distribute the costs and benefits of these transformations, improve social equity and inclusion, and govern the global commons.

Project Compon	Financ ing	Expected Outcomes	Expected Outputs	Tru st	GEF Project	Confirme d Co-
ent	Туре		-	Fu nd	Financin	Financin
				nu	g(\$)	g(\$)

Project Compon ent	Financ ing Type	Expected Outcomes	Expected Outputs	Tru st Fu nd	GEF Project Financin g(\$)	Confirme d Co- Financin g(\$)
Compone nt 1:	Technic al	Outcome 1.1	Output 1.1.1	GE T	788,690.0 0	1,392,670 .00
Establishi	Assistan	A dynamic, user-centered,				
ng and	ce	and open-source data	A			
maintaini ng the		platform is formally launched and operational to monitor	comprehensi ve, peer-			
SCL?s		systems change globally.	reviewed list			
monitorin		5 6 6 5	of key			
g			indicators			
platform.		T 1 1 1 1 1 1	that measure			
		Indicator 1.1.1	progress towards			
		Number of dynamic, user-	2030 and			
		centered, and open-source	2050 targets			
		data platforms to monitor	aligned with			
		systems change globally that	the best available			
		are designed, launched, and operational.	science, the			
		operational.	underlying			
		Indicator 1.1.2	drivers of			
			systems			
		Number of decision-	change with measurable			
		makers[1] visiting the data platform during the project	indicators, a			
		period (disaggregated by	nd related			
		gender).	datasets for			
			each indicator.			
		Target 1.1.1				
		One dynamic, user-centered,	Indicator			
		and open-source data	1.1.1			
		platform to monitor systems	Number of			
		change globally is designed, launched, and operational.	2030 and			
		, <u>1</u>	2050 targets,			
			indicators that measure			
		Target 1 1 2	progress			
		Target 1.1.2	towards			
		15,000 decision-makers	these			
		visiting the data platform	targets,			
		during the project period,	underlying drivers of			
		with 5,000 in the first year and 10,000 in the second year	systems			
		(at least 50% women).	change with			
		× /	measurable			
			indicators, and related			
		Outcome 1.2: Decision-	datasets			
		makers are informed by the	identified			
		SCL?s assessment reports,	and peer-			
		which will provide a	reviewed by at least three			
		complete, annual snapshot of	experts			

Project Compon ent	Financ ing Type	Expected Outcomes	Expected Outputs	Tru st Fu nd	GEF Project Financin g(\$)	Confirme d Co- Financin g(\$)
Compone nt 2: Co- creating the SCL?s knowledg e products to help improve decision- makers? understan ding of the key ingredient s of systems change		Outcome 2.1 Decision-makers are informed by compelling case studies of transformational change and an evidence base of the most critical drivers of such transitions across systems. Indicator 2.1.1 Number of decision-makers informed by each of the SCL?s knowledge products during the project period (disaggregated by gender).	Output 2.1.1 Partnerships established with leading technical experts to co-conduct research on the key drivers of and contexts for systems change.	GE T	175,993.0 0	725,991.0
		Indicator 2.1.2 Number of high-level decision-makers (e.g., at the CEO or ministerial level) who include findings from the SCL?s knowledge products in their engagements, speeches, or outreach efforts (e.g., op- eds, social media, stakeholder updates, speeches, etc.) each year (disaggregated by gender and system). Target 2.1.1 At least 2,000 decision- makers informed by each of the SCL?s knowledge products during the project period (at least 50% women).[1]	Number of partnerships established with leading technical experts during the project period.Targe t 2.1.1 At least two partnerships with leading technical experts established during the project period.			
		Target 2.1.2 At least five high-level decision-makers (e.g., at the CEO or ministerial level) include findings from the SCL?s knowledge products in their appropriate spacebox	Output 2.1.2 Knowledge products published that analyze drivers of systems change to			

Project Compon ent	Financ ing Type	Expected Outcomes	Expected Outputs	Tru st Fu nd	GEF Project Financin g(\$)	Confirme d Co- Financin g(\$)
Compone nt 3: Mobilizin g action for systems change, informed by the SCL?s data and knowledg e products		Outcome 3.1 Decision-makers are equipped with the SCL?s data, analysis, and/or targeted support to sustain and promote[1] systems change for those transformations[2] that are heading in the right direction. Indicator 3.1.1 Number of decision-makers who download data from the SCL?s platform during the project period (disaggregated by gender).	Output 3.1.1 Targeted, facilitated dialogues among decision- makers focused on driving transformati onal change in select systems held.	GE T	753,499.0 0	1,345,091 .00
		by gender).	Indicator 3.1.1			
		Indicator 3.1.2 Number of decision-makers surveyed who have responded saying that the data, analysis, and/or targeted insights from the SCL has ?frequently? or ?very frequently? helped them promote or sustain systems change during the	Number of targeted, facilitated dialogues held during project period.			
		project period (disaggregated by gender and system).	Target 3.1.1 At least three			
		Target 3.1.1 1,500 decision-makers download data from the SCL?s platform during the project period, with 500 downloading data in the first	targeted, facilitated dialogues held during the project period.			
		year and 1,000 downloading data in the second year (at least 50% women).	Output 3.1.2Targete d insights provided to decision- makers			
		Target 3.1.2 At least 100 decision-makers surveyed who have responded saying that the data, analysis, and/or targeted insights from	makers advancing or campaigning for systems change.			

Project Compon ent	Financ ing Type	Expected Outcomes	Expected Outputs	Tru st Fu nd	GEF Project Financin g(\$)	Confirme d Co- Financin g(\$)
Monitorin g & Evaluatio n (M&E)				GE T	100,000.0 0	79,382.00

Sub Total (\$)	1,818,182	3,543,134
	.00	.00

Project Management Cost (PMC)

GET	181,818.00	387,333.00
Sub Total(\$)	181,818.00	387,333.00
Total Project Cost(\$)	2,000,000.00	3,930,467.00

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co- financing	Name of Co- financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Private Sector	Bezos Earth Fund	Grant	Investment mobilized	1,000,000.00
Private Sector	Bezos Earth Fund	In-kind	Recurrent expenditures	1,100,267.00
Civil Society Organization	World Resources Institute	Grant	Investment mobilized	1,500,000.00
GEF Agency	Conservation International	In-kind	Recurrent expenditures	330,200.00

Total Co-Financing(\$) 3,930,467.00

Describe how any "Investment Mobilized" was identified

Funding from the Bezos Earth Fund and World Resources Institute are considered ?Investment Mobilized? as the sources of funding are not linked to recurring expenditures from any of the co-financiers and are distinct grants, which have a specific scope of work for the project and a specific time-frame.

Agen cy	Tru st Fun d	Count ry	Focal Area	Programmi ng of Funds	Amount(\$)	Fee(\$)	Total(\$)
CI	GET	Global	Biodiversi ty	BD Global/Regio nal Set-Aside	750,000	67,500	817,500.0 0
CI	GET	Global	Climate Change	CC Global/Regio nal Set-Aside	250,000	22,500	272,500.0 0
CI	GET	Global	Land Degradati on	LD Global/Regio nal Set-Aside	1,000,000	90,000	1,090,000. 00
			Total G	rant Resources(\$)	2,000,000. 00	180,000. 00	2,180,000. 00

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No** Includes reflow to GEF? **No** F. Project Preparation Grant (PPG) PPG Required **true**

PPG Amount (\$) 47,500

PPG Agency Fee (\$) 4,275

Agenc y	Trus t Fun d	Countr y	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
CI	GET	Global	Climate Change	CC Global/Regiona l Set-Aside	15,833	1,425	17,258.0 0
CI	GET	Global	Biodiversit y	BD Global/Regiona l Set-Aside	15,833	1,425	17,258.0 0
CI	GET	Global	Land Degradatio n	LD Global/Regiona l Set-Aside	15,834	1,425	17,259.0 0
			Total	Project Costs(\$)	47,500.00	4,275.0 0	51,775.0 0

Core Indicators

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		7,500		
Male		7,500		
Total	0	15000	0	0

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

In partnership with leading data providers and technical experts, the Systems Change Lab (SCL) aims to develop a centralized tracking platform where transformations across systems are monitored on a regular basis, providing the first complete picture of progress towards necessary transitions side-byside, informing policy and practice. This platform will also track changes occurring in the underlying drivers of systems changes ? those forces that have historically enabled transformational change, including innovations in technologies, practices, and approaches, supportive policies, strong institutions, shifts in social norms, and leadership from critical change agents. For each transformation (e.g., protect terrestrial ecosystems), the SCL will identify at least five key drivers of change, with measurable indicators (e.g., number of countries that have committed to halting deforestation, total amount of finance allocated to forest conservation, percent of indigenous communities? land with tenure security, etc.). Throughout this proposal, we refer to ?drivers? of systems change as ?enablers? or ?levers? of change; all describe conditions that create an underlying enabling environment for systems change.

As a dynamic, virtual situation room for systems change, the SCL will help decision-makers around the world monitor, learn from, and accelerate transformations across nearly all major socio-technical, social-ecological, political, social, and economic systems to address the following global environmental problems:

1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

Global Environmental Problem #1: Climate Change

Worldwide, rising GHG emissions from human activities have caused a 1.1?C of warming above preindustrial temperatures. This increase in global temperature, as well as other changes in the Earth?s climate system, are unprecedented in recent history ? sea levels are rising faster than they have during any prior century for the last 3,000 years, summer Artic ice coverage is smaller than at any time in the last 1,000 years, and ocean acidification levels are at their highest in 26,000 years. No region of the world will be left untouched by the impacts of climate change, and in many countries, vulnerable communities are already grappling with stronger tropical cyclones, more frequent and severe droughts, and devastating floods. According to the Intergovernmental Panel on Climate Change (IPCC), these impacts will only intensify as the global temperature climbs. At 1.5?C of warming, for example, sea levels will rise by 0.4 meters, up to 90% of coral reefs will be lost, marine fisheries will decline by 1.5 million tons, and 14% of the global population will be exposed to severe heat at least once every five years. Another 0.5?C of warming will cause an additional 0.06 meters of sea level rise, global losses of coral reefs to reach 99%, declines in the ocean?s fish stocks to double, and the percentage of people exposed to severe heat worldwide to nearly triple. And losses across plant, vertebrate, and insect species will increase two to three times. Yet even with full implementation of countries? new or updated commitments under the Paris Agreement, as well as announced mitigation pledges for 2030, the world is heading toward at least 2.7?C of warming by the end of the century.

The IPCC?s Sixth Assessment Report shows that limiting global temperature rise to 1.5?C by the end of the century is still possible. But halving GHG emissions by 2030 and decarbonizing the economy by 2050 will require rapid, far-reaching transformations across power generation, the built environment, industry, transportation, land-use, and agriculture, as well as the immediate scale-up of technological carbon removal. In the absence of such systems change, the climate crisis will likely continue unabated, with potential warming reaching between 3.3?C and 5.7?C above pre-industrial levels by the end of the century should the world take a carbon-intensive pathway.

Global Environmental Problem #2: Land Degradation

Human activities directly impact over 70% of Earth?s ice-free land, with more than a quarter of the planet?s land now degraded. Driven by land-use changes, land-use intensification, and climate change, land degradation impacts the well-being of more than 3.2 billion people. It also spurs biodiversity losses, releases GHG emissions, limits terrestrial ecosystems? carbon uptake, and threatens food security around the world. Since 1998, productivity declines across natural and managed ecosystems have occurred on one-fifth of the planet?s vegetated surface. Today, soil erosion on agricultural lands, specifically, outpaces soil formation by a factor of up to 20 on untilled land and 100 on conventionally tilled fields. These cropland soils under conventional agriculture have become a source of GHG emissions, losing 20-60% of their organic carbon before cultivation.

Land degradation is particularly acute across the world?s drylands. At 1.5?C of warming under a middle-of-the-road scenario (i.e., Shared Socioeconomic Pathway 2), for example, the dryland population vulnerable to drought intensity, habitat degradation, and water stress will reach 178 million people by 2050, a number that will rise to 220 million people at 2?C warming and to 277 million people at 3?C warming. Although many countries have made commitments to halt land degradation and restore degraded landscapes, progress remains slow, and actions undertaken to achieve these

pledges have largely proven insufficient. Urgent, transformational change across multiple systems is now needed to combat these trends and reduce the many, competing pressures on land globally.

Global Environmental Problem #3: Biodiversity Loss

Globally, biodiversity is declining at a rate unprecedented in human history. Approximately 1 million animal and plant species will face extinction, many within the coming decades, should business continue as usual. For example, native species? average abundance across most major terrestrial habitats has dropped at least 20% since 1900, and more than a third of all marine mammals are now classified as threatened. Some of the world?s most biodiverse ecosystems are also disappearing. Annual losses of humid tropical primary forests, for example, increased 12% from 2019 to 2020, while scientists estimate that two-thirds of habitats across the Ocean have now been significantly impacted.

Yet despite commitments to safeguard nature, for example by expanding protected terrestrial and marine areas, biodiversity losses are increasing, driven largely by climate change, pollution, land-use change, direct exploitation, and invasive, alien species. As species and ecosystems disappear, so too will many of the services that sustain human society, from provisioning food and purifying water to regulating the climate and pollinating crops. A step change in action, then, is needed to protect, restore, and sustainably manage these life-supporting ecosystems.

These three environmental problems ? climate change, land degradation, and biodiversity loss ?are this project?s focus. Addressing them, however, will require the SCL to also concentrate on a range of related, cross-cutting challenges (see Annex N for more information). Hazardous chemicals and pollution, for example, are relevant across many of the Lab?s focal systems. For example, global chemical production capacity has nearly doubled in the last two decades, from 1.2 billion to 2.3 tonnes,^[1] with hazardous chemicals being used in industry, manufactured goods, and agriculture, directly impacting human health, biodiversity, land degradation, and climate change. Transformations across sustainable production and consumption, forests and land management, freshwater management, and ocean management seek to address this problem.

The latest science is clear: transformation across nearly all major systems is now required to reverse these trends, and all must occur simultaneously within the coming decades to overcome the deep-seated path dependencies and carbon lock-in common to these systems. This is explored in more detail in the root causes below.

Root Cause #1: Current path dependencies and carbon lock-in

Carbon-intensive systems, as well as development trajectories across systems, are sustained and bolstered through path-dependent processes ? ?those that develop inertial resistance to large-scale

systematic shifts, with resistance to change driven by favorable initial social and economic conditions and the momentum of increasing returns to scale.? These systems are entrenched within institutions, infrastructure and technology, and consumer behaviors that favor the status quo and act together in mutually reinforcing ways to constrain change (see more detail below on each type of lock-in). The world?s current energy system, for example, encompasses the largest infrastructure network ever constructed, which includes trillions of dollars of assets and relies on technological innovations that span the last two centuries. A similarly complex, comprehensive set of policies, institutions, and consumer preferences have co-evolved to support its existence, reflecting powerful vested interests in an energy system that still relies on fossil fuels. This particular form of path dependency, which has led to increasing atmospheric concentrations of CO2, is commonly referred to as ?carbon lock-in? and impedes the rapid, far-reaching transitions needed to avoid the worst climate impacts (Environmental Problem 1).

Path dependencies and lock-ins can also impede the transformations needed to halt biodiversity loss and protect nature. The dominant model of agriculture in high-income countries, for example, is also supported by extensive infrastructure, technologies, institutions, and consumer preferences. More specifically, it involves large-scale commodity monoculture, high inputs of synthetic fertilizers and pesticides, long supply chains, waste, and industrial production. And vested interested in maintaining this status quo exist at every point along the supply chain, despite evidence from the scientific community that conventional large-scale agriculture and its associated land-use change is a primary driver of biodiversity loss and land degradation (Environmental Problem 2 & 3).

This challenge of path dependency is among the most fundamental root causes of the environmental problems identified above and can be broken down further into the root causes outlined below.

Root Cause #1a: Infrastructural and technological lock-in.

This includes existing physical infrastructure and technologies that lock societies onto emissionsintensive, ecologically harmful pathways. Typically, our current systems (e.g., our fossil-fuel-reliant energy system) depend on technologies and complementary infrastructure (e.g., pipelines, refineries, and gasoline stations) that came with high up-front costs, but once installed and constructed, are relatively inexpensive to maintain over their lifetimes. This leads to sunken assets and, therefore, shifting away from this network of existing technologies and infrastructure entails significant, upfront financial costs that, in turn, create a situation in which incumbents resist displacement by low-carbon and nature-positive alternatives.

Root Cause #1b: Institutional and political lock-in.

Vested interests and existing institutions, which often co-evolve alongside technological innovation and infrastructure development, also resist change and reinforce the status quo that favors an emissionsand resource-intensive trajectory. These actors seek to establish and expand policies and governance structures that perpetuate their own interests and enhance their power. And once established, they can wield new regulations, policies, and institutions to block the formation of alternative systems. For example, the political power of the fossil fuels sector, including its lobbying efforts for subsidies, has helped to perpetuate global dependence on this energy source and impede the transition to clean energy. Similarly, this has occurred in the land-use and agriculture sectors, where policies (e.g., the European Common Agricultural Policy) have created a lock-in that hampers major policy shifts to different, often more sustainable, production trajectories.

Root Cause #1c: Behavioral lock-in.

Individual choice (e.g., transportation choices, product preferences, or electricity usage), as well as social structures (e.g., cultural norms and social processes), influence consumption patterns and behavior. As such, they impact adoption of new technologies, acceptance of policies, and willingness to embrace changes in lifestyle and consumptions patterns that are required address today?s climate and nature crises. Social and cultural norms can have a direct impact in determining what and how much a person will eat. In social settings, people are influenced by how much others will consumer around them and what food types they are eating. This can directly have an impact on food loss, waste, and diets. In industrialized countries, for example, society has become accustomed to unchecked consumption of natural resources and materials, with business models designed to increase consumption (e.g., planned obsolescence). Consumers expect affordability and convenience, often at the expense of the natural environment. Environmental challenges such as climate change, biodiversity loss and land degradation are challenging to comprehend, as they are abstract, large-scale, distant, and often impersonal. Therefore, awareness of these issues does not always shift human behavior away from old habits that more tangible and immediate problems might invoke.

Additional barriers tackling some of the root causes listed above, which the SCL can help decisionmakers overcome, are provided below.

Barriers

Decision-makers across government, civil society, and the private sector have largely failed to spur transformational changes required to safeguard the global commons. Key barriers to action include:

Barrier #1: Decision-makers lack access to a single, complete picture of progress made toward accelerating the systemwide transformations needed to safeguard the global commons (e.g., via a data platform or comprehensive annual report).

Although efforts to track some transformations exist in isolation, there is no ?one-stop shop,? where decision-makers can see which transformations are accelerating, stalling, or heading in the wrong direction entirely. Access to the high-quality, accurate, and complete data that is needed to create this snapshot of progress is also limited. Data are often dispersed widely across different platforms and papers, hidden behind paywalls, or published in highly technical formats that many decision-makers find difficult to understand. Similarly, the data needed to understand critical roadblocks, actions by governments, companies, and other actors, and effective policies are also not readily available. The *State of Climate Action 2021*, for example, found that nearly a quarter of the indicators assessed lack sufficient, publicly accessible data with major gaps across land use, agriculture, and the built environment systems. But decision-makers urgently need this information to prioritize where to invest their limited resources, identify the most effective levers of change to pull to destabilize emissions- and resource-intensive path dependency, and assess the impact of their collective efforts over time.

Tied to this barrier, leaders and decision-makers are often not held accountable for the progress or lack of progress linked to the numerous commitments and pledges that have been made relating to action around climate and nature. There is a lack of data, platforms, and reporting that could help to provide a snapshot of whether these commitments are being translated into real world action sufficient to avoid the worst climate impacts and protect nature.

Barrier #2: Lack of understanding the underlying drivers of transformations persists across many systems, limiting decision-makers? capacity to prioritize the most effective interventions and create enabling environments for systems change.

Systems change has often emerged from the convergence of many complex enabling factors (e.g., technological innovations, supportive policies, and leadership from key change agents), and tremendous gains have been made in advancing our understanding of these drivers, particularly in socio-technical systems (e.g., power, industry, and transport). Yet much of this literature is largely inaccessible to decision-makers, and critical knowledge gaps remain across different systems (e.g., social-ecological systems like management of terrestrial, freshwater, and marine ecosystems) and geographies. To make informed decisions and prioritize the most impactful interventions, a set of key questions must be answered. What combination of factors can enable transformational change, and does this portfolio vary across systems and geographies? Are there particular sequences of drivers that are more effective than others? How can these measures come together in ways that destabilize current

feedback loops in incumbent systems, while also establishing new ones that spur durable transformational change? Without this evidence base of effective systems change drivers, decision-makers may struggle to identify the most effective ingredients of systems change and develop evidence-based roadmaps to transform current emissions-intensive, unsustainable systems.

Barrier #3: Limited financial resources, capacity, and expertise hinder decision-makers? capacity to accelerate transformational change to safeguard the global commons, while disjointed efforts dedicated to advancing the same transitions struggle to spur ambitious, effective action.

Environmental ministries, who are key to implementing activities that can spur systems change, are often underfunded, understaffed, and politically weak compared to ministries responsible for other sectors, including natural resource development and energy. Whilst this is most prevalent in developing countries, the performance of developed countries environmental ministries on enforcing and implementing environmental laws is also lacking. Oftentimes, this relative shortage of resources and capacity can result in competing interests and priorities within countries, which can make it challenging to align policies and actions for systems change. In addition, there is a fragmented state of environmental governance and responsibility, with can lead to robust environmental programs in some areas, and no funding or attention to other areas.

On the other side of financing, environmentally harmful subsidies from other ministries further hinder decision-makers? efforts to safeguard the global commons. It is estimated that, on a global scale, at least USD 1.8 trillion a year is spent on subsidies that are harmful to the environment and contribute to climate change, biodiversity loss and land degradation.^[2]

These challenges are not just limited to governments. Non-state actors focused on combatting the climate and nature crises also grapple with limited resources and capacity, as well as struggle to navigate disjointed efforts. On climate action, for example, a large-scale analysis undertaken of different climate strategy documents found that there is a lack of coordination between non-state actors, leading to different approaches and actions being taken. There is a lack of information on ?how initiatives align, scale-up, and form low-carbon pathways?

Relatedly, decision-makers across government, civil society, and the private sector often work in silos (i.e. they do not share information or pool resources/expertise). However, the scale and the nature of the environmental challenges and root causes transcend individual systems, and decision-makers need

opportunities to learn from one another and break out of these silos, as well as targeted support, to accelerate systems change that aligns sectorial policies and institutional priorities within countries.

Barrier #4: For some transformations, incumbents with vested interests in maintaining the status quo lack the political will to spur systems change.

For some transformations that are stalled or heading in the wrong direction, decision-makers across government, civil society, and the private sector may be unwilling to catalyze and sustain systems change. Well-organized, influential incumbents often possess vested interests in the status quo and resist efforts to transform current systems. There are often political and economic interests that could become threatened as a result of the change (see more details on example above on Institutional and Political lock-in). Without dedicated, well-organized coalitions to counterbalance these incumbents and apply pressure on them, efforts to spark systems change can sputter and stall out. Similarly, if coalitions advocating for transformation lack equitable representation across historically marginalized communities, which have often suffered the most from the status quo and often stand the most to gain from systems change, they may struggle to ensure that transitions are durable and that the benefits of such change are equitably distributed.

Barrier	Proposed project response
1. Decision-makers lack access to a single, complete picture of progress made toward accelerating the systemwide transformations needed to safeguard the global commons (e.g., via a data platform or comprehensive annual report).	Outcome 1.1 A dynamic, user-centered, and open-source data platform is formally launched and operational to monitor systems change globally.
	Outcome 1.2 Decision-makers are informed by the SCL?s assessment reports, which will provide a complete, annual snapshot of progress made toward accelerating the systems change needed to safeguard the global commons.

Table 1: Anticipated Barriers and Responses

2. Lack of understanding the underlying drivers of transformations persists across many systems, limiting decision-makers? capacity to prioritize the most effective interventions and create an enabling environment for systems change.	Outcome 2.1 Decision-makers are informed by compelling case studies of transformational change and an evidence base of the most critical drivers of such transitions across systems.
3. Limited financial resources, capacity, and expertise hinder decision-makers? capacity to accelerate transformational change to safeguard the global commons, while disjointed efforts dedicated to advancing the same transitions struggle to spur ambitious, effective action.	Outcome 3.1 Decision-makers are equipped with the SCL?s data, analysis, and/or targeted support to sustain and promote systems change for those transformations that are heading in the right direction.
4. For some transformations, incumbents with vested interests in maintaining the status quo lack the political will to spur systems change.	Outcome 3.2 Decision-makers are organized ? either through the formation of a new coalition or the expansion of an existing coalition ? to mobilize action for transformations that have stalled or are heading in the wrong direction.

2) The baseline scenario and any associated baseline projects

The sectoral context

Calls for rapid, far-reaching transformational change have gained traction among the global climate change community, reflecting an emerging consensus that current efforts have failed to spur deep emissions reductions at the speed and scale required to avoid the worst climate change impacts. The *State of Climate Action 2021* report, for example, found that while numerous countries, cities, and companies have committed to step up mitigation, much greater ambition and action is urgently needed if we are to meet the Paris Agreement?s objective to pursue efforts to limit warming to 1.5?C. In fact, none of the 40 indicators assessed exhibit a recent historical rate of change that is at or above the pace required to achieve a countries 2030 climate targets. Similarly with regards to nature, there is a lack of action. The *Dasgupta Review* illustrates the societal failure to manage our natural capital in a manner that maintains resilience and productivity. And although some progress was made over the last decade, the world failed to fully meet any of the 20 Aichi Biodiversity Targets that governments committed to achieve by 2015 or 2020. ?Transformative changes,? the *IPBES Global Assessment Report* warns, are now required to restore and protect nature.

Whilst there is consensus from the scientific community that transformational change is needed, decision-makers often lack the knowledge, tools, and information to spur durable systems change. The baseline for tracking transformation and mobilizing action across these systems include the following:

Although efforts to track progress made toward some of these transformations exist, critical data gaps remain, and where data does exist, it is often disparate, hidden behind paywalls, or inaccessible.

Whilst some tracking efforts exist, there is no centralized data platform that monitors transformational change across all systems globally that is accessible to decision-makers, nor is there a report that offers an annual snapshot of global progress towards the world?s climate and nature goals as outlined in the Paris Agreement and the Convention on Biological Diversity.

The SCL will focus its tracking efforts on transformations across socio-technical systems (power generation, industry, transport, cities and the built environment, and sustainable production and consumption) and social-ecological systems (food, forest and land management, ocean management, and freshwater management) that the latest science says are now required to avoid the worst climate impacts and protect nature. It will also monitor progress made toward achieving broader transformations across political, economic, and social systems that can enable transitions that are more sectoral in nature and ensure that pathways toward a 1.5?C and nature-positive future are just and equitable. These systems generally align with those that the IPCC and IPBES suggest must transform to address the climate and biodiversity crises, and are also based on a much broader literature review that we conducted for the SCL?s first publication in 2020, ?Safeguarding our Global Commons A Systems Change Lab to Monitor, Learn from, and Advance Transformational Change.? more information on these transformations see Annex N (Major Transformations Required).

Here is a snapshot (although by no means exhaustive) of monitoring efforts that exist across the transformations that the SCL will be working on:

Power Generation

Leading organizations that are tracking progress within this system include the International Energy Agency (IEA), Enerdata, and the International Renewable Energy Agency (IRENA). The IEA offers the most comprehensive, best available data to track progress towards power generation targets. Yet much of its data are behind a paywall. For indicators with data that are freely available for download, datasets are often incomplete (e.g., only global-level data are available for download, although countrylevel data are shown in visualizations) or require manual processing (e.g., full datasets with nationallevel data for all countries and global-level data are not available for a single download, rather decision-makers must manually download the data for each country and then aggregate these data points). Similarly, for some indicators, the IEA only allows decision-makers to download global and national data for free in five-year increments (e.g., 2000, 2005, 2010), rather than the full dataset (e.g., all years between 2000 and 2010). Data provided by Enerdata, a reliable source for global and national datasets focused on power generation, must also be purchased. And although IRENA offers free power generation and capacity datasets to download, they are not as comprehensive as the IEA.

Whilst most indicators for this system are well-understood, critical gaps in tracking progress relating to power storage, efficiency, and access to electricity remain. A 2021 report tracking progress towards Sustainable Development Goal (SDG) 7 (Ensure access to affordable, reliable, sustainable and modern energy for all), for example, concluded that there is a need for methodologies for indicators, common frameworks for surveys, and international databases to help achieve this goal.

Industry

This is focused on tracking efforts of progress in the hard-to-abate industrial sectors. The IEA is also the leading data provider for indicators needed to track progress made toward decarbonizing heavy industry; however, users seeking to access these datasets will encounter the same aforementioned challenges with the IEA?s data. BNEF also provides relevant datasets for tracking progress made in industry, but it similarly requires decision-makers to pay for a subscription to access their data.

Finally, due to the novelty of technological solutions to decarbonize emissions-intensive industries (e.g., green hydrogen), there is relatively little data on their adoption thus far. But while there is a lack of data, the Mission Possible Partnership is a coalition of leaders focused on efforts to decarbonize some of the world?s highest-emitting industries. This partnership has helped to develop quantitative reference point for the hard-to-abate sectors, including heavy industry, through its sector transition strategies.

Transport

Three major data providers for the transport sector are the IEA, the International Council on Clean Transportation (ICCT) and Bloomberg NEF (BNEF). Both the IEA and BNEF require decision-makers to pay for access to their full datasets. BNEF data, specifically, is global and regional in scope, and often extends back to 2015 only, while IEA datasets for some transport sector indicators are only available for particular years (e.g., 2017, 2018, and 2019). Unlike the IEA and BNEF, the ICCT does

not manage an open database but, rather, offers a list of open-source transport datasets and publishes relevant data in its papers, which users must then extract manually for additional analysis.

Cities and the Built Environment

United Nations Environment Programme (UNEP) and the Global Alliance for Buildings and Construction publish annual reports on the outlook of the building and construction sector against net zero GHG emissions targets. Data for some indicators are published annually online through charts, figures, and tables in these reports. But since neither institution publishes their data in an online database, this data must be manually extracted from the reports. And much of the data featured in these reports comes from the IEA, which requires users to seek permission or buy a subscription to download the full datasets.

Finally, across these sources, city-level data appears to be difficult to find on an annual basis. C40 plays a key role in monitoring the progress of cities around the world towards meeting the goals of the Paris Agreement, but its latest monitoring report however acknowledged a lack of city-level emissions data, in particular a lack of Scope 3 emissions data.

Sustainable Production and Consumption

SDG 12 provides a framework with 11 targets and 13 indicators relating to sustainable production and consumption (i.e., the circular economy). The United Nation?s (UN) SDG Tracker does assess progress against these indicators, although they only have data available for six of the 13 indicators. But despite these global efforts, the field of circular economy metrics has not yet reached maturity, with decision-makers across government, civil society, and the private sector still speaking in ?many different languages? when it comes to developing indicators and datasets for sustainable production and consumption. Meaningful, consistent, widely accepted, and accessible indicators do not yet exist, and data limitations remain, according to a 2021 report from the Platform for Accelerating the Circular Economy.

Similarly, while the Ellen MacArthur Foundation and the World Business Council for Sustainable Development (WBCSD) have developed indicators to enable companies to assess circularity and the uptake of circular business models, this information is not publicly available. Data and data protocols needed to monitor the uptake of circular economy business models, including those that contribute to the sharing economy, are not readily available.

Data focused on the drivers of consumption, including population growth, technological innovation, and income (a proxy indicator for affluence), do exist but are often dispersed.

Food

A leading data provider for the food system are the The Food and Agriculture Organization (FAO), which publishes a wide range of datasets related to agricultural production across croplands and pastures. For demand-side shifts, FAO also developed the Food Loss Index, while UNEP recently published the world?s first Food Waste Index. The first report from the Food Waste Index, specifically, uncovered more relevant data relating to food waste than expected, with 152 food waste data points identified in 54 countries. However, there are challenges relating to tracking this information at a national level (although there are disparate national initiatives such as the Waste & Resources Action Programme in the United Kingdom) as there is an absence of a standardized methodology.

With regards to shifting diets, another critical demand-side shift, there are no centralized data collection systems and many methodological challenges. For example, household surveys can vary from country to country, with a range of gaps and inaccuracies, and food suppliers and retailers are often wary to share their data on consumer preferences with researchers. Intermediary indicators of progress, such as widespread awareness of the need to shift diets, are being tracked, with WRI playing a key role through initiatives such as the Better Buying Lab and the Cool Food Pledge.

Forests and Land Management

Global Forest Watch from WRI is among the most comprehensive, credible open-source data platform for forests, showcasing data on protected areas, tree cover loss, and tree cover loss by dominant driver (e.g., commodity-driven deforestation, shifting agriculture, forestry, wildfire, and urbanization), and hot spots of primary forest loss, as well as primary forests, intact forest landscapes, mangrove forests, and land cover. FAO is also a leading provider of forestry data.

UNEP World Conservation Monitoring Centre (UNEP-WCMC) via the UN Biodiversity Lab, also provides decision-makers with access to over 400 spatial data layers across biodiversity, climate change, and development. Several NGOs including Conservation International, WWF, The Nature Conservancy and Birdlife International have developed datasets relating to protected areas, biodiversity hotpots and progress (or lack of) towards the CBD Aichi Targets. The New York Declaration of Forests is also a major reference point for global forest action by governments, companies, and financial actors. Yet despite the array of initiatives and organizations tracking commitments and progress towards eliminating deforestation and promoting sustainable forest management, there is no definitive dataset that can be used to track restoration (although gross tree cover gain is a relatively good proxy for forests). Additionally, a comprehensive global assessment of supply chain commitments? impact on deforestation rates does not yet exist. This would require new datasets that measure leakage (e.g., displacing deforestation in one region to another), track implementation of companies? commitments, monitor the portion of trade covered by supply chain pledges for key commodities, and map other drivers of deforestation.

With regards to land degradation, there is no single indicator, meaning it is difficult to quantify the global extent, rate, and intensity of land degradation. In the absence of this indicator, the UNCCD has developed three sub-indicators for land degradation neutrality, including: land productivity, land cover, and soil organic carbon. FAO has launched an open-data platform, SEPAL, which uses Landsat and Sentinel data to estimate and monitor these indicators at a sub-national scale. The UNCCD also publishes regular information on countries that have committed to setting voluntary LDN targets. In addition, the Global Land Outlook is produced every 2 years, alongside a series of working papers and knowledge products for decision-makers and policymakers that is focused on providing an overview of how land is used now and in future scenarios.

The International Union for Conservation of Nature (IUCN) Invasive Species Specialist Group has developed the Global Register of Invasive Species (GRIS) that includes verified country-wise inventories of introduced and invasive species in terrestrial systems.

Ocean Management

UNEP-WCMC maintains a World Database that provides data tracking of protected marine areas. The Marine Protection Atlas provides a breakdown on the level of protection of these marine areas. Conservation International have developed the Ocean Health Index based on 120 scientific databases to monitor ocean health around the world. And launched recently, WRI?s Ocean Watch provides a centralized database on ocean management, including biodiversity hotspots within protected areas and Marine Protected Areas.

The FAO?s biennial report, The State of World Fisheries and Aquaculture, monitors how global fish stocks are managed. Google, Oceana and Sky have also developed Global Fishing Watch, to provide an open-access data source of global commercial fishing activity.

The non-governmental organisation (NGO), TRAFFIC is a specialist on the global wildlife trade, including on the illegal poaching and trade of marine species including turtles, sharks, eels, and abalone, among many others. TRAFFIC conducts research, investigations, and analysis to compile the evidence to catalyze action and help ensure that the wildlife trade does not threaten conservation efforts.

Although there have been recent attempts to track ocean pollution, for example the University of Michigan using remote sensing to track microplastics, overall, there are challenges relating to the reporting and availability of data, based on how pollution enters the ocean and circulates.

For certain ecosystems such as coastal wetlands (including mangroves, salt marshes, seagrass meadows and other intertidal ecosystems), there is a dearth of data on the global extent of these ecosystems, as well as annual gains and losses, with the exception of Global Mangrove Watch. This lack of data makes it difficult to track progress and set targets to conserve them. Although there have been some gains using remote sensing mapping, this is still geographically uneven.

IUCN?s GRIS also includes verified country-wise inventories of introduced and invasive species in marine systems.

Freshwater Management

Basic data on freshwater supply and demand is generally available at the national level for water management assessments, but limited funding, capacity, and access to technologies have restricted many developing countries? ability to collect this information and perform comprehensive assessments. FAO, the World Bank, WRI?s Aqueduct also track critical indicators related to water supply and demand, as well as water risks (e.g., water stress, groundwater table declines, etc.).

The Global Environment Monitoring System for freshwater (GEMS/Water) from UNEP provides a database relating to water quality for ecological health and human health. Although there have been recent improvements in data availability at a country level, in general the data collected and the frequency of collection is sporadic.

Efforts to track biodiversity loss in freshwater ecosystems has been undertaken by the CBD Secretariat and the IUCN. Yet this work has typically focused on outcomes rather than the drivers of degradation,

for which data availability and quality vary by country. In 2017, UNEP assessed the progress of all UN member states in proving data against this indicator, finding that less than 20% of the countries were able to report on the changing extent of their freshwater ecosystems. In response to this, the Freshwater Ecosystems Explorer tool was developed by the European Commission?s Joint Research Centre, UNEP, and Google to allow countries to track, monitor, and improve the health of freshwater ecosystems. This tool was designed specifically for tracking SDG indicator 6.6.1, which monitors changes to water-related ecosystems over time.

IUCN?s GRIS includes verified country-wise inventories of introduced and invasive species in freshwater systems.

Finance

Financial systems underpin growth and development and can help accelerate (or stymie) the transformational changes needed to safeguard the global commons. Broadly, there is a need to scale up finance (both public and private) for nature and climate, increase measurement and disclosure of environmental risks, and properly account for the costs of environmental degradation (and benefits of environmental protection).

The Task Force on Climate-Related Financial Disclosures (TCFD) provides annual tracking of financial institutions that are implementing the recommendations on disclosing climate-related risks and opportunities. However, the Network for Greening the Financial System (NGFS) have acknowledged that there is still a need for higher quality, granular, reliable, and comparable climate-related data. The recently established Task Force for Nature-Related Financial Disclosures (TNFD) will aim to provide a similar framework and track disclosure on nature-related risks and opportunities. Whilst these frameworks can encourage increased disclosure, they are largely voluntary in nature and reliant on a subsect of public disclosures.

The United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance tracks global climate flows on a biannual basis, and the Climate Policy Initiative publishes a flagship report, which features a broad range of disaggregated data by sector, geography and type. This tracking does not include subnational tracking, making it difficult to understand the effectiveness of global flows of finance reaching the local level, where climate projects are usually implemented. In addition, domestic public budget expenditure on climate related activities is not universally available.

Global efforts to track finance for nature are more nascent than those for climate finance, but UNEP?s *State of Finance for Nature* report offers a helpful start.

With regards to financial inclusion, the World Bank has developed the Global Findex Database, which tracks financial inclusion across more than 140 countries and includes a range of indicators and types of financial services. The World Bank also provides an up-to-date, annual overview of existing and emerging carbon pricing instruments through its State and Trends of Carbon Pricing publication.

Several global efforts aim at tracking and fossil fuel subsidies, most notably the OECD?s Inventory of Support for Fossil Fuels. The IMF also tracks global and regional energy subsidies for 191 countries on a regular (but not annual) basis. The Global Subsidies Initiative (GSI), led by the International Institute for Sustainable Development, is actively working to remove harmful subsidies through a range of research projects and capacity support, raising awareness about subsidies? harmful impacts and the possibilities for phasing out them in different countries. However the GSI recognize that there are limitations in their reports due to a ?lack of a consistent, detailed set of subsidy estimates at the global scale covering both consumer and producer fossil fuel energy for every country.?

Measuring Economic Prosperity and Well-Being

Few decision-makers are willing to advocate for transformations that could harm economic prosperity and well-being, and when it comes to measuring both indicators, many rely too heavily on economic growth, with GDP often hailed as the most important metric of progress. Yet this overreliance on GDP ignores other essential parts of the economy, including non-market activities, social and human capital, and community and ecosystem health. It can also lead decision-makers to prioritize growth, which can result not only in unsustainable production and consumption, but also inequity.

Despite widespread criticisms of GDP and acknowledgements of its limitations, alternative indicators that decision-makers can use to measure economic prosperity and well-being, which are widely accepted, accessible, and measurable, have yet to emerge, and therefore there are no related datasets or monitoring platforms.

Governance for the Global Commons

With the diversity of environmental problems, there is a need for a global governance system that can identify and manage the interconnections amongst international agreements (such as the Paris Agreement, the CBD, and the UNCCD) and address these challenges. Improved national and sub-

national governance systems will also be required to ensure more effective implementation across these global agreements.

The International Institute for Sustainable Development (IISD) and Earth Negotiations Bulletin have published annual assessments of the state of global environmental governance for 2019 and 2020. This is focused on assessing the successes, failures and trends of international environmental negotiations.

The World Bank?s Worldwide Governance Indicators, Transparency International?s Corruption Index, and Freedom House?s Freedom in the World all provide governance-related datasets. However, these datasets do not have a focus on global environment governance. WRI?s Environmental Democracy Index, which does focus on environmental governance provided a measure to the extent and degree to which national laws in 70 countries promote environmental democracy rights. However this index was short lived and was archived in 2015.

Similarly, a WRI assessment of global environmental governance found that data systems for measuring related SDG indicators are often inadequate, and capacity building for data collection is essential. Advocacy groups for better governance for the global commons should provide strong support for these steps, including support for investments by national governments in the institutions for data collection.

Inclusion, Equity and the Just Transition

Transformations to a net-zero CO2 emissions, nature-positive future must be just and fair, generating benefits for all. Equity must be procedural, distributional, structural, and transgenerational.

There are challenges in gathering data for this broader, cross-cutting transformation, although some organizations are looking to tackle this. The European Commission has developed a monitoring framework to measure progress of the Just Transition within the context of the 8th Environment Action Programme (EAP). The EAP provides a broad policy framework and direction for the European Union's environment policy. This monitoring framework for the Just Transition identified several challenges including a lack of a common definition, overlapping indicators, and the difficulty attributing impacts directly to public policies.

The Just Transition Initiative a partnership between the Climate Investment Funds (CIF) and the Center for Strategic and International Studies (CSIS), has developed a framework that incorporates definitions and perspectives on just transitions. They have created a comprehensive library of resources that provides definitions, guidance, strategies and recommendations, as well as case studies. However, this information is disaggregated and would be difficult to monitor.

The Overseas Development Institute?s ?Leave No One Behind? (LNOB) Index monitors the extent to which national systems, institutions, and practices in 159 countries are ready to meet commitments in the 2030 Agenda for Sustainable Development. However, there is no ?centralized repository that contains an inventory of datasets, indicators, methodological work and practitioners? knowledge and advisory notes, to advance the identification and measurement of LNOB? (ODI, 2021, p.87).

With regards to tracking gender equality there is the World Economic Forum Annual Gender Gap Index which is continuously updated. Data2x partners with UN agencies, governments, civil society, academics, and the private sector to acquire gender data. They produce updates on a 5-yearly basis on gender data gaps across different sectors. Since 2015, McKinsey Global Institute have issued a series of reports as part of their Power of Parity series, focusing on the potential boost to economic growth that could come from accelerating progress towards gender equality. They have created a Gender Parity Score, based on 15 indicators of progress towards gender equality. However, there have been no reports from this series since 2019.

As shown above from an initial assessment across all systems, much of the data currently available measure progress at the outcome level (e.g., share of renewables in electricity generation or millions of hectares restored). Efforts focused on tracking how change occurs ? or the underlying drivers of systems change (e.g., technological innovations, supportive policies, institutional strength, etc.) ? are more limited and the datasets more disparate.

Although a rich body of academic literature focused on transitions across some systems exists, the trajectories and factors that enable transformational change are less understood for others, and in both cases, findings are generally not distilled into clear lessons learned for decision-makers.

Tremendous research gains have been made in our understanding of historical socio-technical systems transitions (e.g., in power, industry, and transport), which have broadly focused on common trajectories of change, shared drivers of change, and interactions among these enablers of transition. Only recently

have experts begun to distill these findings into policy best practices and share them with decisionmakers via organizations such as the IEA, IRENA, and Clean Energy Ministerial.

Research efforts to identify shared characteristics across social-ecological transformations (e.g., in the management of terrestrial, freshwater, and marine ecosystems) appear to be more nascent. Traditionally, studies focused on undesirable, hard-to-reverse regime shifts in social-ecological systems ? from kelp forests to sea urchin barrens or from tropical rainforests to grasslands. Only recently have experts within this field begun conceptualizing transformation as a phenomenon that can be steered towards a positive outcome, and therefore there is less consensus on how such change can be achieved (e.g., what are the common trajectories and drivers of change). Studies on social-ecological transformations, for example, are often place-based and focus on a specific challenge in a terrestrial or marine landscape. Few meta-analyses and widely accepted conceptual frameworks exist, and experts are only just starting to translate this body of literature into more accessible lessons learned for decision-makers (e.g., Working Group IV of the Earth Commission).

Overall, the social-technical and socio-ecological systems are at different stages in terms of the emerging body of literature and the focus on systems change. However, what is common between both systems is that the findings from academia have not been easily accessible or translated into language applicable for decision-makers.

Action to accelerate systems change is already well underway within some systems, but it is just beginning in others. And even where progress is occurring, it?s often siloed.

For some transformations, change is already underway, with well-established experts, multistakeholder coalitions, and decision-makers across all corners of society driving systems change globally. The *State of Climate Action 2021* report, for example, highlighted that there has been notable progress within a handful of systems, with increasing adoption of new clean technologies beginning to spur broader transitions across some socio-technical systems. Wind and solar power, in particular, have grown much faster-than-expected over the past two decades, and sales of electric vehicles (EVs) have also increased rapidly since 2015. Prominent coalitions, from RE100 to EV100, are at the helm of these efforts, bringing together companies that are committed to transitioning to EVs by 2030 and to 100% renewable electricity. In addition, institutions, such as the International Council on Clean Transportation (ICCT), are providing grassroots organizing, research, and policy support for the elimination of internal combustion engines and the phaseout of emissions-intensive energy sources. The IRENA Coalition for Action looks to promote the wider and faster uptake of renewable energy, and they are doing this through research, toolkits, working groups, and communities of practice. But for other transformations, such as reducing food loss and waste, this is not the case. A few countries are making good progress on SDG 12.3 including, Australia, Austria, Canada, China, Denmark, Estonia, Germany, Ghana, Italy, Malta, the Netherlands, New Zealand, Norway, the Kingdom of Saudi Arabia, Sweden, and the UK, but most countries are just getting started. This is reflected in the nascent stage of multisectoral coalitions, such as Champions 12.3, which are attempting to spur action through improving the efficiency of data collection and reporting on food loss and waste.

And across these systems (power generation, industry, transport, cities and the built environment, sustainable production and consumption, food, forests and land Management, ocean Management, and freshwater Management), communities of change agents continue to work in silos, despite efforts to bridge the divide ? for example, between those dedicated to limiting global temperature rise to 1.5?C and those focused on safeguarding nature. Given the connections among systems (e.g., improving water quality depends on actions undertaken across agricultural systems or decarbonizing industrial process depends, in part, on a clean electricity grid), it?s critical that these disparate communities begin working together.

Baseline Projects: The SCL?s work to date.

A precursor to the Global Commons Alliance (GCA), the Global Commons Initiative was launched in 2016 with the support of the GEF, and in partnership with a consortium of organizations including IUCN, International Institute for Applied Systems Analysis (IIASA), Stockholm Resilience Center (SRC), World Economic Forum (WEF), and WRI to execute an MSP titled ?Global Commons: Solutions for a Crowded Planet?. The objective of this MSP was to design and catalyze the adoption of innovative, integrated, and transformational solutions in key societal sectors to ensure a sustainable pathway for the future of the planet and for humanity. There were a range of outputs from the MSP, including a white paper from WRI and the WEF examining positive tipping points that can be crossed to help safeguard both people and the planet. The paper concluded that the ?urgency and scale of the needed change are very great, and will require non-incremental systemic disruption.?

Three years later in 2019, the GEF approved the MSP ?Staying within Sustainable Limits: Advancing leadership of the private sector and cities? that helped to establish the GCA, which was originally consisted of three components: the Earth Commission, the Science Based Targets Network (SBTN) and Earth HQ. The GCA aims to create networks to scale science-based action to protect people and the planet. The Alliance is now a partnership of over 50 organizations working across philanthropy, science, environment, business, cities and advocacy.

Established in 2020, the SCL represents the fourth core component of the GCA and is a joint effort between WRI, the High-Level Climate Champions, and Bezos Earth Fund, with WRI facilitating the Lab?s work. The Lab also benefits significantly from thought leadership and guidance from the GEF, the University of Tokyo's Center for Global Commons, and the World Economic Forum. It is also currently exploring partnerships with leading technical experts and data providers, such as IEA, IRENA, UNEP-WCMC, and Climate Action Tracker (CAT).

WRI, with financial support from the GEF, published the SCL?s first publication, ?Safeguarding our Global Commons A Systems Change Lab to Monitor, Learn from, and Advance Transformational Change,? in 2020, building on the white paper co-authored by experts from WRI and the WEF in 2016. This preliminary report outlines the vision for the SCL?s three pillars of work, provides an initial list of systems that the world must transform to limit global temperature rise to 1.5?C and protect nature, and identifies an initial list of critical transformations for each system (see Annex N)

In partnership with the High-Level Champions, the Bezos Earth Fund, CAT, ClimateWorks Foundation, and WRI the SCL also published its first annual assessment report, the *State of Climate Action 2021*, in the lead up to the 26th Conference of the Parties to the UNFCCC. It translates the transformations required to keep global temperature rise to 1.5 degrees C into 40 indicators of progress, with targets for 2030 and 2050 ? such as rapidly phasing out unabated coal in electricity generation, effectively halting deforestation, and scaling up both public and private climate finance. Moving forward, the SCL will expand the scope of these annual assessment reports to include transformations that are also critical to protecting nature.

Baseline Projects: Associated initiatives upon which the SCL can build.

Table 2 below includes more information on GEF projects that have supported the formation of the GCA?s components or have developed relevant data platforms, as well as existing coalitions at the forefront of advocating for and accelerating systems change, which the SCL can learn from and tap into the relevant knowledge that has already been generated.

Table 2: Associated Baseline GEF and non-GEF Projects

Name	Years (Start- End)	Budget (USD)	Donor(s)/Partner(s)	Linkages between the SCL and this project
The Global Environmental Commons. Solutions for a Crowded Planet	2016- 2018	\$2M	GEF and co-finance from IUCN, IIASA, and SRC	The objective of this project was to design and catalyze the adoption of innovative, integrated and transformational solutions in key societal sectors to ensure a sustainable pathway for the future of the planet and for humanity.[1] ¹ An output from this MSP concluded that the ?urgency and scale of the needed change are very great and will require non-incremental systemic disruption.?[2] ² This project was supported by six curator organizations (GEF, IUCN, WEF, WRI, SRC and IIASA).
Staying within Sustainable Limits: Advancing leadership of the private sector and cities	2019- ongoing	\$2M	GEF and co-finance from We Mean Business, Good Energies Foundation, Oak Foundation, Future Earth, PIK, and IIASA.	This project helped to create the first three components of the Global Commons Alliance, including the Earth Commission, SBTN, and Earth HQ. The SCL currently works with all three of these components. The SCL will translate the Earth Commission?s global research on defining the ?safe and just corridor? for humanity (once it?s finalized) into systemwide transformations with actionable, measurable targets, which the Lab will then track progress toward. Working in partnership with SBTN, the Lab will help identify the most impactful levers of change that non-state actors can pull to achieve their targets to protect nature and limit global temperature rise to 1.5?C. And finally, the Lab is working with Earth HQ to ensure that both platforms offer complementary information to key decision-makers.

Strengthening the Blue Economy: The Economic Case, Science- Informed Policy, and Transparency	2019- ongoing	\$2M	GEF and co-finance from Norwegian Ministry of Foreign Affairs, Good Energies Foundation, and the Swedish International Development Agency	This WRI data platform aims to advance the transition to the Blue Economy and supports initiatives such as Ocean Watch. The SCL will coordinate with the relevant WRI teams to access datasets and coalitions on the transformation focused on Ocean Management.
Strengthening Land Degradation Neutrality data and decision- making through free and open access platforms	2019- ongoing	\$2M	GEF and co-finance from World Overview of Conservation Approaches and Technologies and CI-GEF	The GEF-funded project, otherwise known as Tools 4 LDN, aims to combine tools, databases and expertise from leading organizations and universities researching best practices and approaches to eliminating land degradation. This also consists of a data platform from CI, Trends.Earth, which could provide data, best practices, case studies and leading expertise relating to the SCL transformations of Land and Forest Management, as well as Food.

Mission 2020	2017- ongoing	N/A	Yale University, Carbon Tracker, Potsdam Institute for Climate Impact Research and Climat e Action Tracker	Mission 2020 defines and assesses progress against six milestones?in energy, transport, land use, industry, infrastructure, and finance?that would need to be met by 2020 to bend the curve in global greenhouse gas emissions and put the world on a pathway consistent with the Paris Agreement.
				Analysis of existing data shows that while meaningful progress has been made, we are not yet on track to achieve the 2020 climate turning point. Progress is uneven across the six milestones: For some underlying outcomes in several milestones, action has been progressing and accelerating. However, in most cases action is insufficient, or progress is off track.[3] ³
				The SCL is building on this analysis and data to develop the monitoring platform, and the work of Mission 2020 was a precursor of the <i>State of Climate Action</i> report series.
C40 Cities	2005- ongoing	N/A	Various funders including the German Federal Ministry for Economic Cooperation and Development (BMZ), the Ministry of Foreign Affairs Denmark, the UK Government, and the Children?s Investment Fund Foundation (CIFF).	C40 is a network of 97 cities committed to addressing climate change. C40 supports cities to collaborate effectively, share knowledge, and drive meaningful, measurable, and sustainable action on climate change. C40 tracks the progress of cities in reducing emissions and reaching the Paris Agreement and it is also part of the GEF Sustainable Cities Program. This coalition has been identified by the SCL as a leader working on the cities and transport transformations.

Food and Land Use Coalition (FOLU)	2017- ongoing	N/A	The Gordon and Betty Moore Foundation, the MAVA Foundation, Norway?s International Climate and Forest Initiative (NICFI) and the UK Department for International Development (DFID)	FOLU is an initiative focused on the transformation of food and land-use systems and is part of the GEF Food, Systems, Land Use and Restoration Program. Their work includes (i) making the strategic case for rapid change, (ii) supporting countries with their food and land-use planning, policy, and market redesign, (iii) empowering diverse change leaders across public, private, and civil society sectors, (iv) developing evidence-based transformation pathways and (v) accelerating shifts throughout the private sector. Key learnings from this could be important for the food and the forests and land management transformations. The SCL is already working with FOLU, as WRI currently serves as the secretariat of FOLU. They are critical reviewers of the Lab?s research, and the SCL can support decision-makers across FOLU?s network.
Platform for Accelerating the Circular Economy	2018- ongoing	N/A	WEF, WRI, Philips, Ellen MacArthur Foundation, and UNEP	The Platform for Circular Economy is a community hosted by WRI of 75 public, private, and civic executive leaders to help decision-makers accelerate the transition to a circular economy. This community is engaged with the SCL on its sustainable production and consumption research.
Mission Possible Partnership	2021- ongoing	N/A	Energy Transitions Commission, RMI, We Mean Business Coalition, WEF	The Mission Possible Partnership is an alliance of climate leaders focused on decarbonization across industry and transport value chains. The SCL could support decision-makers across these value chains, and the Partnership could provide important data and indicators related to their decarbonization pathways that have been developed.
Energy Transitions Commission	2015 - ongoing	N/A	Commissioners from company and government leaders	This coalition of leaders is focused on the energy sector itself, including high energy-consuming sectors in industry, transport, and buildings. They could provide a good platform to engage and influence decision-makers working in these sectors.

Coalition for Urban Transitions	2016- ongoing	N/A	WRI Ross Center and C40 Cities Climate Leadership Group	This initiative supports national governments to secure economic prosperity and tackle the climate crisis by transforming cities. This coalition has been identified by the SCL as a leader working on the Cities and the Built Environment transformation.
Club of Rome	1968- ongoing	N/A	100 members ? notable scientists, economists, business leaders and former politicians	The Club of Rome is a platform of diverse thought leaders who identify holistic solutions to complex global issues and promote policy initiatives and action to enable humanity to emerge from multiple planetary emergencies. The SCL could engage the Impact Hubs of the Club of Rome, via its connections with the GCA. For example, the Reframing Economics Impact Hub are exploring economic well-being metrics beyond GDP, which could feed into the SCL?s work on Measuring Economic Prosperity and Well-being.
High-Level Climate Champions	2015- ongoing	N/A	UNFCCC	The High-Level Climate Champions aim to strengthen collaboration and drive action from businesses, investors, organizations, cities, and regions on climate change, and coordinate this work with Parties to the United Nations Framework Convention on Climate Change (UNFCCC). They are key decision-makers that the SCL is already working with on outreach and engagement with key decision-makers in the climate change community.

3) The proposed alternative scenario with a description of outcomes and components of the project

Why is this project needed now?

Limiting global temperature rise to 1.5?C and halting biodiversity loss will require transformations across five socio-technical systems (e.g., power, industry, transport, the built environment, and sustainable production and consumption) and four social-ecological systems (e.g., food, terrestrial ecosystem management, freshwater ecosystem management, and marine ecosystem management). Broader transformations across political, economic, and social systems will also be required, such as

financing the transition to a net-zero CO2 emissions and a nature-positive future, measuring economic well-being, distributing the costs and benefits of these transformations, improving social equity and inclusion, and governing the global commons.

In the wake of the COVID-19 crisis, the world stands at a crossroads. We can continue to invest in yesterday?s economy?a decision that will intensify climate change, accelerate biodiversity loss, and deepen socioeconomic inequities. Or we can embark upon a great reset that will lead humanity toward a more sustainable, prosperous future for all. The economic stimulus packages that governments are rolling out have the potential either to deepen carbon lock-in and unsustainable path dependencies or to catalyze transformational change. Unfortunately, recent evidence suggests that, in many countries, this opportunity has been missed.

Convincing decision-makers to change course, then, must be an urgent priority in the coming decade. Leaders across government, civil society, and the private sector must understand why systems change is both necessary and possible and that a collective approach is needed to address the environmental problems identified. Similarly, they must understand which interventions and movements are working and which are not, and why. Resources can then rapidly be allocated to those initiatives poised for success and revise efforts that are ineffective or insufficient.

As a virtual and dynamic situation room, the SCL will monitor systems change globally, taking stock of where shifts are accelerating (or stalling), and analyzing what?s working, what isn?t, and why. It will partner with visionary leaders and diverse coalitions, arming them with the evidence needed to mobilize more effective action and cross positive tipping points. Under the GCA, the SCL is designing a three-pronged strategy to advance transformational change across nearly all major systems:

Monitor

By partnering with leading data providers, potentially including the IEA and UNEP-WCMC, and target users, such as campaigners, philanthropies, and investors, the SCL will co-develop an accessible, opendata platform where required shifts across all systems, as well their drivers, will be regularly tracked against benchmarks aligned with the best available science.

Learn and share

Building on this, the SCL will deepen analysis of *why* and *how* change is occurring. In partnership with leading technical experts and practitioners, it will produce analysis that not only instils greater

confidence that systems change is possible, but also equips change agents with compelling case studies, an evidence base across transformations, and a roadmap for accelerating change.

Mobilize action

Through strategic outreach and engagement, the Lab?s monitoring and learning work will support the many coalitions already advancing system change, such as those working with the High-Level Climate Champions (the SCL currently has partnered with those from Chile and the United Kingdom to support their work at COP26). It will rally around major moments, such as COP15 on biodiversity, the World Food Summit, and the United Nations General Assembly, to inform public and private sector leaders. In doing so, it will pay special attention to transformations that have stalled and work with partners to understand the actors, relationships, vested interests, and barriers to change within these systems. Furthermore, through participatory dialogues, the SCL will identify transformational solutions that are garnering support from more diverse stakeholders over time, ratchet up ambitions, and become more durable. It will also look for possible disruptors that can unlock systems change and enlist diverse coalitions of champions to spark such shifts.

What is systems change?

of Drivers

Whilst there are many definitions of systems change, for the purposes of this project it refers to the reconfiguration of a system, including its component parts and the interactions between these elements, such that it leads to the formation of a new system that produces a qualitatively different outcome. Put simply, it is a shift from one system to another, for example, from a transportation system dominated by cars to one constructed around more sustainable modes of mobility like public transit or walking or from traditional grazing pastures to silvopasture systems that integrate trees and livestock into the same landscape.

Although these shifts are often fundamental and large-scale, they can also emerge from a series of smaller, incremental changes that, taken together, disrupt the status quo and lead to the formation of a new system. The *State of Climate Action 2021* report identified a set of key drivers of systems change as shown in Table 3 below.

Description

Table 3: Driver	s of systems change	
Categories	Examples of	

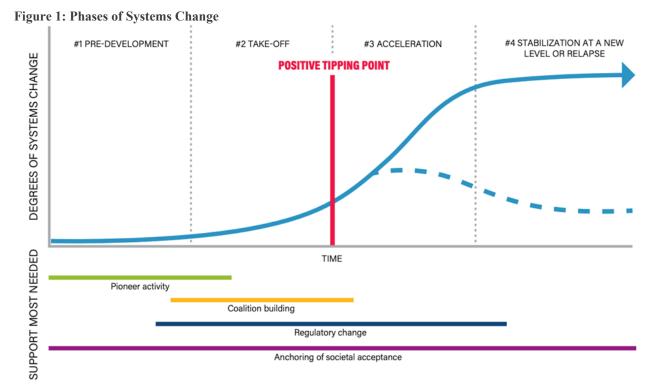
Specific Drivers

Exogenous Changes	Immediate, largely unforeseen crises, such as economic recessions, global pandemics, or conflicts Slowly evolving trends like demographic shifts or intensifying political polarization	Exogenous changes, including both shocks and slower-onset changes, can destabilize the existing system and create windows of opportunity for transformation. These external forces, for example, can focus public attention on reducing previously unseen risks, motivate policymakers to adopt niche innovations to address new crises, or create space for leaders who support transforming existing systems to gain power.
Innovations in Technology, Practices, and Approaches	Development and adoption of complementary technologies Investments in research and development Research networks	Innovations, which broadly encompass new technologies,
	and consortiums Education, knowledge sharing, and capacity building Experimentation, pilot projects, demonstrations, and other early application niches	practices, and approaches, often offer solutions to seemingly intractable challenges. Investments in research and development, support for research networks and consortiums, and universal access to education provide a strong foundation for innovation. Similarly, creating protected spaces for experimentation, pilot projects, and small-scale demonstrations facilitates learning that can lead to improvements in performance and reductions in cost. Developing complementary technologies (e.g., batteries and charging infrastructure for electric vehicles) can also boost functionality and support widespread adoption of innovations.
Regulations and Incentives	Economic incentives, such as subsidies and public procurement; economic disincentives, such as subsidies reform, taxes, and financial penalties Non-economic incentives, including removal of bureaucratic hurdles, transitional support to affected communities, or giving ownership of natural resources to local communities Quotas, bans, regulations, and performance standards	By establishing standards, quotas, bans, or other command-and- control regulations, governments can not only mandate specific changes but also create a stable regulatory environment, often cited as a prerequisite for private sector decarbonization. Using market-based instruments to create incentives (or disincentives) can also shape action by companies, non-profit organizations, and individuals?and, in some contexts, may be more politically feasible than command and-control regulations. For subsidies in particular, revenues must be raised to cover these costs, and the mechanisms to do so will also vary by sector and region.

Strong Institutions	Establishment of international conventions, agreements, and institutions Creation of national ministries, agencies, or interagency taskforces Changes in governance, such as more participatory, transparent decision-making processes and natural resource management Efforts to strengthen existing institutions by, for	Establishing new institutions or strengthening existing ones can ensure that the policies designed to reduce emissions and protect nature are effectively implemented. These institutions can enforce laws, monitor compliance with regulations, and penalize those who break the rules. Well-staffed and well-resourced institutions also have more capacity to work across sectors to improve policy cohesion and avoid unintended consequences. Creating more transparent, participatory, and inclusive decision-making processes, specifically and at all levels of government, can also help reconfigure unequal power dynamics and enable
	example, increasing staff, funds, or technological resources	marginalized communities?those who have often suffered from business-as-usual actions and who generally stand the most to gain from transitions to new systems?to steer transformations to a net- zero, nature-positive future.
Leadership from Change Agents	Leadership from national and subnational policymakers, such as setting ambitious targets Leadership from the private sector, such as establishing and implementing ambitious climate commitments Diverse, multistakeholder coalitions Beneficiaries of transitions Civil society	Successful transitions often depend on sustained, engaged leadership from a wide range of actors who envision new futures, develop roadmaps for change, and build coalitions of those willing to help implement these plans. While these champions may lead governments, companies, and non-profit organizations, they need not always sit at the helm of an institution. Civil society organizations, as well as social movements, can effectively pressure those in power to accelerate transitions, and beneficiaries of these changes play an important role in resisting attempts to return to business-as-usual. Diverse, multistakeholder coalitions that bring these champions together can be a powerful force for change, unifying disparate efforts, pooling resources, and
Behavior Change and Shifts in Social Norms	movements Changes in behavior Shifts in social norms and cultural	counterbalancing well-organized, influential incumbents. Through educational initiatives, public awareness campaigns, information disclosure, or targeted stakeholder engagement, agents of change can make a clear, compelling case for transitions, explain the consequences of inaction, and identify concrete steps that individuals can take to accelerate transitions. They can build consensus for a shared vision of the future, as well as prime people for behavior change interventions. As social norms begin to shift, so too will the policies communities support, the goods

Trajectories of systems change

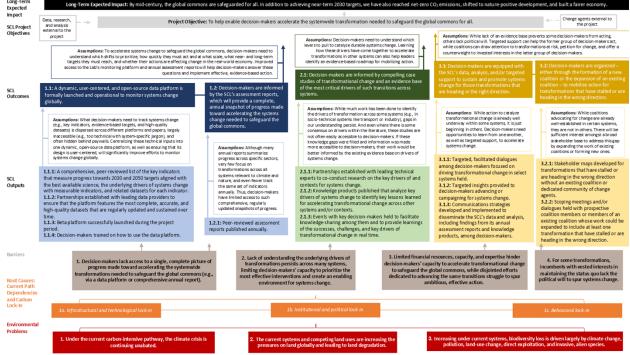
If successful, a transition will increase ambition over time, become more durable and difficult to reverse, and expand to impact a greater proportion of the population. Achieving such change often involves multiple actors at multiple levels to establish a new, lasting equilibrium at scale. The process of systems change, particularly within socio-technical systems, typically follow an ?S? curve, with change occurring at different rates during different stages (Figure 1). Change that may seem impossible at first can develop momentum, become more durable, and reach a tipping point after which change accelerates dramatically until the structure and the intrinsic functioning of a given system have transformed. There is a risk of relapse at any point along the curve, but the probability of reversal declines as the new system takes root.



The Theory of Change (see Figure 2 below) and project components/outcomes for how the SCL will enable systems change is provided in detail below. The Theory of Change addresses the existing situation that there is no complete picture of global progress across transformations, that there are gaps in understanding the enablers of these transformations, and that there is a lack of an evidence base and clear roadmap for progress, which is inhibiting decision makers.

Within the two-year project phase, the SCL will work to build a centralized monitoring platform and associated annual assessment reports across the identified transformations, significantly improving efforts to monitor systems change globally (Component 1). The project will do a deep-dive analysis into the ingredients of systems change, making their findings easily accessible to decision-makers and supporting them to use the SCL?s analysis in their work (Component 2). Finally, the SCL will inform action through targeted support and the creation of at least one coalition to accelerate systems change (Component 3). All the components are linked and will feed into each other, i.e., Component 3 is informed by the findings from Component 1 and 2, but will also feed into, as well as help refine, data collection and research analysis for Components 1 and 2. Findings from Component 2 will also inform subsequent updates to the data platform (e.g., case studies could identify new drivers that were not previously on the data platform that could be added to it).

This Theory of Change is based on the assumptions that, to accelerate systems change to safeguard the global commons, decision-makers need to understand which transitions to prioritize, which levers to pull to catalyze and sustain durable systems change, and which coalitions need to be formed to mobilize action. The SCL is needed to develop this platform and enable decision-makers to enact systems change and safeguard the global commons for all.





SCL Project Objective: To help enable decision-makers to accelerate the systemwide transformations needed to safeguard the global commons for all.

The SCL and its partners will equip decision-makers across government, civil society, and the private sector with the data, analysis, and targeted insights they need to accelerate transformations across nearly all systems. This contributes towards a long-term impact, that by 2050, the world will have safeguarded the global commons for all by achieving net-zero CO2 emissions, shifting to nature-positive development, and building a fairer economy.

Objective-level indicators:

a. Number of global open-data platforms established for tracking transformational change across key systems

Target: 1 global open-data platform

b. Number of decision-makers informed by the SCL?s data platform, assessment reports, knowledge products, and targeted support over the project period

Target: At least 15,000 decision-makers (at least 7,500 women) (GEF Core Indicator 11)

GEF Project Components

The SCL project is composed of three components focused on 1) monitoring the transformational change across key systems, 2) developing knowledge products for learning and sharing about the ingredients for change, and 3) mobilizing action for systems change.

Component 1: Establishing and maintaining the SCL?s monitoring platform

Component 1 focuses on the development of a comprehensive set of indicators, benchmarks, and datasets to track the outcomes of systems transformation and its drivers, including identifying critical gaps in data. These inputs will be compiled into a centralized monitoring platform, with accompanying annual assessment reports.

This Component will have the following outcomes:

Outcome 1.1: A dynamic, user-centered, and open-source data platform is formally launched and operational to monitor systems change globally.

Indicator 1.1.1: Number of dynamic, user-centered, and open-source data platforms to monitor systems change globally that are designed, launched, and operational.

Indicator 1.1.2: Number of decision-makers visiting the data platform during the project period (disaggregated by gender).

Target 1.1.1: One dynamic, user-centered, and open-source data platform to monitor systems change globally is designed, launched, and operational.

Target 1.1.2: 15,000 decision-makers visiting the data platform during the project period, with 5,000 in the first year and 10,000 in the second year (at least 50% women).

This platform will offer decision-makers the first complete picture of progress made toward transformational change across systems. It will provide compelling evidence of major progress aligned with the best available science (transformations in acceleration), identify where change is stalled or heading in the wrong direction (transformations at risk), and reveal trends across systems. The monitoring platform will be designed to provide high-quality, user-centered information that is accessible to decision-makers (i.e., freely available for all people to download, reuse, and republish.)

This Outcome will be achieved through the following outputs:

Output 1.1.1: A comprehensive, peer-reviewed list of key indicators that measure progress towards 2030 and 2050 targets aligned with the best available science, the underlying drivers of systems change with measurable indicators, and related datasets for each indicator.

Indicator 1.1.1: Number of 2030 and 2050 targets, indicators that measure progress towards these targets, underlying drivers of systems change with measurable indicators, and related datasets identified and peer-reviewed by at least three experts during the project period.

Target 1.1.1: At least 30 quantitative targets for 2030 and 2050, 50 indicators that measure progress toward these targets (assuming that some targets may be qualitative), 250 underlying drivers with measurable indicators, and 90 related datasets are identified and peer-reviewed by at least three experts during the project period.

The SCL will translate the required transformational changes across systems into a series of transformations (e.g., decarbonize power), each with at least 1 set of quantitative targets (e.g., increase the share of renewables in electricity generation to between 55-90% by 2030 and 98-100% by 2050) that are aligned with the best available science (to the extent that they exist) and that will serve as

guideposts for measuring progress. In doing so, it will also identify key indicators for each target (e.g., share of renewables in electricity generation). The development of these quantitative targets will build on the methodology established by the SCL in the *State of Climate Action 2021* report and will undergo a rigorous peer review.

Indicators identified will track not only global progress made toward targets for these transformations, but also shifts in the underlying drivers of change. Building on preliminary research funded by the GEF, the *State of Climate Action 2021* report identified a set of key enablers of change. These underlying drivers are those forces that have historically enabled transformation, including innovations in technologies, practices, and approaches, supportive policies, strong institutions, shifts in social norms, and leadership from critical change agents. The selection of these drivers for the *State of Climate Action 2021* report was informed by an extensive review of academic papers on transformation, transition, and systems change theory in the global environmental change literature. This also included an assessment of case studies of historical transitions in these systems (see Table 3 for more information). For each transformation (e.g., protect forests and other natural landscapes), the SCL will identify at least five key drivers of change, with measurable indicators (e.g., number of countries that have committed to halting deforestation, total amount of finance allocated to forest conservation, percent of indigenous communities? land with tenure security, etc.).

The SCL will seek to find the most complete, accurate and open-source datasets associated with each indicator that are regularly updated and sustained over time. But preliminary research suggests that many indicators may lack complete, accurate, and high-quality datasets that are regularly updated and sustained over time. To be conservative, the SCL estimates that only a third of the 300 indicators will have related datasets that meet its criteria for high-quality, regularly maintained datasets, which the SCL will define during the project implementation phase. The SCL will also utilize the expertise of WRI across different sectors, and partnerships with experts (potentially including UNEP-WCMC and CAT) to identify these datasets.

Output 1.1.2: Partnerships established with leading data providers to ensure that the platform features the most complete, accurate, and high-quality datasets that are regularly updated and sustained over time.

Indicator 1.1.2: Number of partnerships established with leading data providers during the project period.

Target 1.1.2: At least 3 partnerships established with leading data providers during the project period.

To help identify high-quality, reliable datasets for the indicators listed in Output 1.1.1, the SCL will seek organizations that are collecting data and maintaining datasets, and establish partnerships for data sharing with them. These partners, who are leaders in providing data in certain transformation, could include UNEP-WCMC, IEA, IRENA, etc. (see more information on leading coalitions, initiatives and organizations that are monitoring progress across the transformation in the baseline scenario and any associated baseline projects section). In addition to this, the SCL will also look to procure open-source data.

Output 1.1.3: Beta platform successfully launched during the project period

Indicator 1.1.3: Number of Beta platforms launched during the project period.

Target 1.1.3: One Beta platform launched during the project period.

Once the indicators, targets, and datasets are identified, data will be curated, made accessible, and visualized via a beta platform. More specifically, to launch the beta version of the platform, the SCL will:

? Conduct an expanded ?user needs assessment? with target audiences, as well as continue user testing of current website designs (see Stakeholder Engagement Plan in Annex I for more details);

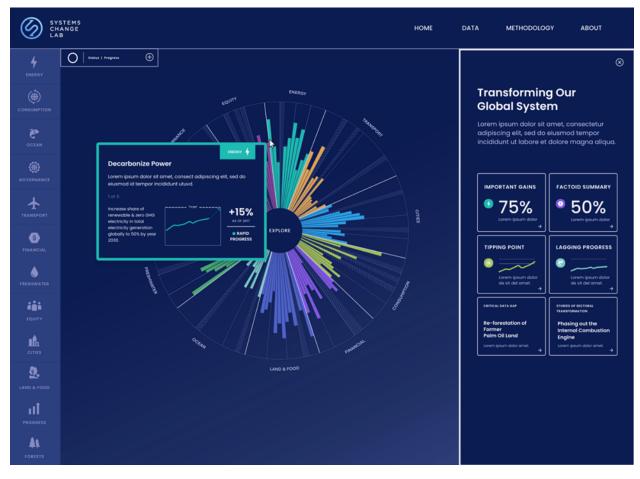
? Draft a plan for how the SCL will build its underlying ?back-end? architecture, data layers, and coding;

? Finalize ?wireframes? of the SCL?s data platform (see Figure 3 below) based on user feedback;

? Write the code to convert the ?wireframes? into an online, password-protected prototype; and

? Garner user feedback and then refine the backend and user interface of the system to launch the Beta version of the SCL.

Figure 3: SCL sample wireframes for the Beta platform



WRI is well-positioned to support the SCL in establishing this data platform, which will rely on the Institute?s existing infrastructure, technologies, and best practices. From Global Forest Watch to Climate Watch to Ocean Watch, it has a strong track record of designing and managing global platforms in partnership with leading data providers. For example, Global Forest Watch has developed partnerships with over 100 organizations who contribute data, technology, and expertise.

Output 1.1.4: Decision-makers trained on how to use the data platform.

Indicator 1.1.4a: Number of key decision-makers trained on how to use the data platform annually (disaggregated by gender and system).

Target 1.1.4a: At least 50 decision-makers trained on how to use the platform annually (at least 33% are women or identify as gender minorities, with the aim of reaching 50%).

Indicator 1.1.4b: Percentage of decision-makers trained that claim proficiency in using the platform(disaggregated by gender and system).

Target 1.1.4b: 75% of decision-makers trained that claim proficiency in using the platform (at least 33% are women or identify as gender minorities, with the aim of reaching 50%).

Targeted training will be conducted with key decision-makers on how to use the platform to ensure their engagement and use of information provided by it. The SCL has identified a smaller, more targeted group of decision-makers for the data platform, including impact investors, philanthropists, donors in multilateral funds and multilateral development banks, those working for United Nations agencies and other international institutions, private sector executives, and leaders of advocacy campaigns.

These trainings could include interactive online workshops and webinars showcasing how to use the platform. WRI has ample experience coordinating these events for other platforms, including Climate Watch, which provides interactive training showing insights from the platform, generating custom visuals, and accessing raw material. These trainings will be offered at different times to accommodates attendees from all geographies. During these events, attendees will be able to ask questions, and request demonstrations on how to access useful data. After each training, WRI will survey decision-makers to ascertain their proficiency in using the platform.

Outcome 1.2: Decision-makers are informed by the SCL?s assessment reports, which will provide a complete, annual snapshot of progress made toward accelerating the systems change needed to safeguard the global commons.

Indicator 1.2.1: Number of decision-makers informed by the SCL?s assessment reports annually (disaggregated by gender).

Target 1.2.1: At least 10,000 decision-makers informed by the SCL?s assessment reports annually (disaggregated by gender).

Indicator 1.2.2: Number of high-level decision-makers (e.g., at the CEO or ministerial level) who include findings from the SCL?s assessment reports in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) each year (disaggregated by gender).

Target 1.2.1: At least 10,000 decision-makers informed by the SCL?s assessment reports annually (at least 50% women).

Indicator 1.2.2: Number of high-level decision-makers (e.g., at the CEO or ministerial level) who include findings from the SCL?s assessment reports in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) each year (disaggregated by gender and system).

Target 1.2.2: At least five high-level decision-makers (e.g., at the CEO or ministerial level) include findings from the SCL?s assessment reports in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) each year (at least two are women or identify as gender minorities, with the aim of reaching three).

The annual assessment reports will provide clear, actionable data findings, accompanied by compelling data visualizations, that will depict both the progress made and the gaps in action that remain. The reports will provide a snapshot of the supportive measures needed to achieve each of the targets and help keep warming below 1.5?C, halt biodiversity loss, and achieve land degradation neutrality. These include public policies, technological innovations, strong institutions and shifts in social norms, among others. This analysis arms decision-makers across government, civil society and the private sector with a clear-eyed view on the state of play of climate and biodiversity and what they need to do.

To ensure high-level decision-makers adopt the findings from the reports into their work, the SCL will create highly targeted communications strategies for each. These strategies include identification of the reports? overarching objectives, primary and secondary audiences, key messages, most effective tactics, and roadmap for implementation. They will leverage the Lab?s engagement with decision-makers around key events (such as COP), and utilize existing relationships that the SCL and its partners have (e.g., with the GCA, High-Level Champions, FOLU, PACE, etc.). The SCL, where possible, will track specific anecdotal examples of how the Lab?s work is informing high-level decision-makers, particularly for those with whom the SCL have close relationships and can confidently attribute their actions to the work of the SCL.

This Outcome will be achieved through the following outputs:

Output 1.2.1: Peer-reviewed assessment reports published annually.

Indicator 1.2.1: Number of peer-reviewed annual assessment reports published annually

Target 1.2.1: One peer-reviewed assessment report published annually.

Based on the collected data from the platform in Outcome 1.1, the SCL will produce an annual assessment report that illustrates where progress is accelerating in line with science. The assessment will also identify where progress is too slow, is stalled, or is moving in the wrong way altogether. Associated communications and outreach will also be pursued when publishing the reports to ensure maximum reach. These reports will help to provide a state of play across the transformations.

The SCL will work with WRI experts and technical partners, including lead researchers and authors across the transformations for these reports and will seek diversity (gender, nationality, disciplinary expertise, etc.) across the selected experts. These annual assessment reports will undergo a rigorous peer review process and will be professionally designed.

This will build off previous work to produce the 2021 annual report on climate action (see the baseline scenario and any associated baseline projects section for more information). This report begins with an explanation of transformational change to frame the evaluation of progress. It then assesses the pace of action on mitigation to date in key sectors and compares it with where the world needs to go by 2030 and by 2050 to help limit global warming to 1.5?C and avoid the worst climate impacts. This effort to track progress relied on the best available data for indicators and targets. The SCL will continue to produce these progress reports on climate action, based on data from its monitoring platform, which will be expanded to include progress related to indicators on biodiversity loss and land degradation.

Component 2: Co-creating the SCL?s knowledge products to help improve decision-makers? understanding of the key ingredients of systems change

Although efforts to track progress reveal where transformations are accelerating, monitoring does not show why (or why not) change is occurring. Component 2 will build off the platform in Component 1 to carry out deep-dive analyses of the drivers of systems change, distilling lessons learned across successful and failed instances of transformational change into actionable key messages for policymakers and share these findings in associated knowledge products to help decision-makers understand which interventions to prioritize.

This Component is composed of one outcome:

Outcome 2.1: Decision-makers are informed by compelling case studies of transformational change and an evidence base of the most critical drivers of such transitions across systems.

Indicator 2.1.1: Number of decision-makers informed by each of the SCL?s knowledge products during the project period (disaggregated by gender).

Target 2.1.1: At least 2,000 decision-makers informed by each of the SCL?s knowledge products during the project period (at least 50% women).

Indicator 2.1.2: Number of high-level decision-makers (e.g., at the CEO or ministerial level) who include findings from the SCL?s knowledge products in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) each year (disaggregated by gender and system).

Target 2.1.2: At least five high-level decision-makers (e.g., at the CEO or ministerial level) include findings from the SCL?s knowledge products in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) during the project period (at least two are women or identify as gender minorities, with the aim of reaching three).

This component will focus on identifying the key enablers of transformational change across systems, including innovations, regulations and incentives, strong institutions, leadership from key change agents, and shifts in behaviors and social norms. More specifically, this research will seek to answer a set of critical questions by analyzing past instances of successful or failed transformational change. What combination of these enablers is required for systems change? Are particular sequences of these factors more effective than others? How does this vary by system, by geography, or by culture? In answering these questions, the Lab will synthesize lessons learned for decision-makers to help build an

evidence base of critical drivers and contexts for transformational change. This evidence base, in turn, can help decision-makers prioritize the most impactful interventions for systems change and identify evidence-based roadmaps for transitions. The SCL, where possible, will track specific anecdotal examples of how the Lab?s work is informing high-level decision-makers, particularly for those with whom the SCL have close relationships and can confidently attribute their actions to the work of the SCL.

This Outcome will be achieved through the following outputs:

Output 2.1.1: Partnerships established with leading technical experts to co-conduct research on the key drivers of and contexts for systems change.

Indicator 2.1.1: Number of partnerships established with leading technical experts during the project period.

Target 2.1.1: At least 2 partnerships with leading technical experts established during the project period.

The SCL will select the transformations to study, partnering with research institutions and researchers with expertise in those fields. These researchers and technical experts will be selected during the project implementation depending on the focus transformations for this output.

Once the partnerships have been established, the SCL will work with these researchers to analyze ingredients of past successful and/or failed transformational change. Initial steps will entail determining case study research principles, especially around making claims of causality, and selection criteria for identifying case studies. Insights on key drivers of and contexts for change from this research will be directly integrated from the tracking platform and annual assessment of progress (from Component 1).

Output 2.1.2: Knowledge products published that analyze drivers of systems change to identify lessons learned for accelerating transformational change across other systems and/or contexts.

Indicator 2.1.2: Number of knowledge products (e.g., briefs, working papers, commentaries, article series, video series, etc.) published during project period.

Target 2.1.2: Three knowledge products (e.g., briefs, working papers, commentaries, article series, video series, etc.) published during project period.

For the selected transformations, the SCL will produce knowledge products such as briefings, working papers and case studies that uncover examples on why systems change was durable, occurred at large scale, and overcame key barriers like vested interests. During project implementation, the SCL will explore other formats that are more accessible or widely shared to publish these knowledge products, such as blog or video series. All these products will include rigorous research and review before publishing.

The focus of these knowledge products will be on the key lessons learned from these examples. For example, the SCL could explore the success of Costa Rica in protecting and restoring its natural ecosystems, whilst other countries have not been so successful. What enabling conditions (e.g., supportive policies like payments for ecosystem services) led to this, and can these drivers be replicated in other countries/regions? These knowledge products will be designed for both technical and non-technical audiences.

Output 2.1.3: Events with decision-makers held to facilitate knowledge-sharing among them and to provide learnings of the successes, challenges, and key drivers of transformational change in real time.

Indicator 2.1.3: Number of knowledge-sharing events held during project period.

Target 2.1.3: Three knowledge-sharing events held during project period.

For different systems, the SCL will bring together practitioners from different geographies and areas of expertise to explore how they have overcome key barriers to systems change in a series of dialogues and peer-to-peer knowledge-sharing events. Findings from these events will inform the development of knowledge products under this component.

These events will likely be held online due to COVID-19 restrictions. But if there is potential for these events to held in-person, this will be explored to maximize knowledge sharing and networking, in accordance with CI-GEF and WRI COVID-19 guidelines.

Component 3: Mobilizing action for systems change, informed by the SCL?s data and knowledge products

Informed by findings on where progress is stagnant or headed in the wrong direction entirely from Components 1 and 2, the SCL will equip decision-makers with the targeted insights they need to spur change, as well as mobilize coalitions to accelerate action. Lessons learned from decision-makers? actions will also be synthesized and feed into, as well as help refine, data collection and research analysis for Components 1 and 2.

This Component will have the following outcomes:

Outcome 3.1: Decision-makers are equipped with the SCL?s data, analysis, and/or targeted support to sustain and promote systems change for those transformations that are heading in the right direction.

Indicator 3.1.1: Number of decision-makers who download data from the SCL?s platform during the project period (disaggregated by gender).

Target 3.1.1: 1,500 decision-makers download data from the SCL?s platform during the project period, with 500 downloading data in the first year and 1,000 downloading data in the second year (at least 50% women).

Indicator 3.1.2: Number of decision-makers surveyed who have responded saying that the data, analysis, and/or targeted insights from the SCL has ?frequently? or ?very frequently? helped them promote or sustain systems change during the project period (disaggregated by gender and system).

Target 3.1.2: At least 100 decision-makers surveyed who have responded saying that the data, analysis, and/or targeted insights from the SCL has ?frequently? or ?very frequently? helped them promote or sustain systems change during the project period (at least 33% are women or identify as gender minorities, with the aim of reaching 50%).

The SCL will provide targeted support to decision-makers driving systems change. These decisionmakers include those that are working on transformations that are already underway and making good progress. They will represent key players across each space (e.g., from leading organizations, private sector champions, etc.). This support will be both proactive and reactive. The SCL will provide tailored messaging packs for decision-makers that summarize key messages, insights, and analysis from the Lab on how to promote and sustain systems change, which will likely be distributed ahead of key events (e.g., the Clean Energy Ministerial, G20 Summit, or United Nations General Assembly). The SCL will also respond to specific queries from decision-makers relating to the systems in the run up to these events. This will be done through the platform, further research, and the combined expertise of the SCL experts. This support will ensure that decision-makers are equipped with the best available data on the extent to which transformations are accelerating, at a standstill, or heading in the wrong direction, as well as the most effective levers that they can pull to spur transformational change. For example, some coalitions might already be making interventions in systems for change, but the SCL research shows that these drivers might not be the most impactful ones to prioritize. The SCL will provide tailored, up-to-date messaging, analysis, and materials to increase the impact of their efforts, find leverage points and ensure efficient use of resources. This is focused on mobilizing action with coalitions to ensure their actions are more effective and impactful.

This Outcome will be achieved through the following outputs:

Output 3.1.1: Targeted, facilitated dialogues among decision-makers focused on driving transformational change in select systems held.

Indicator 3.1.1: Number of targeted, facilitated dialogues held during project period.

Target 3.1.1: At least three targeted, facilitated dialogues held during the project period.

The SCL will have targeted, facilitated dialogues with decision-makers across key coalitions seeking to advance each transformation. These coalitions could include the Energy Transitions Commission, C40 Cities, the Food and Land Use Coalition, the Platform for Accelerating the Circular Economy. These dialogues will help get a better understanding of the drivers that the coalitions are prioritizing and compare and match up with the drivers coming out of the research in Component 2. The conversations will help the SCL to illicit what are the data/research needs from the coalitions, for example what evidence do they need from the SCL to make the case for systems change with their peers. Finally, the dialogue will delve into how the different actors can collaborate and work better together, to avoid disjointed and duplicative efforts.

Output 3.1.2: Targeted insights provided to decision-makers advancing or campaigning for systems change.

Indicator 3.1.2: Number of decision-makers who receive targeted insights (e.g., key messaging packs, talking points, pre-written speeches, briefing materials, media outreach materials, etc.) from the Lab during the project period (disaggregated by gender and system).

Target 3.1.2: At least 50 decision-makers receiving targeted insights from the Lab during the project period (at least 33% are women or identify as gender minorities, with the aim of reaching 50%).

The targeted insights can help to inform decision-makers strategy, and where possible provide evidence on what they are advocating for. These targeted insights will be fed into ongoing processes to ensure it reaches the decision-makers, such as the UNFCCC COPs, CBD COPs, World Cities Summit, Stockholm + 50, United Nations General Assembly, among others. In addition to intergovernmental processes, the SCL will seek to bring its results into related convenings in various regions, reaching out to related industries, policymakers, and nongovernmental organizations working in relevant spaces.

Output 3.1.3: Communications strategies developed and implemented to disseminate the SCL?s data and analysis, including findings from its annual assessment reports and knowledge products, among decision-makers.

Indicator 3.1.3: Number of communications strategies developed during the project period

Target 3.1.3: At least five communication strategies developed, including one for each annual assessment report and knowledge product, during the project period.

An overarching communications strategy will be developed for the SCL. This strategy will identify the SCL?s target audience, goals/objectives, key messages, and key tactics. In addition, there will be targeted communications strategies for each product that is launched including ? the platform, the assessment reports, the knowledge products, any events, etc. This will aim to drive traffic to the monitoring platform and increase user visits, disseminate the annual assessment reports, and ensure the research products are distributed to the correct audience.

This work will include the development communications guidance with an eye to ensuring clear and consistent messaging for both internal and external communication relating to the SCL. The external communications will be catered to the SCL?s key audiences, including policymakers across all sectors and at all levels of decision-making; funders and investors channeling climate and nature-related finance through bilateral aid agencies, multilateral institutions, private philanthropies, and impact investing firms; leaders across the private sector; and those at the helm of international non-governmental organizations, civil society movements, and United Nations agencies.

Outcome 3.2: Decision-makers are organized ? either through the formation of a new coalition or the expansion of an existing coalition ? to mobilize action for transformations that have stalled or are heading in the wrong direction.

Indicator 3.2: Number of new coalitions formed or existing coalitions expanded to mobilize action for transformations that are stalled or heading in the wrong direction during the project period.

Target 3.2: At least one new coalition established or the work of an existing coalition is expanded to focus on advancing transformations that have stalled or are heading in the wrong direction during the project period.

For the transformations stalled or heading in the wrong direction entirely, and don?t have a dedicated community of change agents associated with them, the SCL will work with coalitions and decisionmakers to try to address those risks and bring together the right people to work with partners to understand the actors, relationships, vested interests, and barriers in these systems. The SCL will use a variety of means to assess gaps and barriers and to map the actors affecting each transformation.

This Outcome will be achieved through the following outputs:

Output 3.2.1: Stakeholder maps developed for transformations that have stalled or are heading in the wrong direction without an existing coalition or dedicated community of change agents.

Indicator 3.2.1: Number of stakeholder maps developed during the project period.

Target 3.2.1: At least two stakeholder maps developed during the project period.

The SCL will conduct systems mapping to better understand the various actors, relationships, vested interests, drivers, and barriers in select systems. These stakeholder maps will be carried out for at least 2 transformations, which will be confirmed during project implementation. Based on the stakeholder maps, the SCL will be able to select coalitions and decision-makers for further dialogue and engagement.

Output 3.2.2: Scoping meetings and/or dialogues held with prospective coalition members or members of an existing coalition whose work could be expanded to include at least one transformation that have stalled or are heading in the wrong direction

Indicator 3.2.2: Number of scoping meetings and/or dialogues held during the project period.

Target 3.2.2: At least ten scoping meetings and/or dialogues held during the project period.

Through participatory dialogues and working with partners, the SCL will seek to identify solutions that will be transformational. i.e., those that will grow over time, ratchet up ambitions to accomplish change, and become more durable. The SCL will also identify possible disruptors that could unlock systems change and will enlist top leaders and champions to advocate for such changes.

The SCL will hold a series of scoping meetings and discussions to create and/or expand action coalitions that could advance change. These discussions will supplement the findings from the stakeholder mapping, and for example could focus on getting a better understanding of the ecosystem, getting a sense of who needs to be involved in a new coalition or if there?s an existing coalition that could take this on, and who has the influence/power needed to affect change.

4) Alignment with GEF focal area and/or impact program strategies

Overall, the SCL is well-aligned with the principles set out in the GEF 2020 strategy, as well as the GEF-7 Programming Directions, to support decision-makers in catalyzing systems change. The SCL will aim to accelerate transformational change across systems, including power, transport, the built environment, industry, sustainable production and consumption, land use, agriculture and management of the world?s freshwater and ocean. Cross-cutting transformations of political, economic, and social systems will focus on how we measure economic well-being, deliver basic services, equitably distribute the costs and benefits of change, finance these transformations, and govern the global commons. More specifically, the SCL?s objectives align with the following GEF Focal Areas:

Biodiversity Focal Area:

BD-1-1 (Mainstreaming biodiversity across sectors, as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors). The SCL could indirectly support decision-makers in the mainstreaming of biodiversity in economic planning and policy planning through:

? Translating transformations required to safeguard biodiversity into actionable 2030 and 2050 targets and track global progress towards them;

? Monitoring key drivers of systems change for each transformation over time;

? Identifying key combinations and sequences of the ingredients of systems change for biodiversity-related transformations (including in food, forests and land management, ocean management and freshwater management) from case studies, as well as broad lessons that can be learned across systems;

? Identifying connections (e.g., co-benefits, trade-offs, and interdependencies) between systems to help decision-makers understand when climate action could benefit/harm efforts to protect biodiversity and vice-versa; and

? Potentially supporting coalition building related to biodiversity-specific transformations.

Climate Change Focal Area:

CCM-EA (Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through enabling activities). Through the platform, training and knowledge sharing activities, the SCL could indirectly support the mainstreaming of mitigation concerns into the national planning and development agenda through:

? Translating transformations required to limit warming to 1.5?C into actionable 2030 and 2050 targets and track global progress towards them;

? Monitoring key drivers of systems change for each transformation over time;

? Identifying key combinations and sequences of the ingredients of systems change for climaterelated transformations from case studies, as well as broad lessons that can be learned across systems;

? Identifying connections (e.g., co-benefits, trade-offs, and interdependencies) between systems to help decision-makers understand when climate action could benefit/harm efforts to protect nature and vice-versa; and

? Potentially supporting coalition building related to climate-related transformations.

Countries could use the data, analysis and the platform to prepare appropriate strategies and policies. The SCL platform will also highlight policy coherence across different sectors, helping to encourage countries to align policies across sectors around reaching their climate targets.

Land Degradation Focal Area.

LD-2-5 (Creating enabling environments to support scaling up and mainstreaming of SLM and LDN). Through the annual assessment reports and the various research and knowledge products that will be produced by the SCL, the project will equip decision-makers with the information needed to create the enabling environment around SLM and LDN through:

? Translating transformations required to achieve sustainable land management and land degradation neutrality into actionable 2030 and 2050 targets and track global progress towards them;

? Monitoring key drivers of systems change for each transformation over time;

? Identifying key combinations and sequences of the ingredients of systems change for landrelated transformations (including in food, forests and land management, and freshwater management) from case studies, as well as broad lessons that can be learned across systems; ? Identifying connections (e.g., co-benefits, trade-offs, and interdependencies) between systems to help decision-makers understand when climate action could benefit/harm efforts to protect land and vice-versa; and

? Potentially supporting coalition building related to land-related transformations.

Impact Programs

The SCL will contribute indirectly towards the GEF-7 Impact Programs (IPs), which focus on Systems Transformation, including Food Systems, Land Use and Restoration (FOLUR), Sustainable Forest Management, and Sustainable Cities. These IPs, aim to provide holistic and integrated approaches for transformational change in these key systems in line with countries? national development priorities. The SCL could be a central place to monitor global progress made across these IPs, tracking whether action implemented from GEF-supported projects in aggregate are delivering real-world change aligned with avoiding the worst impacts and halting biodiversity loss. This information could help support the GEF in identifying where transformations are accelerating, stalling, or heading in the wrong direction, helping to inform GEF?s investment priorities and assess its worldwide impact.

Relatedly, the SCL will identify a critical subset of forces that enable systems change across each transformation ? information that could help GEF-supported projects within these IPs identify effective levers of change to pull to spur and sustain transitions. The SCL will also highlight interconnections between systems, showing where action can deliver co-benefits across IPs, where codependency?s exists, and where decision-makers must manage tradeoffs. Such research may prove especially helpful in achieving transformational change across highly connected systems, such as food, land, and forests.

Notably, the SCL will engage with or is already collaborating with many of projects that are part of these IPs, such as C40 and FOLU (see Table 2), these are key coalitions that are advancing systems change in FOLUR and Sustainable Cities. WRI are a key technical partner of the Sustainable Cities Program, and specific outputs from the SCL (such as key indicators and datasets) could support the global knowledge sharing and learning platform.

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF,

LDCF, SCCF, and co-financing

The window of opportunity for transformative change to limit warming to 1.5?C and steer the world toward a net-zero CO2 emissions and nature-positive future is rapidly closing. The GEF project funds will be crucial to rapidly testing, establishing, and launching the monitoring platform, the creation of SCL research and knowledge products, and mobilizing action based on SCL data and analyses.

This information for decision-makers will come at a crucial time, as countries ramp up implementation of their enhanced NDCs, post-2020 biodiversity framework, and 2030 Agenda for Sustainable Development. The SCL can be used to then deploy resources rapidly to these initiatives and build from the baseline described in Section 2. Specifically, GEF financing will be leveraged to;

? Enable the SCL to quickly expand efforts beyond climate-related transformations. The focus to date has been on supporting the High-Level Climate Champions? tracking of progress towards their breakthrough campaigns in terms of climate action. As this is well aligned with WRI?s expertise and there have been specific calls from the climate community for this type of support. Support from the GEF would enable the SCL to expand its scope to other critical transformations needed to combat biodiversity loss and land degradation. For example, with GEF funding, the SCL could partner with leading institutions to identify indicators and high-quality, regularly maintained data sources, such as UNEP-WCMC for biodiversity-related indicators and datasets, who have developed the UN Biodiversity Lab platform. This will enable the SCL to integrate these indicators and datasets into the monitoring platform and annual assessment reports, providing a snapshot of progress relating to biodiversity. In addition, the partnership with UNEP-WCMC could be leveraged with the deep dives into the drivers of systems change and with mobilizing action owing to their credibility in this space.

? Enable the SCL to systematically integrate social inclusion and equity considerations.

During project implementation the SCL will seek to build on the technical research on transformations of socio-technical and social ecological systems, to integrate social and equity considerations into the work of the SCL, including those related to women and gender minorities. This could include support from the GEF to hire staff for the SCL to coordinate and provide oversight on these issues in collaboration with the technical staff (see more information in 6. Institutional Arrangement and Coordination).

? Work with leading researchers to assess case studies of the drivers of transformational

change. While there has been considerable work done in this space focused on socio-technical systems (see The baseline scenario and any associated baseline projects section for more information), GEF support would enable the SCL to build from this work, particularly in social-ecological systems (management of land/forests, freshwater ecosystems, and the ocean) and uncover examples in which change was durable, occurred at large scale, overcame vested interests and other root causes and barriers. From these case studies, the SCL will identify key ingredients of transformational change The SCL will also apply these social-technical learning to low-carbon technologies, for which the literature is still nascent. For each of these systems, the SCL will also bring together practitioners from different geographies and areas of expertise to explore how they have overcome barriers and unlocked larger scale systems change in a series of dialogues.

? Establish and continuously engage with an Advisory Council to help deliver systems change needed to safeguard the global commons. This Council, comprised of leading thinkers on systems change hailing from government, civil society, the private sector, and multilateral institutions like the GEF, will help shape the SCL?s strategy, guide implementation of its activities, and offer key insights from their work on advancing transformational change with key systems. In turn, establishing this Council will help the Lab reach key decision-makers, particularly those with significant influence and the power to pull critical change levers. The SCL will seek not only to inform Council members? work, but also ensure that these members become key messengers of change for the Lab.

? Strengthen coalition-building to address transformations that have stalled or are heading in the wrong direction. SCL analysis will identify those transformations which are not making progress or heading in the wrong direction, and don?t have a dedicated community of change agents. GEF support will allow the SCL to support the creation of action-based coalitions (or strengthening of existing coalitions identified in the baseline) which aim to address this and accelerate progress.

The Bezos Earth Fund?s co-financing, as well as co-financing support from WRI?s anonymous donor, will be complementary to GEF financing and will focus on separate components of this two-year project. The addition of GEF financing could help strengthen the likelihood of further financing from the Bezos Earth Fund, specifically, upon successful completion of this project, which will be needed to maintain the data platform, expand our research on the drivers of transformational change across different systems, and support continued engagement with key decision-makers. The presence of GEF as a funder of the project will also help the Lab diversify the funding base of the project. Finally, the GEF funds, can be leveraged with the Bezos Earth Fund and WRI funding to bring in more co-financing support further down the line for the SCL.

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The SCL will seek to achieve global environmental and adaptation benefits indirectly by providing decision-makers with the knowledge, tools, data, and research that they need to accelerate systems change to safeguard the global commons for all. Although not quantifiable, this focus of the SCL project is directly relevant to most of the GEF-7 Core Indicators. For example, as shown in Table 4 below, the project will monitor, learn from, and accelerate transformations that aim to lead to:

? The protection of forests and other natural landscapes (Core Indicator 1: terrestrial protected areas created or under improved management for conservation and sustainable use);

? The protection and restoration of marine ecosystems (Core Indicator 2: marine protected areas created or under improved management for conservation and sustainable use);

? The restoration of degraded and deforested landscapes (Core Indicator 3: area of land restored); and

? The decarbonization of the energy sector (Core Indicator 6: greenhouse Gas Emissions Mitigated).

The project has the potential to mobilize action for durable, transformational change to solve some of the world?s greatest social and environmental challenges?to protect forests, freshwater, the ocean, and the climate. Through enabling decision-makers to promote the transformation of key economic systems, by mid-century the SCL will help to safeguard the global commons for all.

For Core Indicator 11 (the number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment), the SCL will benefit at least 15,000 decision-makers. This target of 15,000 decision-makers relates specifically to users of the platform during the project period (5,000 in first year and then doubling to 10,000 in second year), and the SCL will be able to collate this information (sex disaggregated) using Google Analytics. This figure is based on estimates of users of other platforms that WRI hosts, such as Climate Watch.

The SCL will have beneficiaries beyond the platform through, for example, knowledge sharing and coalition-building. However, given that many of those who access the platform may also participate in the Lab?s trainings, engage in knowledge-sharing events, or receive targeted analysis from the Lab, there is a risk of double-counting.

Table 4: Global Environmental Benefits from Alternative Scenarios

Baseline Scenario	Alternative Scenario	Global Environmental Benefits (GEBs)
Although efforts to track some of these transformations exist, critical data gaps remain, and where data does exist, it is often disparate, hidden behind paywalls, or inaccessible.	The SCL will create an open-data platform where required shifts across all systems, as well as their drivers, will be regularly tracked against benchmarks aligned with the best available science.	Improved information and monitoring can empower decision- makers. The SCL will give decision- makers the information they need to take effective, evidence-based action to safeguard the global commons, as well as monitor whether those actions are resulting in real- world progress.

Although a rich body of academic literature focused on transitions across some systems exists, the trajectories and factors that enable transformational change are less understood for others, and in both cases, findings are generally not distilled into lessons learned for decision-makers.

Action to accelerate systems change is already well underway within some systems, but it is just beginning in others. And even where progress is occurring, it?s often siloed. The SCL will deepen analysis of *why* and *how* change is occurring. In partnership with leading technical experts, practitioners, and experts, it will produce analysis that not only instils greater confidence that systems change is possible, but also equips change agents with compelling case studies, an evidence base across transformations, and a roadmap for accelerating change.

For transformations in acceleration, decision makers will be equipped with the analysis and materials needed to sustain and promote further progress taking informed decisions.

For transformations at risk, the SCL will form or expand coalitions of key actors to mobilize action for the required transformations. Increasing decision-makers? understanding of the ingredients of systems change can enable them to identify the most effective change levers to pull within their systems (e.g., forests, the ocean, or energy) and develop evidencebased roadmaps to spur durable transformational change to a netzero CO₂ emissions, naturepositive future.

Increased access to targeted insights and support can mobilize decision-makers, coalitions and champions to pursue effective action, particularly for transformations that have stalled or are heading in the wrong direction. With this support, decision-makers can contribute to delivering GEF GEBs relating to biodiversity (conservation of globally significant biodiversity), climate change mitigation (mitigated GHG emissions), and land degradation (mitigated/avoided greenhouse gas emissions and increased carbon sequestration in

7) Innovativeness, sustainability and potential for scaling up

Innovativeness

The SCL will provide a platform to translate these large systemwide transformations into concrete, actionable targets, with measurable indicators that decision-makers must achieve to address both the climate and nature crises. This will provide the first complete picture of progress across systems and move beyond the current siloed approach of tracking change. The SCL is also unique in that it will monitor progress at both the outcome and driver level.

The SCL will identify the ingredients of systems change, focusing on why and how change is occurring, not just showing where. This will all be shared with decision-makers via knowledge products, including key messages/roadmaps/strategies, and events. Key inputs from decision-makers, in turn, will inform updates to the Lab?s data platform and subsequent knowledge products.

Sustainability

To help ensure that the SCL continues implementing its three-pronged strategy after this project ends, the Lab is focused on:

? Integrating the SCL into global decision-making processes, from establishing the Lab as a permanent component of the High-Level Climate Champions to working with the UNFCCC secretariat to inform official inputs the Global Stocktake to collaborating with the Champions to track progress made toward delivering the Glasgow Breakthroughs. Not only does this work raise the profile of the Lab, but it also helps create demand for its data platform and knowledge products.

? Cultivating partnerships with leading data providers and technical experts to bring potential competitors into the Lab, while also enabling the SCL to deliver the highest quality data platform and knowledge products.

? Establishing an Advisory Council composed of leaders across government, civil society, and the private sector ? champions of transformational change who are ?systems thinkers? and actively advocating for such rapid, far-reaching change. Not only will this council provide critical, strategic guidance to the SCL to ensure that its deliverables provide real value to decision-makers, but its members can also serve as key ambassadors for the Lab, bringing in opportunities to increase demand for its knowledge products and potentially new funding sources.

? Seeking multi-year funding from a diversified set of sources (e.g., multilateral climate funds like the GEF, private philanthropies like the Bezos Earth Fund and ClimateWorks Foundation, impact investment firms like Just Climate, and high net-worth individuals), as well as cultivating relationships with donors dedicated to promoting systems change to ensure financial sustainability.

For the data platform, specifically, the SCL has taken a number of steps to ensure its sustainability, beginning with an in-depth user needs assessment, as well as on-going user testing, to ensure the platform is designed to be accessible, user-centered, and valuable to targeted decision-makers. Findings from both processes have and will continue to inform the platform development and design, and the Lab will preview a full prototype with a set of key stakeholders to ensure that it can meet their needs.

This platform will also be updated continuously to ensure it is up-to-date and relevant to decisionmakers and a long-term outreach and maintenance plan will be developed to ensure its longevity. Maximizing search engine optimization, periodically introducing new functions or content to the platform, providing trainings, producing related research products, and integrating the platform into other tools are all strategies that WRI has used to draw in target audiences and keep users coming back to the platform long after the project ends. Targeted engagement and strategic communications outreach will also help build and maintain the Lab?s target audience of decision-makers.

WRI, as a lead partner of the SCL, has developed several successful data platforms in recent years including Global Forest Watch (GFW), Climate Watch, and Ocean Watch. GFW, in particular, is an open-source web application to monitor global forests in near real-time, that has been financially sustainable since 2012. Global Forest Watch has been financially successful in catering it?s application for specific issues relating to the needs of funders, attracting long-term funding from high-net worth individuals interested in forest issues, securing contributions from countries and companies that use the system to inform their decisions, driving down costs by using Google Earth and crowdsourcing to obtain data, as well as using resources from WRI?s anchor information system, Resource Watch, which receives institutional funding from WRI. Similarly, Climate Watch offers open data, visualizations and analysis to help policymakers, researchers and other stakeholders gather insights on countries' climate progress. The SCL can learn lessons and replicate the work that went into developing these data platforms to ensure the long-term financial sustainability of and demand for the SCL.

Building off WRI?s technical knowledge and prior experience hosting global platforms, WRI is well positioned to be home for the SCL for the years to come, beyond this initial 2-year project. WRI consistently receives top ratings from charity evaluators for its strong financial stewardship and commitment to transparency and accountability and has well established systems and functions in Operations, Grants and Contracts, Accounting, and other necessary core operational functions. Over the

last decade, WRI has experienced steady and continued growth, with an organizational budget of \$165 million in FY21 and an expected \$189 million in FY22. As WRI continues to grow, it has taken special care to build systems and processes to fit an organization of its size. When designing the budget and workplan for this project, the project team reviewed the capacity of existing staff and budgeted additional hires as necessary to ensure successful delivery of the project.

Scalability

By working with the High-Level Climate Champions, the SCL?s research was integrated into thematic days at COP26 and featured in the *Yearbook of Global Climate Action 2021*, an official input into the Global Stocktake). Through the Champions, the SCL will also help track progress toward the Glasgow Breakthroughs. The SCL could extend this kind of support to the other Rio Conventions beyond the UNFCCC, for example, by working with champions across the biodiversity or land degradation community and developing research products that cater to their needs.

In partnership with the GEF, the SCL will also explore establishing new coalitions (if needed) for select areas related to GEF priorities, including transitioning to a sustainable food and land use future and/or sustainable urban future. A coalition is a specific suite of public, private, financial, research, and/or civil sector entities that mobilize action across a specific shift or transformation, and ensure a strategy is pursued and implemented at scale. With the GEF, the SCL will identify 1-3 priority coalitions that do not exist and help catalyze the formation of one high-priority coalition by helping to corral the entities and build a strategy with them. This may involve seeding the idea, helping recruit the appropriate entities, bringing best practices to coalition building, and more.

The SCL will initially focus on providing a global level overview of progress against transformations, but it is the intention to scale out the platform and progress reports to provide national-level overviews where data is available. It is envisaged that the platform could have a page for each country showing national data and what is needed from the countries to meet 2030 and 2050 targets. The Lab, for example, could work with CAT to use and/or build on their fair share methodology to identify countries? contributions to global goals. This will be confirmed during project implementation and is pending the availability of high-quality, regularly maintained open-source datasets that are available at a national level.

^[2] Koplow & Steenblik (2022). *Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business*. Available

^[1] UNEP (2019). *The evolving chemicals economy: status and trends relevant for sustainability*. Available online: https://wedocs.unep.org/handle/20.500.11822/28186

online: https://www.earthtrack.net/sites/default/files/documents/EHS_Reform_Background_Report_fin .pdf

^[3] Table from Boehm et al. (2021) *State of Climate Action 2021: Systems Transformations Required to Limit Global Warming to 1.5?C.* Available online: https://doi.org/10.46830/wrirpt.21.00048. Based on this paper, these categories of enablers were identified from a synthesis of the following studies: Chapin et al. (2010); Few et al. (2017); Folke et al. (2010); Geels et al. (2017a); Geels and Schot (2007); H?lscher et al. (2018); ICAT (2020); Levin et al. (2012); Moore et al. (2014); Olsson et al. (2004); Otto et al. (2020); O?Brien and Sygna (2013); Patterson et al. (2017); Reyers et al. (2018); Sharpe and Lenton (2021); Sterl et al. (2017); Victor et al. (2019); Westley et al. (2011); Levin et al. (2020).

^[4] Decision-makers include policymakers across all sectors and at all levels of decision-making; funders and investors channelling climate and nature-related finance through bilateral aid agencies, multilateral institutions, private philanthropies, and impact investing firms; leaders across the private sector; and those at the helm of international non-governmental organizations, civil society movements, and United Nations agencies.

^[5] Limiting global temperature rise to 1.5?C and halting biodiversity loss will require transformations across socio-technical systems (power, industry, transport, the built environment, and sustainable production and consumption) and social-ecological systems (food, terrestrial ecosystem management, freshwater ecosystem management, and marine ecosystem management). Broader transformations across political, economic, and social systems will also be required, such as how we will finance the transition to a net-zero GHG emissions and nature-positive future, measure economic well-being, distribute the costs and benefits of these transformations, improve social equity and inclusion, and govern the global commons.

^[6] The SCL?s data, analysis, and/or targeted support can help decision-makers ?promote? systems change by highlighting factors that enable change (e.g., technological innovations or policies that change incentives) ? insights that can inform their actions. Decision-makers who promote systems change, then, are those that pull these change levers or undertake actions that help create an enabling environment for systems change (e.g., they invest in research and development for low-carbon technologies, strengthen institutions to improve enforcement of existing regulations, or lobby for policies that incentivize adoption of more sustainable innovations). Sustaining systems change involves continuing to pull those levers of change or contribute to an enabling environment for change over time.

^[7] For each system that must transform, the SCL identifies a series of critical component shifts. Transforming the food system to limit global temperature rise and protect nature, for instance, entails shifts focused on increasing crop yields, ruminant meat productivity per hectare of pasture, reducing food loss and waste, as well as shifting from high-meat diets to those that are plant based. In total, there are some 50 critical shifts identified across all systems. Throughout the proposal, the Lab refers to these component shifts as ?transformations.?

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

N/a as this is a global project **1c. Child Project?**

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

See stakeholder engagement plan.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

The development of the SCL has and will continue to involve extensive stakeholder consultations across the project?s primary audiences, which include: policymakers across sectors and at all levels decision-making; funders and investors channeling climate and nature-related finance through bilateral aid agencies, multilateral institutions, private philanthropies, and impact investing firms; leaders across the private sector; and those at the helm of international non-governmental organizations, civil society movements, and United Nations agencies. Consultations have also been held with technical experts to ensure that the SCL?s research is robust, and its strategies are evidence-based. In total, more than 70 stakeholders and technical experts have been consulted, representing INGOs, UN Agencies, funders, investors, advocacy organizations, and sectoral experts from both developed and developing countries. These consultations, carried out via online meetings, emails, and consultation by WRI, encompassed a user needs assessment for the data platform with 40 different stakeholders from 14 different organizations, as well as more technical reviews of the platform and its underlying research with 33 sectoral experts. For the full Stakeholder Engagement Plan see Annex I.

As part of these consultations, the stakeholders were presented with a series of high-level questions relating to the SCL at large and the platform, as well as several user experience questions with accompanying visual representations of what the SCL data platform could look like (see more details in Annex P). The findings from these engagements and how the SCL will incorporate them into the design of the platform specific to individual stakeholder groups are included in Table 5 below.

Stakeholder Names	Dates, Locations and Methods of Engagement	Outcomes
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Table 5: Stakeholder Engagement During PPG Phase

Funders and Investors	July-November 2021	Key insights from engagement with funders and investors include:
(Just Climate, Global Impact Investing Network, Climate Leadership Initiative, Sequoia, GEF, and the Bezos Earth Fund)	Online user needs assessments and data platform consultations.	 Allowing users to prioritize key transformations and to ?score? levers of change would be helpful to those interested in using the platform to identify where to focus their investments. In response to this feedback, the SCL is investigating how the platform might help users prioritize different indicators, including ways to sort transformations and drivers (e.g., mitigation potential, co-benefits, dependencies, reversibility, etc.). Impact investors want simple data visualizations, with accompanying narratives to contextualize the data. They also want to know what?s changing because of their investments and what interventions lead to change. During the design of the platform, the SCL will aim to keep the dashboard on the platform as simple as possible, by synthesizing complex challenges/data into accessible insights, focusing on high-level narrative and messages alongside the data. Similarly, philanthropic funders want to use the SCL to help see if they are on track to meet the goals of their investments and to understand what actions are most impactful. As the SCL continues to be updated, a huge value add is using the monitoring platform to assess if a funder?s strategy is still relevant on an annual basis.

INGOs and UN Agencies (UNDP, IEA, IIASA, High-Level Climate Champions, and Oxford Sustainability)	July-November 2021 Online user needs assessments and data platform consultations.	Key insights from engagements with INGOs and UN Agencies include: •This stakeholder group highlighted that at present, there are many data-rich platforms for each sector, but few do a good job of telling stories of how the data is connected. The biggest issue, then, is not the lack of data, but the lack of insights and analyses that contextualize data. As such, providing narrative text that accompanies each transformation, target, driver, and indicator is needed to help users better understand the data featured on the platform, as well as the story it tells. Including this language on the connections page is particularly important. Based on these takeaways, the SCL is now focusing on developing features that communicate the connections between transformations, such as narrative descriptions of trade-offs, co-benefits, and dependencies. The SCL will be providing substantially more narrative and methodological explanations throughout the platform, including a visual hover over detailing ?how to read? the main dashboard visuals.
		•To the extent feasible, including regional- and national-level data will provide a significant value add for those working to affect change at this level of decision- making, and without this context, global data may not be as useful or actionable. Highlighting where governments have made commitments (and where they haven?t), for example, can help INGOs and UN Agencies identify opportunities to petition for change. The SCL team is putting an increased emphasis on finding national level data where it exists, as well as other disaggregated data where it makes sense and is feasible. In addition to finding national level data, the SCL is investigating how to create visuals that, where relevant, can simply show where governments are acting on drivers of change.

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Advocacy CSOs and NGOs (350.org, Friends of the Earth, and We Mean Business)	July-November 2021 Online user needs assessments and data platform consultations.	Key insights from engagement with advocacy CSOs and NGOs include: •Advocates also identified that they want a ?methodology? section of the platform that clearly explains the selection of systems, transformations, indicators, and targets, as well as a glossary of terminology. As part of the additional methodological explanations included in the platform, the SCL will explain the methodology to help with user buy-in. This will include glossary of terminology to ensure the SCL is transparent in what definitions it will be using.
		 During the consultation period, stakeholders from this group identified that data on subsidies is often hard to track down and would be particularly powerful if it?s possible to include. The inclusion of regional- and nationallevel data will provide a significant value add, without this context, global data may not be as useful or actionable. To complement this level of information, highlighting where governments have made commitments (and where they haven?t) can help advocacy CSOs and NGOs leaders identify opportunities to petition for change. The SCL will endeavor to include national data (including data on national subsidies) and other disaggregated data where possible and where it is impactful. In addition to finding national level data, the SCL is investigating how to create visuals that, where relevant, can simply show where governments are acting on particular drivers of change.

Stakeholder Engagement in the Implementation Phase

Table 6 below provides a summary of how stakeholders will be consulted during the project implementation phase. Special attention will be paid to ensure engagement with stakeholders from both developed and developing countries.

Stakeholder Name	Method of Engagement	Location and Frequency	Resources Required	Budget
Policymakers	The SCL will produce targeted insights to help policymakers spur systems change and ensure SCL findings are included in their work, as well as in their speeches and outreach efforts. The SCL team will include policymakers as part of the user needs assessments and user testing. They will also train key policymakers through meetings and focus groups.	There will be ongoing engagement with this stakeholder group, which will largely be held online to facilitate participation and minimize travel.	Communications, engagement, and technical staff within WRI and the SCL will lead this outreach through email and online meetings primarily. Knowledge- sharing event invitations, key messaging packs, talking points, pre- written speeches, briefing materials, and media outreach materials will be shared with them.	All engagement resources including staffing and other engagement materials are integrated into the overall project budget.
Funders and Investors	The SCL team will engage funders and investors through user needs assessments and user testing. They will also train key funders and investors through meetings and focus groups. The Lab?s Co- Director from Bezos Earth Fund will also help introduce the Lab to other funders.	There will be ongoing engagement with this stakeholder group, which will largely be held online to facilitate participation and minimize travel.	Communications, engagement, and technical staff within WRI and the SCL will lead this outreach through email and online meetings primarily. Knowledge- sharing event invitations, key messaging packs, talking points, pre- written speeches, briefing materials, and media outreach materials will be shared with them.	All engagement resources including staffing and engagement materials are integrated into the overall project budget.

 Table 6: Stakeholder Engagement in the Implementation Phase

Private Sector Leaders	The SCL will work with private sector leaders to ensure key findings from knowledge products are included in their own engagements, speeches, and outreach efforts. The SCL will include private sector leaders as part of facilitated dialogues and knowledge sharing events.	There will be ongoing engagement with this stakeholder group, which will largely be held online to facilitate participation and minimize travel.	Communications, engagement, and technical staff within WRI and the SCL will lead this outreach through email and online meetings primarily. Knowledge- sharing event invitations, key messaging packs, talking points, pre- written speeches, briefing materials, and media outreach materials will be shared with them.	All engagement resources including staffing and engagement materials are integrated into the overall project budget.
INGOs and UN Agencies	The SCL team will reach out to INGOs and UN Agencies (e.g., UNDP, IEA and IIASA) and engage them through partnerships to identify and develop coalitions of thought leaders and convene key decision- makers for knowledge sharing events. The SCL team will include INGOs and UN Agencies as part of the user needs assessments and user testing, as well as train key decision- makers through meetings and focus groups. These institutions can also be engaged through partnerships to identify and gather relevant data for the platform.	There will be ongoing engagement with this stakeholder group, which will largely be held online to facilitate participation and minimize travel.	Communications, engagement, and technical staff within WRI and the SCL will lead this outreach through email and online meetings primarily. Knowledge- sharing event invitations, key messaging packs, talking points, pre- written speeches, briefing materials, and media outreach materials will be shared with them.	All engagement resources including staffing and engagement materials are integrated into the overall project budget.

Advocacy CSOs and NGOs	The SCL will engage with these organizations to form or expand existing coalitions to mobilize action for certain transformations. The SCL will also ensure key findings from knowledge products are included in their own engagements, speeches, and outreach efforts. Advocacy CSOs and NGOs will also be included as part of the user needs assessments and training of key thought leaders within these organizations, via meetings and focus groups.	There will be ongoing engagement with this stakeholder group, which will largely be held online to facilitate participation and minimize travel.	Communications, engagement, and technical staff within WRI and the SCL will lead this outreach through email and online meetings primarily. Knowledge- sharing event invitations, key messaging packs, talking points, pre- written speeches, briefing materials, and media outreach materials will be shared with them.	All engagement resources including staffing and engagement materials are integrated into the overall project budget.
Technical experts	The SCL will engage technical experts in the peer-review process for the outcomes, drivers and targets for systems change. These expert consultations will evolve during project implementation as the SCL focuses on different transformations. The SCL will also establish partnerships with leading technical experts to co-conduct case studies on the key drivers of systems change.	There will be ongoing engagement with this stakeholder group, which will largely be held online to facilitate participation and minimize travel.	Communications, engagement, and technical staff within WRI and the SCL will lead this outreach through email and online meetings primarily. Draft target, driver, and indicator lists, briefs, working papers, and reports will be shared with this group for review.	All engagement resources including staffing and engagement materials are integrated into the overall project budget.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain) Yes

Decision-makers across civil society are a core audience of both the SCL broadly, as well as its data platform. Representatives from civil society will be invited to sit on the SCL?s Advisory Council, attend SCL events, receive targeted support from the SCL, consulted during implementation of Component 3.2, and likely contribute to the Lab?s knowledge products either as technical partners or peer reviewers. For the data platform, specifically, the SCL has and will continue to engage with a range of stakeholders across civil society through user testing and its user needs assessment; these representatives will also be invited to platform-specific trainings **3. Gender Equality and Women's Empowerment**

Provide the gender analysis or equivalent socio-economic assesment.

A gender analysis was conducted in the PPG phase, and the full analysis and resulting gender mainstreaming plan are included in the Annex (see Annex K). A summary of the findings from this analysis and how it will be incorporated into the SCL is provided below.

Project-specific gender information and considerations

Considering the scope of the project, there are two main gender considerations resulting from the global analysis:

1. There is an unequal representation of women in the decision-making roles that the SCL seeks to target.

The SCL will target key decision-makers to participate in knowledge-sharing events, participate in facilitated dialogues and receive targeted support to access and use SCL knowledge products. Key decision-makers will include impact investors, philanthropists, donors in multilateral funds and multilateral development banks, those working for United Nations agencies and other international institutions, private sector executives, and leaders of advocacy campaigns. Given the information assessed in the global analysis, it is anticipated that this group of decision-makers will not be genderbalanced.

2. There is a limited representation of gender issues in sector transformation monitoring efforts to date.

The SCL monitoring platform will track progress against its selected indicators using WRI?s existing research capacity and through partnerships with leading data providers. Improved integration of gender data (data collection, analysis and reporting) to provide better gender-disaggregated recommendations will depend on data availability and more systematic monitoring by researchers and data providers. Considering the highlighted gender data gap and the specificities of some sectoral transformations, it is anticipated that gender-specific recommendations will not be provided in all knowledge products, but the SCL will highlight critical data gaps, including those related to gender where relevant.

How the SCL will mainstream gender in its operations

There are two main pathways for the SCL to mainstream gender during its implementation, by:

1. Integrating a gender-sensitive approach in the implementation of its activities

WRI will:

? Designate a person for managing gender mainstreaming within the Project Management Unit (PMU);

? Require the PMU and technical team members to complete a gender awareness training and be aware of this project?s GMP;

? Actively pursue and monitor inclusive participation in events and training sessions in a genderdisaggregated way, by ensuring invites reach women and gender minorities and by using facilitation techniques that ensure they feel confident to speak and contribute;

? Adopt gender-sensitive approaches to research;

? Strive to select a group of decision-makers targeted for direct support by the SCL that, to the extent possible, is gender-balanced;

? Ensure that the SCL?s Grievance Mechanism (see separate AGM document) will be open to complaints related to gender-relevant issues, including sexual harassment or gender discrimination.

2. Ensuring that data analyses and knowledge products include gender-responsive indicators and recommendations where relevant

WRI will:

? Wherever possible and relevant, SCL knowledge products will apply gender data best practices, highlight gender differences, and provide gender-responsive recommendations. For that, the project?s social inclusion and equity expert will review the scope of the knowledge products and indicate where gender-related aspects should be highlighted, including relevant gender-related data gaps.

? The SCL will include the monitoring of key gender indicators within the ?Inclusion, equity, and just transition? cross-cutting transformation. For example, the monitoring platform could include the indices monitored by the WEF in their annual gender gap report.

Project-wide gender mainstreaming indicators are included in the Gender Action Plan below (Table 7).

Table 7: Gender Action Plan

Component 1: Establishing and maintaining the SCL?s monitoring platform Outcome 1.1: A dynamic, user-centred, and open-source data platform[1] is formally launched and operational to monitor systems change globally.						
Outputs	Activities to Mainstream Gender into Output	Target	Resources Required	Budget		
Output 1.1.1 A comprehensive, peer- reviewed list of key indicators that measure progress towards 2030 and 2050 targets aligned with the best available science, the underlying drivers of systems change with measurable indicators, and related datasets for each indicator.	 ? Gender-related indicators to be included within the ?Inclusion, equity, and just transition? cross cutting theme and connections to the sectoral transformations highlighted. ? Guidance and review of the sectoral indicators to be provided by a social inclusion and equity expert. 	? The social inclusion and equity expert will review all indicators and suggest gender-related indicators to be included in the ?Inclusion, equity, and just transition? and in other sectors in the data platform to monitor systems change globally in Year 1.	? No additional resources needed ? the expert?s time is already factored into project budget and will be covered by co- financing under Component 1.1.	? N/A; coverage of the social inclusion and equity expert?s time will be covered by co- financing.		

Output 1.1.2 Partnerships established with leading data providers to ensure that the platform features the most complete, accurate, and high- quality datasets that are regularly updated and sustained over time.	? Seeking partnerships with leading data providers on gender equity whose datasets meets WRI?s criteria.	 ? An assessment of potential data providers on gender equity will be carried out in Year 1. 	? No additional resources needed ? already factored into project budget.	? N/A		
Output 1.1.3 Beta platform successfully launched during the project period.	? N/A	? N/A	? N/A	? N/A		
Output 1.1.4 Decision-makers trained on how to use the data platform.	? WRI will attempt to maximize gender- diverse decision-maker participation in cohorts of trained decision- makers.	? At least 50 key decision-makers trained on how to use the platform annually, from which at least 33% are women or identify as gender minorities, with the aim of reaching 50%.	? No additional resources needed ? already factored into project budget.	? N/A		
Outcome 1.2: Decision-makers are informed by the SCL?s assessment reports, which will provide a complete, annual snapshot of progress made toward accelerating the systems change needed to safeguard the global commons.						

Component 2: Co-creating th understanding of the key ingr			e decision-mak	cers?		
Outcome 2.1: Decision-maker	understanding of the key ingredients of systems change Outcome 2.1: Decision-makers are informed by compelling case studies of transformational change and an evidence base of the most critical drivers of such transitions across systems.					
	Activities to ainstream Gender	Target	Resources	Budget		

Output 2.1.1 Partnerships established with leading technical experts to co-conduct research on the key drivers of and contexts for systems change.	 ? WRI and partners adopt good practices for integrating a gender- sensitive approach to research.[5]⁴ ? Researcher network is expanded to engage more women and gender minorities. 	 ? Best practices for integrating a gender- sensitive approach to research are formally adopted in the partnership agreements with leading technical experts. ? Research team of the SCL is comprised of at least 50% women and gender minorities. 	? No additional resources needed ? already factored into project budget.	? N/A		
Output 2.1.2 Knowledge products published that analyze drivers of systems change to identify lessons learned for accelerating transformational change across other systems and/or contexts.	? Knowledge products highlight if/how gender and social equity can drive systems transformations and provide gender- responsive recommendations where relevant.	? The social inclusion and equity expert will review the scope of the knowledge products published during the project period (three knowledge products published during project period), and will indicate where gender can be highlighted as drivers of systems transformations.	? No additional resources needed ? the expert?s time is already factored into project budget and will be covered by co- financing under Component 2.1.	? N/A; coverage of the social inclusion and equity expert?s time will be covered by co- financing.		
Output 2.1.3: Events with decision- makers held to facilitate knowledge- sharing among them and to provide learnings of the successes, challenges, and key drivers of transformational change in real time.	? Women and gender minorities decision maker participation is actively pursued, facilitated, and monitored in SCL events and training sessions.	 ? 3 knowledge- sharing events for decision-makers held during project period, with at least 33% participation of women and gender minorities, with the aim of reaching 50%. ? Registration of decision-makers participating in the events is disaggregated by gender. 	? No additional resources needed ? already factored into project budget.	? N/A		
Component 3: Mobilizing action for systems change, informed by the SCL?s data and knowledge products						

Outcome 3.1: Decision-makers are equipped with the SCL?s data, analysis, and/or targeted support to sustain and promote systems change for those transformations that are heading in the right direction.

Outputs	Activities to Mainstream Gender into Output	Target	Resources Required	Budget
Output 3.1.1 Targeted, facilitated dialogues among decision-makers focused on driving transformational change in select systems held.	 ? Gender-diverse decision-maker participation is encouraged and monitored in SCL facilitated dialogues. ? Include a focus on gender/social issues that impede or promote transformation and solutions for change in SCL facilitated dialogues. 	 ? At least three targeted, facilitated dialogues held during the project period, with at least 33% women and gender minorities decision-makers invited, with the aim of reaching 50%. ? Dialogues include a focus on gender/social issues that impede or promote transformation and solutions for change. 	? No additional resources needed ? already factored into project budget.	? N/A
Output 3.1.2 Targeted insights provided to decision- makers advancing or campaigning for systems change.	? Targeted insights provided to decision- makers include gender- related aspects where relevant.	? The social inclusion and equity expert will review the scope of the targeted insights provided to decision-makers (target of 50 decision-makers) to indicate where they should include gender- related analysis and where lack of gender data should be a point of discussion.	? No additional resources needed ? the expert?s time is already factored into project budget and will be covered by co- financing under Component 3.1.	? N/A; coverage of the social inclusion and equity expert?s time will be covered by co- financing.

the expansion of an exis	? Communication strategies aim to increase the access of women and gender minorities decision- makers to the platform, the annual assessment report and the knowledge products, by adopting specific actions to reach gender- diverse decision-makers (such as disseminating knowledge products via gender network organisations). makers are organized ? ein ting coalition ? to mobilize			
are heading in the wron	g direction.			
Output 3.2.1	? N/A	? N/A	? N/A	? N/A
Stakeholder maps developed for transformations that have stalled or are heading in the wrong direction without an existing coalition or dedicated community of change agents.				
Output 3.2.2 Scoping meetings and/or dialogues held with prospective coalition members or members of an existing coalition whose work could be expanded to include at least one transformation that have stalled or are heading in the wrong direction	? WRI will encourage women and gender minorities participation in scoping meetings and/or dialogues held with prospective coalition members or members of an existing coalition; meetings will be facilitated to break down power dynamics and ensure meaningful participation. WRI will strive to engage women/gender coalitions in the process.	 ? At least 10 scoping meetings and/or dialogues held during the project period, including at least 33% of women and gender minorities invited, with the aim of reaching 50%. ? Women/gender coalitions engaged in the scoping meetings where appropriate (depending on the existence of such group within the focal transformation). 	? No additional resources needed ? already factored into project budget.	? N/A

^[1] The SCL?s data, analysis, and/or targeted support can help decision-makers ?promote? systems change by highlighting factors that enable change (e.g., technological innovations or policies that change incentives) ? insights that can inform their actions. Decision-makers who promote systems change, then, are those that pull these change levers or undertake actions that help create an enabling environment for systems change (e.g., they invest in research and development for low-carbon technologies, strengthen institutions to improve enforcement of existing regulations, or lobby for policies that incentivize adoption of more sustainable innovations). Sustaining systems change involves continuing to pull those levers of change or contribute to an enabling environment for change over time.

^[2] For each system that must transform, the SCL identifies a series of critical component shifts. Transforming the food system to limit global temperature rise and protect nature, for instance, entails shifts focused on increasing crop yields, ruminant meat productivity per hectare of pasture, reducing food loss and waste, as well as shifting from high-meat diets to those that are plant based. In total, there are some 50 critical shifts identified across all systems. Throughout the proposal, the Lab refers to these component shifts as ?transformations.?

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

Will the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on private sector engagement in the project, if any

To achieve transformations across the systems that the SCL has identified, it is critical for the SCL to engage the private sector. As detailed in the Stakeholder Engagement Plan (Annex I), the SCL will work with private sector leaders, particularly those who are committed to reducing their emissions and having a net-positive environmental impact. The SCL will engage with the private sector in different ways throughout project implementation:

In the process of developing the platform (Component 1), the SCL will work closely with key private sector stakeholders to ensure it is designed to meet their information needs. Private sector input will be particularly insightful around the platform?s inclusion of driver indicators, many of which will help capture key elements of the private sector?s role in supporting enabling environments for transformation (e.g., advocating for enabling policy, investment in technological advancements, etc.).

By developing annual assessment reports (Component 1), which will include findings relevant to private sector leaders committed to advancing systems change to address the climate and nature crises.

These stakeholders and their affiliated institutions will be well positioned to utilize this information to further advocate for change within their respective spheres of influence.

Through an Advisory Council, which will likely include leaders of private sector institutions and coalitions, the SCL will learn from them about what has successfully driven system change, hypothesize about what could trigger and sustain such change in the future, and foster collaboration and pollination across systems (Component 2).

We will also work with private sector leaders to ensure key findings from knowledge products are included in their own engagements, speeches, and outreach efforts (Component 2).

Through knowledge sharing events and targeted engagement, the SCL can influence the actions that they choose to focus on and implement, including the targets they set, the strategies they invest in, and the actions they take (Component 2).

By establishing new coalitions or expanding the work of existing groups dedicated to accelerating transformations that have stalled or are heading in the wrong direction (Component 3), which may include a private sector cohort. The SCL could leverage its relationships with groups, such as SBTI, SBTN, WEF, WMB and WBCSD, to help identify the most appropriate private sector leaders to bring into these coalitions.

Beyond setting targets and directly implementing actions, private sector leaders will play a crucial role in spurring transformational change in influencing other stakeholders including policymakers, investors, and consumers. Larger companies, for example, can pave the way for smaller companies to follow.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Table 8: Risk Assessment and Mitigation Strategy

Risk	Risk description	Risk level (High, Moderate, Low)	Mitigation measures
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i. Lack of uptake and use of the SCL?s data platform and knowledge products by decision- makers	There is slow or no uptake and use of the SCL?s data platform and knowledge products from decision-makers and the broader stakeholder audience.	Moderate	The Advisory Council will help ensure that there is a high level of engagement and uptake of the outputs of the SCL with decision-makers. This will include having ?Champions? within the Advisory Council, who will use the findings from the SCL to inform the work they are undertaking. These individuals and their affiliated institutions will be well positioned to utilize this information to further advocate for change within their respective spheres of influence. Similarly, through its user needs assessment and user testing, the Lab will continue to cultivate relationships with decision- makers across target stakeholder groups. Strategic, targeted outreach and engagement will also be pursued (see more in Section 1a.7 Innovativeness, sustainability and potential for scaling up).
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ii. Political inertia	Decision-makers do not act on the knowledge and recommendations generated by the SCL to accelerate transformational change due to political inertia towards the ?status quo? and lack of political will to tackle ?systems-wide change?.	Moderate	The SCL will mitigate this risk in three key ways: i) Through partnering with high-level decision-makers across civil society, government, and the private sector who do have the political will and power to enact change.
			ii) In some instances, expanding an existing coalitions or forming a new one to counterbalance the power of those with vested interests in the status quo.
			iii) Identifying small, low order levers of change that can be actioned now, where ambition levels can be ratcheted up over time to lead to durable systems change.
iii. Project resource risk	There is a risk of not securing the right expertise and partners for the SCL, as it covers a broad remit of sectoral transformation. This could lead to project delays while the SCL team works to secure the right expertise, or even an inability to publish some sectoral transformations if this level of expertise cannot for some reason be acquired.	Low	The SCL has a three-pronged governance structure working with an Advisory Council, a diverse set of researchers, and data providers to ensure the correct expertise for each sector is well represented. The SCL is also largely housed within WRI and can draw on its deep bench of experts across sectors.

iv. Lack of adequate or available data	A core component of the SCL is monitoring and assessing data to track progress and build an evidence base for systems change. For some indicators, data does not exist, or where it does exist, is incomplete, is inaccessible for public use, or does not exist for a majority of countries. There is a risk that these data gaps and challenges will prevent some parts of the SCL platform from being useful as a visualization tool for a number of sectors.	Moderate	The SCL will partner with leading data providers to provide the most up-to-date, complete data to track systems change across sectors and geographies. Annual reports will be produced that show the progress, or lack of progress, made toward transformations, as well as data gaps and challenges. These data gaps and challenges will be highlighted in order to inform research agendas.
v. Outreach and efforts crowded out by other environmental initiatives	With a plethora of climate change and environmental initiatives, events, and coalitions, there is a risk that the outreach and efforts of the SCL could be drowned out by other events or fail to garner attention.	Low	The SCL will be unique in that it will be the only centralized platform for measuring not only progress, but also actions taken across all required transformations. The SCL will be complementary to existing work and will have targeted communications and outreach, and lessons learned that will be shared at major events and during key moments.
vi. COVID-19	The direct impact of COVID-19 on the operations of SCL and its ability to meet its workplan and objectives.	Low	Due to COVID-19, WRI staff will implement the project?s activities through remote work. The components of the SCL can all be implemented remotely, and it is not expected that the workplan and objectives will be considerably impacted. For staff working on SCL in a WRI office, there are specific policies in place to ensure health and safety. This guidance is updated regularly as the pandemic evolves for each office based on local

vii. Social and environmental risks	Impacts of climate change and other environmental and social issues	Low	The social and environmental impacts will be minimal, as the SCL does not have a specific intervention site and the project?s activities will largely be carried out remotely. In addition to this, the SCL will aim to drive systems change that will result in a more sustainable, equitable, and prosperous future.
viii. Political risks	Publishing country data could be politically charged depending on where the data comes from.	Low	Most of the data that the SCL will be collecting will be publicly available. The SCL will ensure that this data comes from reputable sources

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

WRI is the Executing Agency (EA) for this project and will be responsible for:

•Managing the SCL, GEF Project Execution, and day-to-day activities; Leading the reporting process on project progress and budget management; Managing sub-contracts, project staff, and funds; and Executing any other project management functions.

Conservation International will act as the Implementing Agency (IA) and will be responsible for:

- ? Making the funding available on behalf of the GEF to the Executing Agency;
- ? Providing technical and financial oversight to the EA;
- ? Ensuring fiduciary standards;
- ? Supervising development, implementation, and monitoring and evaluation of the project; and
- ? Participating in the Project Steering Committee.

The Project Steering Committee

The Project Steering Committee (PSC) will be comprised of leaders from WRI and Bezos Earth Fund, as the two organizations charged with co-directing the SCL (see Figure 4 below), and CI-GEF as the IA and representative of the GEF, with a voice but not a vote. Decisions made by the PSC will require consensus

from those on the committee, and both representatives from WRI and BEF will also sit on the SCL?s Advisory Council, which will provide strategic guidance to the Lab (see more details in below). The PSC, specifically, will be responsible for:

? Overseeing the implementation of the project;

? Reviewing progress and providing oversight on the various project activities as reported by the PMU;

- ? Approving the annual work plan and budget;
- ? Overseeing the implementation of corrective actions;
- ? Enhancing synergies between the GEF project and other relevant projects/initiatives; and
- ? Providing feedback and approving project outputs and outcomes.

Project Management Unit

As the EA, WRI will host the Project Management Unit (PMU), which will consist of a the project lead and the financial lead, to coordinate the day-to-day oversight of the GEF project. These are existing positions within WRI.

The Directors for WRI Programs will collectively coordinate within WRI, provide technical support to the Lab?s technical specialist, and externally to guide the work of the SCL. Specifically, the key responsibilities of the Directors include:

? Providing leadership and technical expertise across systems on GHG emissions accounting frameworks, climate action policy and tools, economic policy, and knowledge sharing;

? Serving as senior strategic liaisons for the SCL and partners.

The Project Lead will work under the overall guidance of the WRI Project Directors, the SCL Project Steering Committee, and the SCL Advisory Committee in co-ordination with the SCL Co-Director at Bezos Earth Fund (See Annex O for information on specific responsibilities of the Directors and Project Lead).

The Finance Lead will be responsible for financial tracking and reporting, budget management, and providing administrative and project management support to project staff. They will also support the monitoring of the overall project performance, as well as liaise with internal staff and stakeholders to problem-solve, generate solutions to systematic issues, and find effective ways to complete tasks, as needed.

The Communications, Engagement, Data Platform, and Technical Specialists are crucial to the implementation of the project?s three components and will support the PMU.

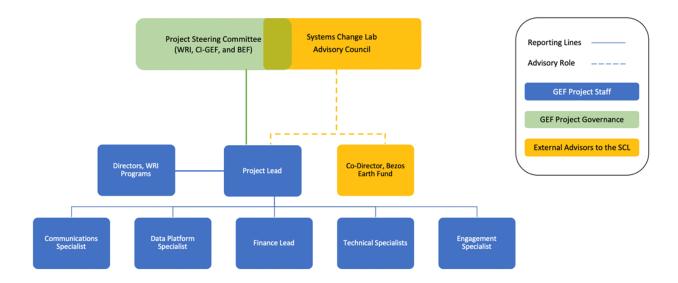


Figure 4: SCL governance structure

Broader Systems Change Lab Governance

As a core component of the GCA, the SCL is a joint effort between WRI, the High-Level Champions, and the Bezos Earth Fund, with WRI facilitating the Lab?s work. The SCL also benefits significantly from thought leadership and guidance from the GEF, the University of Tokyo's Center for Global Commons, and the World Economic Forum.

This broader governance of the SCL will help to provide advice to this GEF project, as well as help to form partnerships that will be crucial to the various outcomes of this project.

Advisory Council for the SCL

The SCL will establish an Advisory Council composed of leaders across government, civil society, and the private sector from developed and developing countries ? champions of transformational change who are ?systems thinkers? and actively advocating for such rapid, far-reaching change. Members invited will also include representatives from the Lab?s core partners, supporters, and technical partners, including WRI, the Bezos Earth Fund, the High-Level Climate Champions, the GEF, the University of Tokyo?s Center for Global Commons, and the World Economic Forum, among others. This Council will provide strategic guidance on the SCL?s work, offering critical insights on what has successfully driven system change, hypothesize about what could trigger and sustain such change in the future, and foster collaboration and knowledge-sharing across systems. Members will also have the opportunity to view and comment on the SCL's outputs before they are published.

In addition, the SCL?s findings may be used by Advisory Council members to inform their broader work. These individuals and their affiliated institutions will be well positioned to utilize this information to further advocate for change within their respective spheres of influence.

Partnerships To Support the SCL?s Work

To achieve the SCL?s three overarching objectives, the SCL will pursue three critical avenues of collaboration:

1. *Partnerships with technical experts across systems*, who can complement the above-mentioned individuals in identifying ingredients of transformation and can create a compelling evidence base for systems change. This will not be a pre-established group of institutions and individuals but will evolve during project implementation as the SCL focuses on different transformations.

2. *Partnerships with leading data providers,* who can collaborate with the SCL to provide the most up-to-date, complete data to track systems change across sectors and geographies.

3. *Partnerships with innovative data visualization experts,* who can develop the most effective, innovative data visualizations to engage the SCL?s audience effectively.

For each partnership, the SCL will establish a partner agreement or Memorandum of Understanding that outlines clear expectations on roles, responsibilities, and recognition of the partner?s contributions. The Lab?s Co-Directors will manage these partnerships, and on as needed basis, the SCL will help co-fundraise for partners or secure additional co-financing to cover the costs of collaboration. Also, depending on the partner?s contribution to the Lab, representatives from the partner organization may be invited to sit on the Lab?s Advisory Council.

As identified in the baseline scenario, the SCL will also coordinate with ongoing GEF projects (listed below in Table 9), to limit duplication of efforts and identify potential areas of mutual collaboration.

Table 9: Coordination	with relevant	GEF-financed	projects and	other initiatives
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Project/Initiative	Coordination

Staying within Sustainable Limits: Advancing leadership of the private sector and cities	The SCL will translate the Earth Commission?s global research on defining the ?safe and just corridor? for humanity (once its finalized) into systemwide transformations, with actionable, measurable targets, which the SCL will track progress toward. Working in partnership with SBTN, the SCL will help identify the most impactful levers of change that non-state actors can pull to achieve their targets to protect nature and limit global temperature rise to 1.5?C. And finally, the SCL is working with Earth HQ to ensure that both platforms offer complementary information to key decision-makers. All coordination efforts will occur under the Global Commons Alliance.
Strengthening the Blue Economy: The Economic Case, Science-Informed Policy, and Transparency	A GEF-funded WRI data platform (which supports initiatives such as Ocean Watch) that the SCL will coordinate with to access datasets and coalitions on the transformation focused on Ocean Management.
Strengthening Land Degradation Neutrality data and decision-making through free and open access platforms	A CI data platform, Trends.Earth, that could provide data, best practice, case studies and leading expertise relating to the SCL transformation of Land and Forest Management. Should the datasets meet the SCL?s criteria and be offered in compatible formats, the SCL may pursue a partnership with Trends.Earth as a data provider. This could utilize existing relationships between WRI and CI to initiate this coordination, and if needed, an MOU could be developed.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The SCL can indirectly support national priorities and policies made under relevant conventions (as detailed in Table 10 below). These conventions and agreements, including the SDGs, are often used as an overarching framework, under which countries express their national priorities; similarly, these conventions and agreements can set certain requirements and commitments for governments to fulfil. Different countries could use the data, analysis and the platform from the SCL to prepare appropriate strategies and policies to meet these requirements. The SCL platform will also highlight policy coherence (or lack thereof) across different sectors, helping to encourage countries to align policies across sectors around reaching their climate and nature targets.

Table 10: Project consistency with various national priorities

National Priorities, Plans and Policies	Project Consistency with the National priorities
National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC	Under the initial guidelines for the formulation of NAPAs, a major component to the process is reporting, monitoring and review. Specifically, the UNFCCC calls on Parties to ?monitor and review the efforts undertaken and provide information on their national communications on the progress made and the effectiveness of the national adaptation plan process.?
	The SCL aims to monitor progress across transformations that are likely cross-cutting with the intended aggregate outcomes of the NAPAs. For example, through working with data providers and target users, the SCL may shed light on data or methodologies for data collection that Parties monitoring NAPA progress would not otherwise have access to. In the future, and depending on data availability, the SCL may also track national-level progress towards national targets.
	Furthermore, the SCL could identify key global data gaps useful to NAPAs that need to be filled.
	Finally, the SCL could help decision-makers identify the right levers of change to pull and what measures they should adopt to achieve the targets laid out in these plans. To that end, the SCL will provide targeted support to decision-makers if asked and where appropriate to support implementation.

National Action Program (NAP) under UNCCD	Parties to the UNCCD shoulder responsibility for implementing the 2018-2030 Strategic Framework, which seeks to avoid, minimize, and reverse desertification and land degradation, as well as mitigate the impacts of drought, primarily through their NAPs. The strategy also calls on Parties to set national, voluntary land degradation neutrality targets to achieve a land degradation-neutral world by 2030.
	Monitoring progress made in implementing this strategy relies on national reporting, and Parties have agreed to report on a number of indicators, including, for example, trends in land cover, land productivity, and carbon stocks, as well as trends in access to safe drinking water, poverty, and income inequality in affected areas.
	The SCL will track global progress made across these indicators, and to the extent that national or regional level data exists, we will also include these datasets on our platform. The Lab will also benefit Parties seeking to spur systems-wide changes needed to achieve the strategy?s priorities, and provide insights on enabling factors, as well as contexts, that can help accelerate implementation of their NAPs and help them achieve their land degradation neutrality targets. These drivers could include access to finance, land tenure security, or policies that incentivize adoption of more sustainable land management practices.
	The SCL can also provide targeted support to the relevant national decision-makers if asked and where appropriate to support implementation of the NAPs and land degradation neutrality targets.

Nationally Determined Contributions (NDC) under the UNFCCC	All three pillars of the SCL would contribute to establishing and achieving the NDCs for all involved Parties to the UNFCCC by:
	? Establishing and maintaining the SCL?s monitoring platform. An integral component of the NDCs is monitoring and evaluating implementation progress. The SCL could provide complementary data, and demonstrate best practice methodologies for data aggregation for use by countries.
	? Co-creating the SCL?s knowledge products to help improve decision-makers? understanding of the key ingredients of systems change. Providing insights from historical precedents and the determinants of systems change can inform implementation plans for Parties? NDCs.
	? Mobilizing action for systems change, informed by the SCL?s data and knowledge products. Identifying barriers to change, as well as key enablers of transformation, can help countries prioritize future updates to their NDCs. Furthermore, mobilizing coalitions to address these shortcomings can also directly help countries achieve their NDCs.

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Sustainable Development Goals (SDGs)	The SDGs have been adopted by all UN Member States and to achieve these goals, every country will need contribute towards them and align their national priorities with them. Countries have been attempting to develop national SDG strategies and action plans, as well as to assess progress against them. The SCL plans to ensure that the SDGs are systematically considered across the platform, particularly in target-setting. For example, goals around decarbonizing power must also consider and allow for expanding electricity access to under-served populations, and food system targets must also consider food security. This work could help individual countries understand how progress (or lack of progress) on one goal, could help to achieve or undermine progress on others.
	The SCL would also directly contribute to SDG 17: Partnerships for the Goals:
	? Target 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries
	? Target 17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries
	Indirectly, the SCL would contribute to the other SDGs by nature of monitoring, providing insights, and fostering action across a set of interdisciplinary system transformations that span the SDGs.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Knowledge management is integral to the SCL?s success, as the Lab seeks to inform and support decisionmakers across developed and developing countries so that they can more effectively accelerate the transformations needed to safeguard the global commons for all. Due to its centrality to the project, the SCL has integrated knowledge management across each Component, including: ? **Establishing and maintaining the SCL?s monitoring platform.** The SCL will partner with leading data providers, such as the IEA and UNEP-WCMC, and target users, including campaigners, philanthropies and investors to co-develop the platform with WRI?s technical experts. Together, they will design this monitoring platform to provide high-quality, user-centered, accessible information that can support decision-makers working to spur transformational change across systems. All designs and functions will be tested with the Lab?s targeted audience, while all technical inputs will undergo rigorous peer review. Once launched, this open-data platform (i.e., all data featured will be freely available to download, reuse, and republish) will provide a complete, regularly updated picture of progress made toward systemwide transitions required to avoid the worst climate impacts, protect nature, and build a fairer economy. Targeted trainings, such as online workshops or webinars, will be carried out with key decision-makers to ensure that they understand how to use the platform, and feedback from these events will inform further development of the platform.

? To reach a broader audience, the Lab will also produce complementary annual assessment reports that provide a static snapshot of progress. These publications will also undergo peer-review and be designed to be accessible to busy decision-makers. Outreach efforts, which will occur alongside key events (such as the COPs) and leverage existing the SCL?s relationships, will help enable wide uptake of these publications and their findings. Lessons learned during the report development phase and responses to the publications from decision-makers will inform updates to the monitoring platform and future annual assessments.

? **Producing and sharing the SCL?s knowledge products to inform decision-makers on the ingredients of systems change**. The SCL will produce analysis that not only instills greater confidence that systems change is possible, but also equips decision-makers with compelling case studies, an evidence base of critical levers of change that they can pull to spur transformation, and a roadmap for accelerating systems change. These knowledge products will focus on *why* (or why not) systems change is occurring and will provide a deep-dive analyses into the drivers of systems change. Partnerships with leading technical experts will be established as needed (e.g., where WRI has gaps), and the research process will be supported by peer-to-peer, knowledge-sharing events held with practitioners from different geographies and areas of expertise to explore critical drivers of systems change in targeted dialogues.

? In these knowledge products, the SCL will identify key lessons learned from these case studies of systems change and share these insights with decision-makers through associated outreach and targeted engagement. These analyses will help decision-makers identify levers to prioritize when seeking to accelerate systems change, and all knowledge products will be designed for both technical and non-technical audiences.

? **Mobilizing action for systems change, informed by the SCL?s data and knowledge products.** For transformations where progress is heading in the right direction, albeit too slowly, the SCL will provide decision-makers with targeted insights and strategic communications materials to spur systems change. This support will include curated messaging packs with media materials, editorial content, prewritten talking points, and key messages, as well as tailored, technical responses to specific queries from decision-makers provided on an as-needed basis. For transformations where progress is stalled or heading in the wrong direction entirely, the SCL will with partners and existing coalitions to understand the actors, relationships, vested interests, and barriers in these systems. The Lab will then identify 1-3 priority coalitions that do not exist and help catalyze the formation of one high-priority coalition by helping to corral the entities and build a strategy with them. This may involve seeding the idea, mapping stakeholders, helping recruit the appropriate entities, bringing best practices to coalition building, and hosting participatory dialogues and scoping meeting.

? Overall, the SCL will develop an overarching communications strategy to help disseminate data, analysis, and insights from the data platform and knowledge products produced during the project period. The Lab will also create more targeted communications strategies with messages and tactics that cater to different sets of audiences, which will vary by knowledge product. Outreach for all Components will likely be pursued around major moments, such as UNFCCC COPs, CBD COPs, World Cities Summit, Stockholm + 50, United Nations General Assembly, among others.

Table 11 below shows how knowledge management is integrated into the design of the project and the relevant outputs from the Results Framework. Given the nature of the project the costs allocated to the components of \$1,718,182 will generate KM activities.

Project Outputs	Knowledge management and research products related to each output	Timeline
Output 1.1.1 A comprehensive, peer-reviewed list of key indicators that measure progress towards 2030 and 2050 targets aligned with the best available science, the underlying drivers of systems change with measurable indicators, and related datasets for each indicator.	? Peer-reviewed list of, targets, indicators, drivers, and datasets	? This output will be finalized in Q4 of year 1.
Output 1.1.2 Partnerships established with leading data providers to ensure that the platform features the most complete, accurate, and high- quality datasets that are regularly updated and sustained over time	? Partnerships? Datasets	? This output will be finalized in Q4 of year 1.
Output 1.1.3 Beta platform successfully launched during the project period.	? Beta platfrom	? This output will be finalized in Q2 of year 1.

Table 11: Knowledge management plan

Output 1.1.4 Decision-makers trained on how to use the data platform	? Training programs	? Ongoing throughout the project duration
Output 1.2.1 Peer-reviewed assessment reports published annually	? Progress reports	? Annual[1]
Output 2.1.1 Partnerships established with leading technical experts to co- conduct research on the key drivers of and contexts for systems change	? Partnerships	? This output will be finalized in Q3 of year 1.
Output 2.1.2 Knowledge products published that analyze drivers of systems change to identify lessons learned for accelerating transformational change across other systems and/or contexts	? 3 knowledge products produced which could include briefs, working papers, case studies, and blog and/or video series	? This output will be produced in year 2, with knowledge products in Q1, Q2 and Q4.
Output 2.1.3 Events with decision-makers held to facilitate knowledge-sharing among them and to provide learnings of the successes, challenges, and key drivers of transformational change in real time.	? Knowledge-sharing events to launch and share the knowledge products from 2.1.2	? This output will be produced in year 2, with knowledge-sharing events in Q1, Q2 and Q4.
Output 3.1.1 Targeted, facilitated dialogues among decision-makers focused on driving transformational change in select systems held	? 3 facilitated dialogues	? 2 will be carried out in conjunction with the release of the annual reports, 1 will be carried out at the end of the project in year 2.
Output 3.1.2 Targeted insights provided to decision-makers advancing or campaigning for systems change	? Key messaging packs, talking points, pre-written speeches, briefing materials, and media outreach materials	? Intermittent throughout the project duration

Output 3.1.3 Communications strategies developed and implemented to disseminate the SCL?s data and analysis, including findings from its annual assessment reports and knowledge products, among decision-makers	 ? Overarching communications strategy to identify the SCL?s target audience, goals/objectives, key messages, and key tactics. ? Targeted communications strategies for each product that is launched including ? the platform, the assessment reports, the knowledge products, any events, etc. 	? Intermittent throughout the project duration
Output 3.2.1 Stakeholder maps developed for transformations that have stalled or are heading in the wrong direction without an existing coalition or dedicated community of change agents.	? Stakeholder maps developed for at least 2 transformations to inform the formation of a new coalition or the expansion of an existing coalition	? This output will be finalized in Q2 of year 2.
Output 3.2.2 Scoping meetings and/or dialogues held with prospective coalition members or members of an existing coalition whose work could be expanded to include at least one transformation that have stalled or are heading in the wrong direction	? Scoping meetings and/or dialogues with new coalition or members of an existing coalition	? These will be carried out throughout year 2 of the project

9. Monitoring and Evaluation

Describe the budgeted M and E plan

A. Monitoring and Evaluation Roles and Responsibilities

The PMU will be responsible for initiating and organizing key monitoring and evaluation tasks. This includes the project inception workshop and report, quarterly progress reporting, annual assessment and implementation reporting, documentation of lessons learned, and support for and cooperation with the independent external evaluation exercises.

WRI, as the project Executing Agency, will be responsible for ensuring that the monitoring and evaluation activities are carried out in a timely and comprehensive manner, and for initiating key monitoring and evaluation activities, such as the independent evaluation exercises.

Key project executing partners will be responsible for providing any and all required information and data necessary for timely and comprehensive project reporting, including results and financial data, as necessary and appropriate.

The PSC plays a key oversight role for the project, with regular meetings to receive updates on project implementation progress and approve annual workplans. The PSC also provides continuous ad-hoc oversight and feedback on project activities, responding to inquiries or requests for approval from the PMU and/or Executing Agency.

The CI-GEF Project Agency plays an overall assurance, backstopping, and oversight role with respect to monitoring and evaluation activities.

The CI General Counsel?s Office and Grants and Contracts Unit function is responsible for contracting and oversight of the planned independent external evaluation exercises at the mid-point and end of the project.

B. Monitoring and Evaluation Components and Activities

The Project M&E Plan will include the following components (see Table 12 for details):

a. Inception workshop

A project inception workshop will be held within the first three months of project start with the project stakeholders. An overarching objective of the inception workshop is to assist the project team in understanding and taking ownership of the project?s objectives and outcomes. The inception workshop will be used to detail the roles, support services, and complementary responsibilities of the CI-GEF Project Agency and the Executing Agency.

b. Inception workshop Report

The Executing Agency will produce an inception report documenting all changes and decisions made during the inception workshop to the project planned activities, budget, results framework, and any other

key aspects of the project. The inception report will be produced within one month of the inception workshop, as it will serve as a key input to the timely planning and execution of project start-up and activities.

c. Project Results Monitoring Plan (Objective, Outcomes, and Outputs)

A Project Results Monitoring Plan will be developed by the GEF Project Agency, which will include objective, outcome and output indicators, metrics to be collected for each indicator, methodology for data collection and analysis, baseline information, location of data gathering, frequency of data collection, responsible parties, and indicative resources needed to complete the plan. Appendix J provides the Project Results Monitoring Plan table that will help complete this M&E component.

In addition to the objective, outcome, and output indicators, the Project Results Monitoring Plan table will also include all indicators identified in the Safeguard Plans prepared for the project, thus they will be consistently and timely monitored. The monitoring of these indicators throughout the life of the project will be necessary to assess if the project has successfully achieved its expected results.

<u>Baseline Establishment</u> baseline data (related to the results framework and core indicators) will be collected and documented by the relevant project partners within the first year of project implementation.

d. GEF Core Indicator Worksheet

The relevant section of the GEF Core Indicator Worksheet has been updated for the CEO endorsement submission (see Annex D). This worksheet will also be updated i) prior to mid-term review, and ii) prior to the terminal evaluation.

e. Project Steering Committee Meetings

Project Steering Committee (PSC) meetings will be held annually. Meetings shall be held to review and approve project annual budget and work plans, discuss implementation issues and identify solutions, and to increase coordination and communication between key project partners. The meetings held by the PSC will be monitored and results adequately reported.

f. CI-GEF Project Agency Field Supervision Missions

The CI-GEF PA will annually assess project progress through either in-person or virtual visits as agreed in the project?s Inception Report/Annual Work Plan. Any oversight visits will most likely be conducted to coincide with the timing of PSC meetings. A report will be prepared by the CI-GEF PA staff participating in the oversight mission and will be circulated to the project team and Project Coordination Team within one month of the visit.

g. Quarterly Progress Reporting

The Executing Agency will submit quarterly progress reports to the CI-GEF Project Agency, including a budget follow-up and requests for disbursement to cover expected quarterly expenditures.

h. Annual Project Implementation Report (PIR)

The Executing Agency will prepare an annual PIR to monitor progress made since project start and in

particular for the reporting period (July 1st to June 30th). The PIR will summarize the annual project result and progress. A summary of the report will be shared with the Project Steering Committee.

i. Final Project Report

The Executing Agency will draft a final report at the end of the project.

j. Independent Terminal Evaluation

An independent Terminal Evaluation will take place within six months after project completion and will be undertaken in accordance with CI and GEF guidance. The terminal evaluation will focus on the delivery of the project?s results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The Executing Agency in collaboration with the PSC will provide a formal management answer to the findings and recommendations of the terminal evaluation.

k. Lessons Learned and Knowledge Generation

Results from the project will be disseminated through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. There will be a two-way flow of information between this project and other projects of a similar focus.

1. Financial Statements Audit

Annual Financial reports submitted by the Executing Agency will be audited annually by external auditors appointed by the Executing Agency.

The Terms of References for the evaluations will be drafted by the CI-GEF PA in accordance with GEF requirements. The procurement and contracting for the independent evaluations will handled by CI?s General Counsel?s Office. The funding for the evaluations will come from the project budget, as indicated at project approval.

Type of M&E	Reporting	Responsible	Indicative Budget
	Frequency	Parties	from GEF (USD)
a) Inception workshop and Report	Within three months of signing of CI Grant Agreement for GEF Projects	? Project Team? Executing Agency? CI-GEF PA	All non-labor costs, such as those associated with events, workshops, and trainings, will be covered by co- financing.

Table 12: M&E Plan Summary

b) Inception workshop Report	Within one month of inception workshop	? Project Team? CI-GEF PA	All non-labor costs, such as those associated with events, workshops, and trainings, will be covered by co- financing.	
c) Project Results Monitoring Plan (Objective, Outcomes and Outputs)	Annually (data on indicators will be gathered according to monitoring plan schedule shown on Appendix J)	? Project Team? CI-GEF PA	11,496.44	
d) GEF Core Indicator Worksheet	i) At CEO endorsement submission ii) Prior to mid-term, iii) Prior to terminal evaluation	? Project Team? Executing Agency? CI-GEF PA	10,346.80	
e) Project Steering Committee Meetings	Annually	? Project Team? Executing Agency? CI-GEF PA	35,319.32	
f) CI-GEF Project Agency Field Supervision Missions	One off event/visit	? CI-GEF PA	N/A *paid by Agency fees	
g) Quarterly Progress Reporting	Quarterly	? Project Team? Executing Agency	70,638.64	
h) Annual Project Implementation Report (PIR)	Annually for year ending June 30	? Project Team? Executing Agency? CI-GEF PA	18,394.31	
i) Project Completion Report	Upon project operational closure	? Project Team? Executing Agency	14,945.55	

j) Independent External Mid-term Review	Approximate mid- point of project implementation period	? CI Evaluation Office? Project Team? CI-GEF PA	N/A
k) Independent Terminal Evaluation	Evaluation within three months prior to project completion.	? CI Evaluation Office? Project Team? CI-GEF PA	30,000
l) Lessons Learned and Knowledge Generation	At least annually	? Project Team? Executing Agency? CI-GEF PA	35,319.32
m) Financial Statements Audit	Annually	? Executing Agency? CI-GEF PA	11,246.00

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

Due to the global and interdisciplinary nature of this project, it is hard to pinpoint quantifiable or localized socioeconomic benefits?however, the project should bring about socioeconomic co-benefits globally and locally through facilitating systems change via the project outcomes.

More specifically, the success of the SCL?s work could help deliver the GEF?s global environmental benefits and adaptation benefits. Rapid, far-reaching transitions across systems can lead to a more prosperous, sustainable, and nature-positive society for all. As an example, transforming how we manage land and forests entails restoring degraded and deforested landscapes. Such a transformation would lead to a positive impact not only on biodiversity, associated ecosystems services, and ecological resilience, but also contribute to GEF?s global environmental benefits in climate change (through sequestering and storing carbon), land degradation (through restoration of native ecosystems), and adaptation (through agroforestry systems that diversify farmers? livelihoods). Similarly, transforming our food systems

involves shifting to sustainable agricultural production, halving food loss and waste, shifting to more plantbased diets, and reducing GHG emissions from agriculture. These shifts could enhance food security (through increasing crop, livestock, and pasture productivity on existing lands) and improve livelihoods (through the introduction of more resilient, low-emissions production methods and technologies), helping hundreds of millions of small-scale agricultural producers to adapt to the impacts of climate change.

The SCL also includes a cross-cutting focus on ?Inclusion, Equity and the Just Transition? that will underpin the sectoral transformations it seeks to advance (see Annex N for further information). This will include shifts that ensure that the costs and benefits of systems change are equitably distributed, that those historically marginalized from decision-making processes have a seat at the table across all levels of policymaking (i.e., global, national, and local), and that efforts to safeguard the global commons are combined with those to ensure universal access to basic services and opportunities. It also encompasses efforts to ensure just transitions at all levels and for both those disproportionately affected by climate impacts and biodiversity loss, as well as those working in industries that may need to be phased out (e.g., fossil fuel companies). If the Lab is successful in supporting decision-makers to act on these issues, (and potentially strengthening coalitions or helping create a new coalition for transformations not currently addressed), then this should also contribute to substantial socioeconomic benefits in the near future at both local and national levels.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approva I	MTR	ТЕ
	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Project Category:	Category A	Category B	Category C	
			Х	
The proposed project activities are likely to have minimal or no adverse environmental and social impacts.				
Safeguards Triggered:				
Environmental & Social Impact Assessment	nt Cul	tural Heritage		
Protection of Natural Habitats and Biodive Conservation Resett. & Physical/Economic Displacemen Indigenous Peoples Resource Efficiency & Pollution Preventio	Cor t Priv Inter	y Labour and Working Conditions Community Health, Safety and Security Private Sector Direct Investments and Financial Intermediaries Climate Risk and Related Disasters		
Mitigation Measures Required:				
Limited or Full ESIA Environmental & Social Management Plan Plan for Natural Habitat Protection and Biodiversity Conservation Voluntary Resettlement Action Plan Process Framework Indigenous Peoples Plan	u Cul Lab Cor Env	ource Efficiency & Poll. tural Heritage Manageme our Management Procedu nmunity Health, Safety ar rironmental and Social Ma nate and Disaster Risk M	nt Plan Ires nd Security Plan anagement Framework	

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
SCL AGM Plan	CEO Endorsement ESS	
SCL Safeguard Screening	CEO Endorsement ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Objective:	To help enable decision-makers to accelerate the systemwide transformations needed to safeguard the global commons for all.
Indicator(s):	 a. Number of global open data platforms established for tracking transformational change across key systems Target: 1 global open data platform b. Number of decision-makers informed by the Systems Change Lab?s data platform, assessment reports, knowledge products, and targeted support over the project period Target: At least 15,000 decision-makers (at least 50% women) (GEF Core Indicator 11)^[4]

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
Component 1: Establishi	ing and maintaining the	SCL?s monitoring platfe	orm

Outcome 1.1 A dynamic, user- centered, and open- source data platform is formally launched and operational to monitor systems change globally.	Baseline 1.1.1 No dynamic, user- centered, and open- source data platform to monitor systems change globally is publicly available.	Target 1.1.1 One dynamic, user- centered, and open- source data platform to monitor systems change globally is designed, launched, and operational.	Output 1.1.1 A comprehensive, peer- reviewed list of key indicators that measure progress towards 2030 and 2050 targets aligned with the best available science, ^[7] the underlying
Indicator 1.1.1 Number of dynamic, user-centered, and open- source data platforms to monitor systems change globally that are designed, launched, and operational. Indicator 1.1.2 Number of decision- makers ^[6] visiting the data platform during the project period (disaggregated by gender).	Baseline 1.1.2 No decision-makers visiting the data platform.	Target 1.1.2 15,000 decision-makers visiting the data platform during the project period, with 5,000 in the first year and 10,000 in the second year (at least 50% women).	drivers of systems change with measurable indicators, ^[8] and related
			reviewed by at least three experts during the project period. Output 1.1.2 Partnerships established with leading data providers to ensure that the platform features the most complete, accurate, and high-quality datasets that are regularly updated and sustained over time. Indicator 1.1.2 Number of partnerships established with leading data providers during the project period. Target 1.1.2 At least 3 partnerships established with leading data providers during the project period. Output 1.1.3 Beta platform successfully

Outcome 1.2 Decision-makers are informed by the SCL?s assessment reports, which will provide a complete, annual snapshot of progress made toward accelerating the systems change needed to safeguard the global commons. Indicator 1.2.1 Number of decision- makers informed by the SCL?s assessment reports annually (disaggregated by gender). Indicator 1.2.2 Number of high-level decision-makers (e.g., at the CEO or ministerial level) who include findings from the SCL?s assessment reports in their engagements, speeches, or outreach afforts (a.g. on ads	makers including findings from the SCL?s assessment reports in their engagements, speeches, or outreach efforts.	Target 1.2.1 At least 10,000 decision- makers informed by the SCL?s assessment reports annually (at least 50% women). ^[10] Target 1.2.2 At least five high-level decision-makers (e.g., at the CEO or ministerial level) include findings from the SCL?s assessment reports in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) each year (at least two are women or identify as gender minorities, with the aim of reaching three).	Output 1.2.1 Peer-reviewed assessment reports published annually. Indicator 1.2.1 Number of peer-reviewed assessment reports published annually. Target 1.2.1 One peer-reviewed assessment report published annually.
level) who include findings from the SCL?s assessment reports in their engagements,			
Component 2: Co-creati	ng the SCL?s knowledge	e products ^[11] to help imp	rove decision-makers?

understanding of the key ingredients of systems change

Outcome 2.1 Decision-makers are informed by compelling case studies of transformational change and an evidence base of the most critical drivers of such transitions across systems. Indicator 2.1.1 Number of decisionmakers informed by each of the SCL?s knowledge products during the project period (disaggregated by

Indicator 2.1.2 Number of high-level decision-makers (e.g., at the CEO or ministerial level) who include findings from the SCL?s knowledge products in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) each year (disaggregated by gender and system).

gender).

Baseline 2.1.1 No decision-makers informed by each of the SCL?s knowledge products during the project period.

Baseline 2.1.2 No high-level decisionmakers currently including findings from the SCL?s knowledge products in their engagements, speeches, or outreach efforts.

Target 2.1.1 At least 2,000 decisionmakers informed by each of the SCL?s knowledge products during the project period (at least 50% women).^[12]

Target 2.1.2 At least five high-level decision-makers (e.g., at the CEO or ministerial level) include findings from the SCL?s knowledge products in their engagements, speeches, or outreach efforts (e.g., op-eds, social media, stakeholder updates, speeches, etc.) during the project period (at least two are women or identify as gender minorities, with the aim of reaching three).

Output 2.1.1

Partnerships established with leading technical experts to co-conduct research on the key drivers of and contexts for systems change.

Indicator 2.1.1 Number of partnerships established with leading technical experts during the project period.

Target 2.1.1 At least two partnerships with leading technical experts established during the project period.

Output 2.1.2

Knowledge products published that analyze drivers of systems change to identify lessons learned for accelerating transformational change across other systems and/or contexts.

Indicator 2.1.2 Number of knowledge products (e.g., briefs, working papers, commentaries, article series, video series, etc.) published during project period.

Target 2.1.2 Three knowledge products (e.g., briefs, working papers, commentaries, article series, video series, etc.) published during project period.

Output 2.1.3

Events with decisionmakers held to facilitate knowledge-sharing among them and to provide learnings of the successes, challenges, and key drivers of transformational change in real time.^[13]

Indicator 2.1.3 Number of knowledgesharing events held during project period.

Target 2.1.3 Three knowledge-sharing events held during project period. Component 3: Mobilizing action for systems change, informed by the SCL?s data and knowledge products

Outcome 3.1

Decision-makers are equipped with the SCL?s data, analysis, and/or targeted support to sustain and promote^[14] systems change for those transformations^[15] that are heading in the right direction.

Indicator 3.1.1 Number of decisionmakers who download data from the SCL?s platform during the project period (disaggregated by gender).

Indicator 3.1.2 Number of decisionmakers surveyed who have responded saying that the data, analysis, and/or targeted insights from the SCL has ?frequently? or ?very frequently? helped them promote or sustain systems change during the project period (disaggregated by gender and system).

Baseline 3.1 No decision-makers have downloaded data from the SCL?s platform.

Baseline 3.2 No decision-makers have received data, analysis, and/or targeted support from the SCL. Target 3.1.1 1,500 decision-makers download data from the SCL?s platform during the project period, with 500 downloading data in the first year and 1,000 downloading data in the second year (at least 50% women).

Target 3.1.2

At least 100 decisionmakers surveyed who have responded saying that the data, analysis, and/or targeted insights from the SCL has ?frequently? or ?very frequently? helped them promote or sustain systems change during the project period (at least 33% are women or identify as gender minorities, with the aim of reaching 50%).

Output 3.1.1

Targeted, facilitated dialogues among decisionmakers focused on driving transformational change in select systems held.

Indicator 3.1.1 Number of targeted, facilitated dialogues held during project period.

Target 3.1.1 At least three targeted, facilitated dialogues held during the project period.

Output 3.1.2

Targeted insights provided to decision-makers advancing or campaigning for systems change.

Indicator 3.1.2 Number of decisionmakers who receive targeted insights (e.g., key messaging packs, talking points, pre-written speeches, briefing materials, media outreach materials, etc.) from the Lab during the project period (disaggregated by gender and system).

Target 3.1.2 At least 50 decisionmakers receiving targeted insights from the Lab during the project period (at least 33% are women or identify as gender minorities, with the aim of reaching 50%).

Output 3.1.3

Communications strategies developed and implemented to disseminate the SCL?s data and analysis, including findings from its annual assessment reports and knowledge products, among decision-makers.

Indicator 3.1.3 Number of communications strategies developed during the project period.

Target 3.1.3 At least five communication strategies developed, including one

Outcome 3.2 Decision-makers are organized ? either through the formation of a new coalition or the expansion of an existing coalition ? to mobilize action for transformations that have stalled or are heading in the wrong direction. Indicator 3.2 Number of new coalitions formed, or existing coalitions expanded to mobilize action for transformations that are stalled or heading in the wrong direction during the project period.	coalitions have yet to bring insights from the Systems Change Lab into their strategy.	coalition is expanded to focus on advancing transformations that	Output 3.2.1 Stakeholder maps developed for transformations that have stalled or are heading in the wrong direction without an existing coalition or dedicated community of change agents. Indicator 3.2.1 Number of stakeholder maps developed during the project period. Target 3.2.1 At least two stakeholder maps developed during the project period. Output 3.2.2 Scoping meetings and/or dialogues held with prospective coalition members or members of an existing coalition whose work could be expanded to include at least one transformation that have stalled or are heading in the wrong direction. Indicator 3.2.2 Number of scoping meetings and/or dialogues held during the project period. Target 3.2.2 At least ten scoping meetings and/or dialogues held during the project period.
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^[1] Decision-makers include policymakers across all sectors and at all levels of decision-making; funders and investors channeling climate and nature-related finance through bilateral aid agencies, multilateral institutions, private philanthropies, and impact investing firms; leaders across the private sector; and those at the helm of international non-governmental organizations, civil society movements, and United Nations agencies.

[2] Limiting global temperature rise to 1.5?C and halting biodiversity loss will require transformations across socio-technical systems (power, industry, transport, the built environment, and sustainable production and consumption) and social-ecological systems (food, terrestrial ecosystem management, freshwater ecosystem management, and marine ecosystem management). Broader transformations across political, economic, and social systems will also be required, such as how we will finance the transition to a net-zero GHG emissions and nature-positive future, measure economic well-being, distribute the costs and benefits of these transformations, improve social equity and inclusion, and govern the global commons.

^[3] Limiting global temperature rise to 1.5?C and halting biodiversity loss will require transformations across socio-technical systems (power, industry, transport, the built environment, and sustainable production and consumption) and social-ecological systems (food, terrestrial ecosystem management, freshwater ecosystem management, and marine ecosystem management). Broader transformations across political, economic, and social systems will also be required, such as how we will finance the transition to a net-zero GHG emissions and nature-positive future, measure economic well-being, distribute the costs and benefits of these transformations, improve social equity and inclusion, and govern the global commons.

^[4] For Core Indicator 11 (the number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment), the SCL will benefit at least 15,000 decision-makers. This target of 15,000 decision-makers relates specifically to users of the platform during the project period (5,000 in first year and then doubling to 10,000 in second year), and the SCL will be able to collate this information (sex disaggregated) using Google Analytics. This figure is based on estimates of users of other platforms that WRI hosts, such as Climate Watch. The SCL will have beneficiaries beyond the platform through, for example, knowledge-sharing and coalition-building. However, given that many of those who access the platform may also participate in the Lab?s trainings, engage in knowledge-sharing events, or receive targeted analysis from the Lab, there is a risk of double-counting.

^[5] The SCL defines a dynamic platform as one for which both the narrative text and data are updated regularly (i.e., at least annually), as well as one that includes interactive data visualizations. The Lab will ensure that the platform is user-centered by conducting extensive user needs assessments and user testing with target audiences, and ensuring that the findings from these processes inform the platform?s design. Finally, the Lab will strive to ensure that all datasets featured on the platform are open-source ? freely available for all people to download, reuse, and republish.

^[6] The SCL has identified a smaller, more targeted group of decision-makers for the data platform, including impact investors, philanthropists, donors in multilateral funds and multilateral development banks, those working for United Nations agencies and other international institutions, private sector executives, and leaders of advocacy campaigns.

^[7] The SCL will translate the required transformational changes across systems into a series of component shifts, which the Lab colloquially calls ?transformations? for ease of communication, each with at least 1 quantitative targets for 2030 and 2050 that are aligned with the best available science (to the extent that they exist) and that will serve as guideposts for measuring progress. In doing so, it will also identify key indicators for each target (e.g., share of renewables in electricity generation or million hectares of land reforested).

^[8] The underlying drivers of systems change are those forces that have historically enabled transformational change, including innovations in technologies, practices, and approaches, supportive policies, strong institutions, shifts in social norms, and leadership from critical change agents. For each transformation (e.g., protect terrestrial ecosystems), the SCL will identify at least

5 key drivers of change, with measurable indicators (e.g., number of countries that have committed to halting deforestation, total amount of finance allocated to forest conversation, percent of indigenous communities? land with tenure security, etc.).

^[9] Preliminary research suggests that many indicators may lack complete, accurate, and lack highquality datasets that are regularly updated and sustained over time. To be conservative, we estimate that only a third of all 300 indicators will have related datasets that meet this criteria, which the Lab is currently defining.

^[10] The SCL will tally the number of launch event attendees, article pageviews, email views, social media impressions, and publication pageviews to identify a total number of views across all communications outreach materials. We then assume one unique individual for every three views across all outreach.

^[11] The monitoring platform created in component 1 will inform these knowledge products, but they will require additional analysis and focus on identifying the key drivers of systems change, understanding how these ingredients come together (and in what sequence) to spur transformation, and highlighting lessons learned for decision-makers. These products will likely entail highly focused case studies.

[12] The SCL will tally the number of launch event attendees, article pageviews, email views, social media impressions, and publication pageviews to identify a total number of views across all communications outreach materials. We then assume one unique individual for every three views.[13] Findings from these events will inform the research underpinning knowledge products produced under this component to ensure that knowledge-sharing is not unidirectional.

^[14] The SCL?s data, analysis, and/or targeted support can help decision-makers ?promote? systems change by highlighting factors that enable change (e.g., technological innovations or policies that change incentives) ? insights that can inform their actions. Decision-makers who promote systems change, then, are those that pull these change levers or undertake actions that help create an enabling environment for systems change (e.g., they invest in research and development for low-carbon technologies, strengthen institutions to improve enforcement of existing regulations, or lobby for policies that incentivize adoption of more sustainable innovations). Sustaining systems change involves continuing to pull those levers of change or contribute to an enabling environment for change over time.

^[15] For each system that must transform, the SCL identifies a series of critical component shifts. Transforming the food system to limit global temperature rise and protect nature, for instance, entails shifts focused on increasing crop yields, ruminant meat productivity per hectare of pasture, reducing food loss and waste, as well as shifting from high-meat diets to those that are plant based. In total, there are some 50 critical shifts identified across all systems. Throughout the proposal, the Lab refers to these component shifts as ?transformations.?

^[16] The SCL will develop one over-arching communications strategy across all components, as well as more targeted communications strategy for each report, knowledge product, and event hosted. This target, then, focuses on those project-specific communications strategies.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities	GETF/LDCF/SCCF Amount (\$)		
Implemented	Budgeted Amount	Amount Spent To date	Amount Committed
GEF 1-Step MSP Development including the following activities were conducted: stakeholder mapping and engagement; Baseline assessment; Preparation of 1 step project document and budget; and the Preparation of safeguards plans (ESIA/ESMP, GMP, SEP, AGM)	47,500	34,500	13,000
Total	47,500	34,500	13,000

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

N/A for global project

ANNEX E: Project Budget Table

Please attach a project budget table.

	Detailed Description	Component (USDeq.)									Responsibl Entity
Expenditure Category		Component 1		Component 2	Component 3		Sub-Total	M&E	РМС	Total (USDeq.)	(Executing En receiving fu from the G Agency)[1
		Outcome 1.1	Outcome 1.2	Outcome 2.1	Outcome 3.1	Outcome 3.2					
S	Staff- Project Lead	\$45,138	\$45,138	\$45,913	\$45,138	\$45,915	\$227,242	S-	\$27,997	\$255,239	WBSystems Change Lab
s	Staff- Engagement Specialist	S-	S-	S-	\$139,556	\$30,619	\$170,175	\$37,167	S-	\$207,342	
	Staff- Communications Specialist	\$35,751	\$13,153	\$9,291	\$9,134	\$9,291	\$76,620	\$9,087	S-	\$85,707	
	Staff- Directors, WRI Programs	\$12,664	\$5,338	\$2,715	S-	S-	\$20,717	S-	\$32,189	\$52,906	
	Staff- Finance Lead	s.	S-	S-	\$-	S-	S-	\$11,328	\$81,092	\$92,420	
	Staff- Data Platform Specialist	\$108,901	S-	S-	S-	S-	\$108,901	S-	S-	\$108,901	
Personnel and	Staff- Technical Specialist, Lead on Food, Forests and Land, Freshwater, and the Ocean	\$19,721	\$24,220	\$24,636	\$24,220	\$24,636	\$117,433	s-	s-	\$117,433	
Professional Services2	Staff- Technical Specialist, Data	\$144,326	S-	S-	S-	S-	\$144,326	S-	S-	\$144,326	
	Staff- Technical Specialist, Lead on Socio-Technical Systems	\$29,040	\$29,040	\$29,540	\$29,040	S-	\$116,660	S-	Ş-	\$116,660	
	Staff- Technical Specialist1	S-	S-	S-	\$115,016	\$116,995	\$232,011	S-	S-	\$232,011	
	Staff- Technical Specialist, Power, Industry, Transport, and Buildings	\$32,072	\$65,734	\$32,960	\$27,541	\$13,104	\$171,411	S-	S-	\$171,411	
	Staff- Technical Specialist, Food, Forests, Land, Freshwater, and the Ocean	\$29,467	\$29,997	\$4,309	\$4,236	\$4,309	\$72,318	S-	\$-	\$72,318	
c	Contractual Services - Annual Project Audit	S-	S-	S-	S-	S-	S-	S-	\$11,246	\$11,246	
0	Contractual Services - Terminal Evaluation	s-	S-	S-	S-	S-	S-	\$30,000	Ş-	\$30,000	
Other Operating Costs3	Telecommunications costs for staff working on the project	\$14,701	\$6,710	\$4,749	\$12,644	\$7,663	\$46,467	\$1,944	\$4,907	\$53,318	
	Direct Project Related IT, Research, and Electronic Network support for staff working on the project and web platform/hosting expenses	\$33,549	\$15,223	\$10,781	\$28,493	\$17,182	\$105,228	\$4,471	\$11,204	\$120,903	
	Office space utilities, supplies, office maintenance and services for staff working on the project	\$33,625	\$15,182	\$11,099	\$31,621	\$17,145	\$108,672	\$6,003	\$13,183	\$127,858	
irand Total		\$538,955	\$249,735	\$175,993	\$466,639	\$286,860	\$1,718,182	\$100,000	\$181,818	\$2,000,000	
opertise to be determined in Y	Year 2, after focal transformations in Component have been identified.										
	ions will be covered solely by co-financing, including a social inclusion and equity expert, a j o project using a consistent 'best practices' methodology and are utilitzed for the delivery o			oduction and consum	nption expert.						

ANNEX F: (For NGI only) Termsheet

labor costs, such as those associated with events, workshops, steering committee meetings, and trainings, will be covered by cofinancing.

<u>Instructions</u>. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

<u>Instructions</u>. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).