

GLOBAL PLATFORM FOR SUSTAINABLE CITIES (GPSC) SUSTAINABLE CITY DEVELOPMENT IN MALAYSIA PROJECT (2017-2021)

NATIONAL STEERING COMMITTEE MEETING NO. 1/2018

8 November 2018



Meeting Agenda

1. Opening Remarks by the Chairman.
2. Minutes of National Steering Committee Meeting dated 2 May 2017.
3. Matters arising.
4. Progress updates on Sustainable City Development in Malaysia Project .
5. Presentation on Melaka Sustainability Outlook by World Bank.
6. Proposal on Terms of Reference (TOR) for Smart Grid Demonstration Project.
7. Other matters.

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GPSC – Malaysia : A Global Project with Strategic Linkages



MALAYSIA



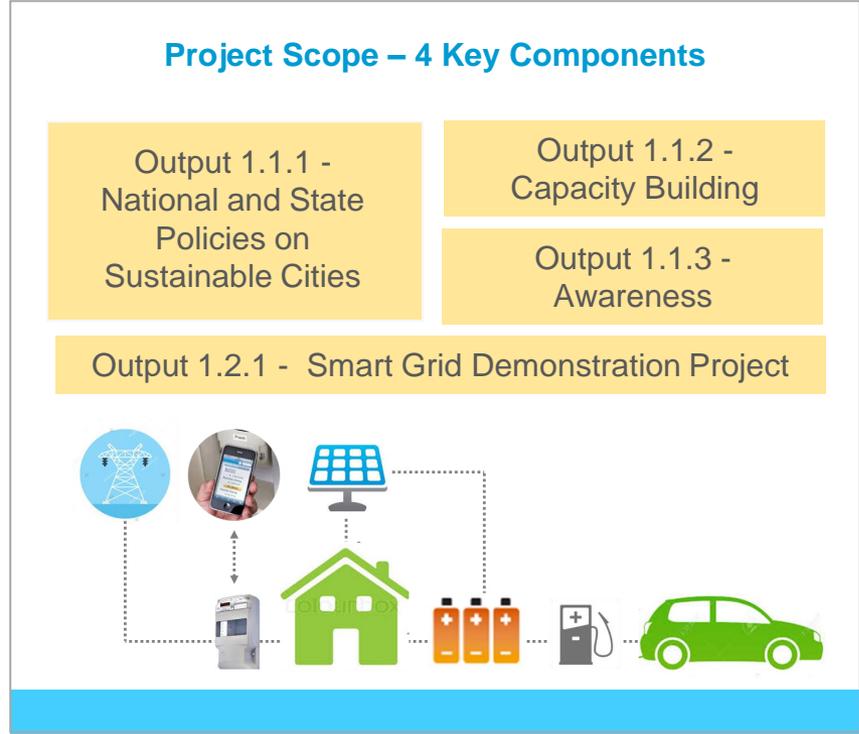
GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

- SDG11 : Part of a GEF global project on **Sustainable Cities Integrated Approach Pilot**, which is participated by 27 cities in 11 countries around the world;
- Total Global Budget : GEF - \$130 million; Co-financing - \$1.48 billion
- Budget for Malaysia : GEF - \$ 3.0 million; Co-financing - \$18.0 million

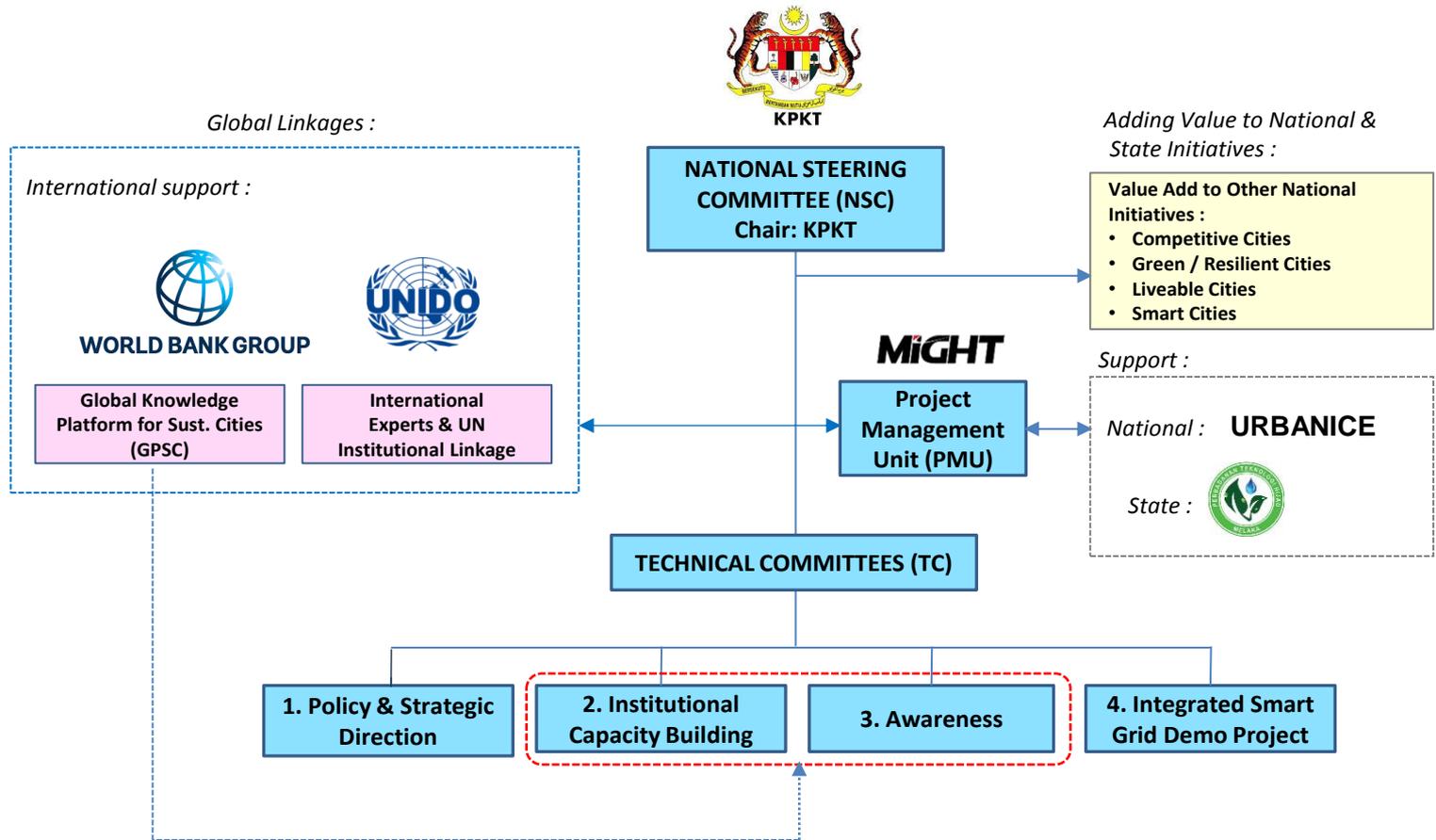


Global Partners

National & State Partners



Integrated Approach in Urban Planning in both Strategic Contents and Federal-State Level Linkages



**Establishing a Robust Governance Structure for Greater Success through a National Platform Adding Value through Integration, Synergisation & Alignment of Multiple City Initiatives in Malaysia...
.....as well as Leverage on existing Global Linkages.**

National Steering Committee Members

NATIONAL STEERING COMMITTEE MEMBERS		
NO	ORGANISATION	ROLE
1	Secretary General of Ministry of Housing & Local Government (KPKT)	Chair
2	Ministry of Economic Affairs	Member
3	Ministry of Finance (MOF)	Member
4	Ministry of International Trade and Industry (MITI)	Member
5	Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC)	Member
6	Ministry of Water, Land and Natural Resources (KATS)	Member
7	Ministry of Communications & Multimedia Malaysia (KKMM)	Member
8	Ministry of Federal Territories	Member
9	Melaka State Economic Planning Unit (UPEN Melaka)	Member
10	Malaysian Institute of Planners (MIP)	Member
11	Dewan Bandaraya Kuala Lumpur (DBKL)	Member
12	Majlis Bandaran Johor Bahru (MBJB)	Member
13	Dewan Bandaraya Kota Kinabalu (DBKK)	Member
14	Dewan Bandaraya Kuching Utara (DBKU)	Member
15	Pihak Berkuasa Tempatan Taman Perindustrian Hi-Tech Kulim (PBTTPHTK)	Member
16	PLAN Malaysia (JPBD)	Member

NATIONAL STEERING COMMITTEE SECRETARIAT AND EX-OFFICIO		
NO	ORGANISATION	ROLE
1	Deputy Secretary General (Policy and Development), Ministry of Housing & Local Government (KPKT)	Head of Secretariat
2	Under Secretary, Policy and Inspectorate, Ministry of Housing & Local Government (KPKT)	Secretariat
3	Local Government Department (JKT)	Secretariat
4	Malaysian Industry-Government Group for High Technology (MIGHT)	Secretariat
5	Urbanice Malaysia	Secretariat
6	Malaysian Green Technology Corporation (MGTC)	Ex-Officio
7	Melaka Green Technology Corporation (PTHM)	Ex- Officio

Project Components

Output 1.1.1 - National and State Policies on Sustainable Cities

To develop both **National & State policies** and strategic direction for Implementation of sustainable and resilient cities improved/developed; supported by enabling programs (funding models, green procurement, PPPs, etc.) & projects

Output 1.1.3 - Awareness

To develop and implement **Institutional capacity of** policy-makers at the national, state and local levels;

Output 1.1.2 - Capacity Building

To plan and implement **Awareness** raising events for policy-makers, industry and end-users organized at all levels for dissemination of tangible benefits/results of the project;

Output 1.2.1 - Smart Grid Demonstration Project

The adoption of renewable energy (RE) integrated Smart Grid facilitated through demonstration activities of distributed RE systems, solar-powered EV charging facilities, battery energy storage, Energy Efficiency (EE) and RE applications in buildings, related policies, capacity building and ICT systems.

Project Financing for 5 Years - Overview

DIRECT FINANCING (Grant)

CO - FINANCING (In Kind)

Project Components

Output 1.1.1 -
National and State
Policies on
Sustainable Cities

Output 1.1.3 -
Awareness

Output 1.1.2 -
Capacity Building

Output 1.2.1 - Smart
Grid Demonstration
Project

USD 937,293

USD 1,605,000

TOTAL (USD)

USD 2,542,293

NAME OF CO-FINANCIER	TYPE	AMOUNT (USD)
Malaysian Industry-Government Group for High Technology (MiGHT)	In-kind	3,000,000
Ministry of Energy, Green Technology and Water (KeTTHA)	In-kind	1,000,000
Malaysia Green Technology Corporation (MGTC)	In-kind	770,000
Ministry of Urban Wellbeing, Housing and Local Government	In-kind	1,000,000
Melaka City	In-kind	12,000,000
UNIDO	Grants	84,000
UNIDO	In-kind	146,000
TOTAL		18,000,000

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7. Other matters.



SUSTAINABLE CITY DEVELOPMENT IN MALAYSIA PROJECT

Activity Title : NATIONAL STEERING COMMITTEE MEETING NO. 1/2017		Time / Date : 12.45 p.m., 2 May 2017
Document Title : MINUTES OF MEETING		Venue : Straits Room 1, Avillion Legacy Hotel Melaka No. of pages : 8 pages
Attendees :		
Committee Members :		
No	Organisation	Name & Designation
1.	Ministry of Urban Wellbeing, Housing and Local Government (KPKT)	YBhg. Dato' Dr. Tam Weng Wah (Deputy Secretary General, Development)
2.	Economic Planning Unit (EPU)	Dr. Ramli Nordin (Deputy Director, K-Economy)
3.	Ministry of Finance (MOF)	Mr. Nazaruddin Abu (Principal Assistant Director, Budget)
4.	Ministry of Green Technology, Energy and Water (KeTTHA)	Mr. Asdirhyme Abdul (Under Secretary, (Regulatory and Industrial Development)
5.	Ministry of International Trade and Industry (MITI)	Ms. Sabariah Ghazali (Director, Trade and Other Related Emerging Issues)
6.	Ministry of Communication and Multimedia Malaysia (KKMM)	Mr. Azizul Akram Abdul Kamal (Senior Assistant Secretary, Development)
7.	Melaka State Economic Planning Unit (UPEN)	Mr. Shamsul Ambia Abd Aziz (Under Secretary Development)
8.	Kuching North City Hall (DBKU)	Mr. Jumaini Haili (Director)
9.	Malaysian Institute of Planners (MIP)	Mr. TPr Ihsan Zainal Mokhtar (President)
By Invitation :		
1.	United Nations Industrial Development Organization (UNIDO)	Mr. Jossy Thomas (UNIDO Project Manager for Sustainable City Development in Malaysia Project)

Meeting Agenda

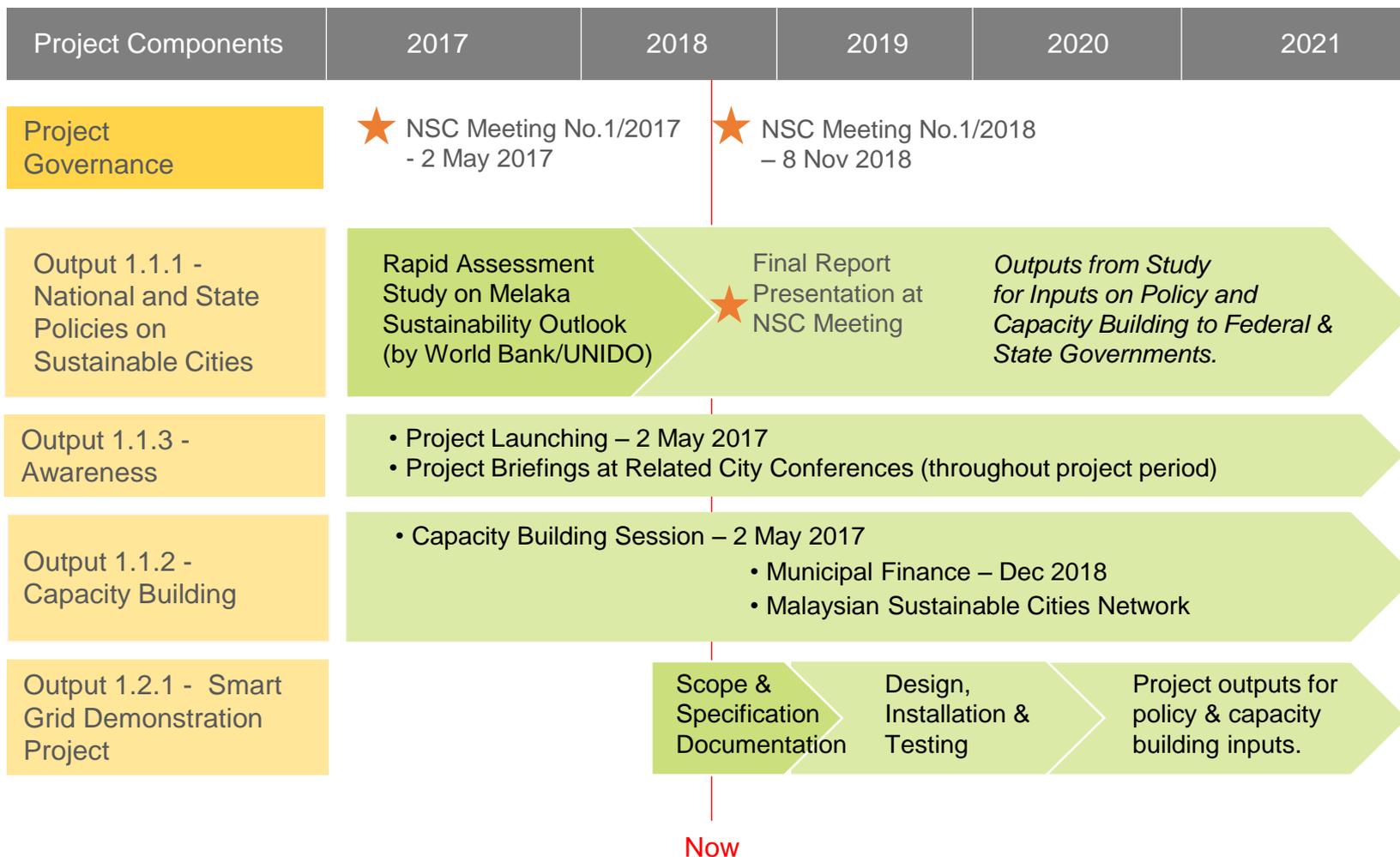
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Minutes Item	Related Minutes on Matters Arising	Updates
3.1 (iv) – Proposed Project Governance	To facilitate policy implementation, the National Steering Committee (NSC) will also be linked to the existing National Physical Planning Council, chaired by Prime Minister where PLANMalaysia is the Secretariat. Another existing platform is the Local Government Council chaired by Deputy Prime minister where Local Government Department of KPKT is the Secretariat to the council. The Secretariat is requested to review these platforms and assess its relevancy to the project.	Should there be policy interventions required beyond the NSC, it will be accordingly elevated to the higher level platforms such as National Physical Planning Council and Local Government Council on need basis.
3.2 (i) – Composition of National Steering Committee (NSC) Members and Ex-Officio to the NSC	Dewan Bandaraya Kuching Utara (DBKU) explained that based on State Secretary that UPEN should be the committee members and DBKU will be the ex-officio. the Chairman noted and subject of approval by Secretary General of KPKT	As Melaka is the only state incorporated in this project, it is recommended that the membership to NSC be maintained through DBKU as it is directly involve on competitive city issues with the federal government.
3.3 -Proposed Terms of Reference (TOR) for NSC	<ul style="list-style-type: none"> (i) KeTTHA suggested the item on Personnel in the TOR to be omitted because the Government servant placement structure. (ii) The Chairman advised the meeting that the detailed TOR is attached and members of meeting to give feed back to the Secretariat. 	<p>The word personnel has been changed to ‘person-in-charge’ in the TOR.</p> <p>No additional feedback received beyond what has been discussed at the NSC meeting.</p>
6.1-Other Matters	KeTTHA also suggested the Secretariat to consult GreenTech Malaysia, GBI and CIDB on the Carbon Inventory Methods.	Green House Gas (GHG) inventory methods will be incorporated as part of Smart Grid Demonstration Projects – Refer to Agenda 6.

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Overview on Key Project Progress & Timeline



Update on Project Progress – Output 1.1.1 : Deliverables

Project Components

Output 1.1.1 - National and State Policies on Sustainable Cities

Output 1.1.3 - Awareness

Output 1.1.2 - Capacity Building

Output 1.2.1 - Smart Grid Demonstration Project

End of 2017	1.1.1 National & state policies and strategic direction for development of sustainable and resilient cities improved/developed; supported by enabling programs (funding models, green procurement, PPPs, etc.) & projects	Yearly report containing: For activity 1.1.1.1, namely “Verification of existing national, state and local urban policies and guidelines with the view of developing new or enhancing the existing policy and regulatory frameworks for sustainable city development”: A. Finalized report outline with information sources B. Supporting documents and photos from the scoping mission C. Final report, including an extensive study of existing national, state and local urban policies as well as guidelines and action points for developing new or enhancing the existing policy and regulatory frameworks for sustainable city development D. Relevant invoices, CVs of experts that were engaged for delivery of activity and financial documentation
End of 2018	1.1.1 National & state policies and strategic direction for development of sustainable and resilient cities improved/developed; supported by enabling programs (funding models, green procurement, PPPs, etc.) & projects	Yearly report containing: For activity 1.1.1.2, namely “Policies, legislations and regulations and enforcement systems for SCD strengthened at national, state and local levels through the Rapid Assessment on Melaka Report” E. Outline of relevant policies, legislations and regulations prepared in line with the action points defined under activity 1.1.1.1. F. Documents demonstrating consultation process for report finalization. G. Documents and photos demonstrating that consultations were conducted. H. Documents and photos demonstrating that awareness and capacity building were conducted with reference to the output of the report. I. Finalized policies, legislations and regulations and enforcement systems. J. Relevant invoices, CVs of experts that were engaged for delivery of activity and financial documentation.

Project Components

Output 1.1.1 -
National and State
Policies on
Sustainable Cities

Output 1.1.3 -
Awareness

Output 1.1.2 -
Capacity Building

Output 1.2.1 - Smart
Grid Demonstration
Project



To be tabled under Agenda 5 - Presentation on Melaka Sustainability Outlook by The World Bank.

Overview on Key Project Activities – Output 1.1.3

Project Awareness

Project Components

Output 1.1.1 - National and State Policies on Sustainable Cities

Output 1.1.3 - Awareness

Output 1.1.2 - Capacity Building

Output 1.2.1 - Smart Grid Demonstration Project



Group Photo of VIPs at the Launching Ceremony for the Project – 2 May 2017



Opening Ceremony to Launch Project, Melaka – 2 May 2017



Overview on Key Project Activities – Output 1.1.2

Capacity Building

Project Components

Output 1.1.1 - National and State Policies on Sustainable Cities

Output 1.1.3 - Awareness

Output 1.1.2 - Capacity Building

Output 1.2.1 - Smart Grid Demonstration Project

SESSION 4: CAPACITY BUILDING

0845 *Registration & Light Breakfast*

0900 (Parallel Session)

Session 1: Competitive Cities by UNHabitat

Session 2: Municipal Finance by World Bank

Session 3: City Carbon Inventory by International

Council for Local Environmental Initiatives (ICLEI)

Session 4: Bio-Degradable Packaging Implementation in Cities

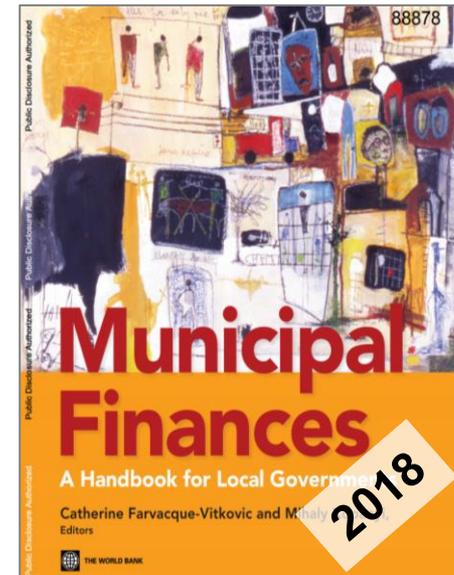
1045 *Coffee Break*

1100 Continued Parallel Session

1300 *Lunch*

1400 *End of Event*

2017



Capacity Building – Municipal Finance



Project Components

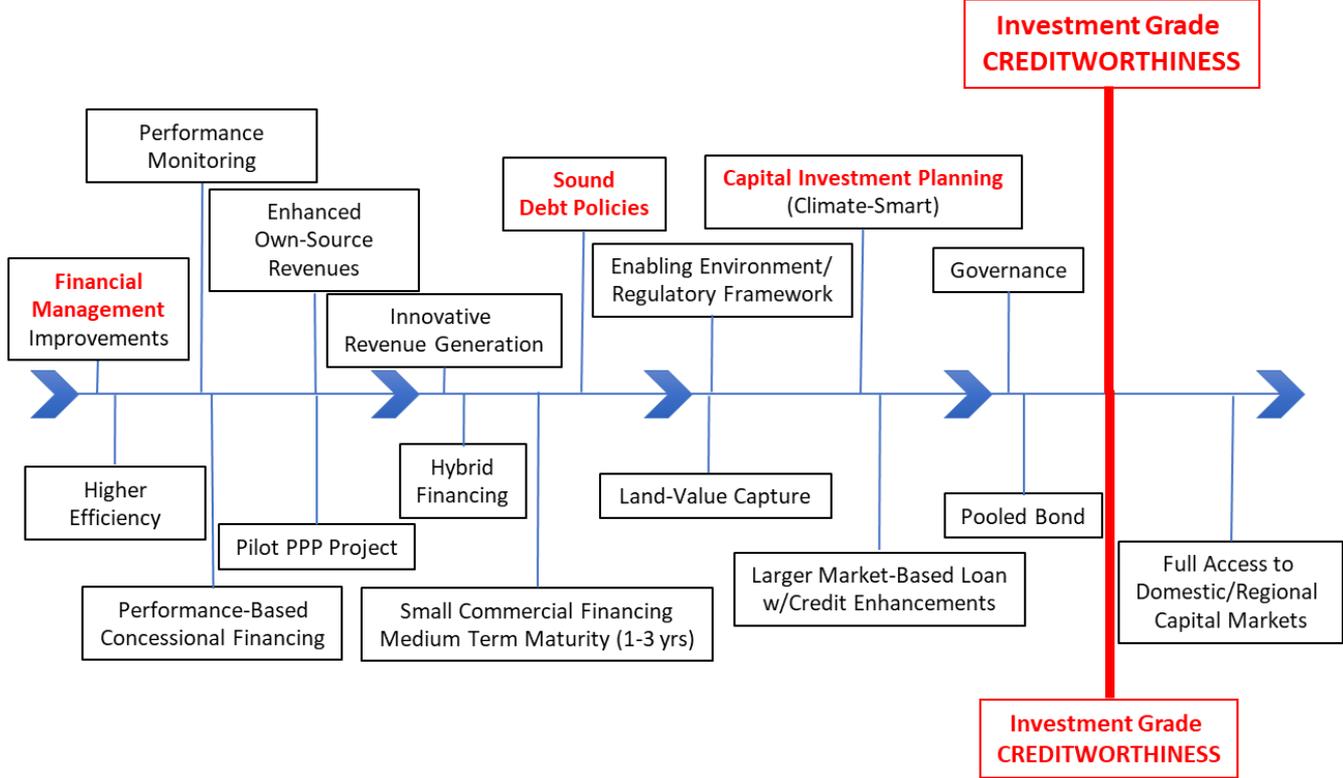
Output 1.1.1 - National and State Policies on Sustainable Cities

Output 1.1.3 - Awareness

Output 1.1.2 - Capacity Building

Output 1.2.1 - Smart Grid Demonstration Project

The Path to Creditworthiness...



.....is paved towards access to Resources for Development

Project Components

Output 1.1.1 -
National and State
Policies on
Sustainable Cities

Output 1.1.3 -
Awareness

Output 1.1.2 -
Capacity Building

Output 1.2.1 - Smart
Grid Demonstration
Project

<p>2017 till 2018</p>	<p>1.1.2. Institutional capacity of policy-makers at the national, state and local levels built</p>	<p>Yearly report containing:</p> <p>For activity 1.1.2.1. namely “Establishment of the International Centre for Sustainable Cities (ICSC)in Melaka”:</p> <ul style="list-style-type: none"> A. Finalized TOR for ICSC (TOR should define the host organization of ICSC, members of advisory board, operating model, work plan, and links to Global Platform for Sustainable Cities) B. Documents demonstrating consultation process for finalizing the TOR for ICSC C. Documents demonstrating that national consultations were conducted D. Documents and photos from the launching event of the ICSC E. Relevant invoices, CVs of experts that were engaged for delivery of activity and financial documentation
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Including :

- Project Awareness activities
- Stakeholders Training on Related Areas

Overview on Key Project Activities – Output 1.1.2 & 1.1.3

International Centre for Sustainable Cities

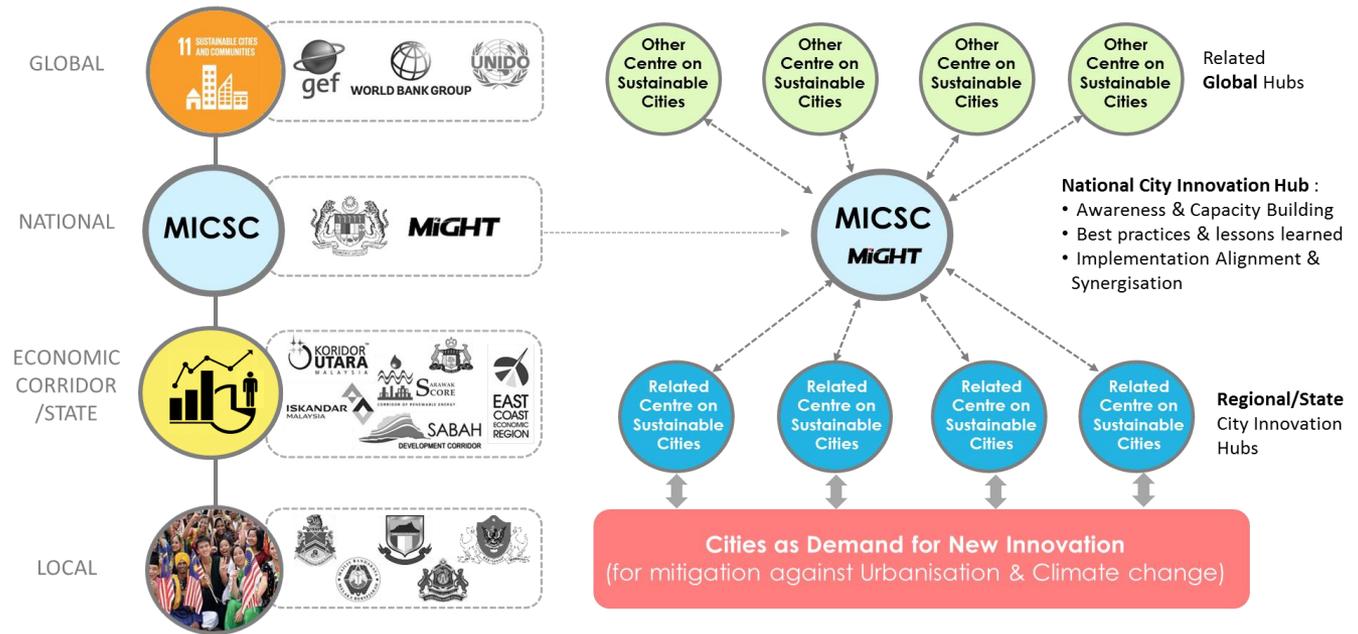
Project Components

Output 1.1.1 - National and State Policies on Sustainable Cities

Output 1.1.3 - Awareness

Output 1.1.2 - Capacity Building

Output 1.2.1 - Smart Grid Demonstration Project



1. To provide **4-tier linkage** on Sustainable Cities initiative involving global, national, state/economic corridor and local levels.
2. To provide **support on the implementation** of global SDG11 on Sustainable Cities and Communities, Malaysia's 11th Macro-Economic Plan on Competitive Cities and Smart City, State and local levels related initiatives.
3. To function as a **knowledge centre** in the development and implementation of Sustainable Cities.
4. To **synergise** multiple international-national-state-local collaborations.
5. To serve as a **platform** and **knowledge hub** for the dissemination, knowledge sharing, alignment and synergisation of multiple stakeholders in the area of Sustainable Cities.
6. To **showcase** lessons learned and **recognize** success stories on the initiative.
7. To **provide advisory, awareness** and **capacity building** initiatives in partnership with related NGOs, Academia, Government, Private Sectors and International organisations.

Overview on Key Project Activities – Output 1.1.2 & 1.1.3

International Centre for Sustainable Cities (ICSC)- Updates

Project Components

Output 1.1.1 -
National and State
Policies on
Sustainable Cities

Output 1.1.3 -
Awareness

Output 1.1.2 -
Capacity Building

Output 1.2.1 - Smart
Grid Demonstration
Project

2017 Activities :

- Melaka State Government identified the location in Bukit Peringgit.
- Preliminary TOR was developed and presented at the Stakeholders Consultation No.1 held on 3 October 2017 in Melaka.
- Key Issues on ICSC in 2017 :
 - CAPEX funding for the centre
 - Sustainable operational model
 - Linkage between National and State levels
- Project progress as end of 2017 – 50%

2018 Activities :

- Review on approach to the implementation of ICSC was carried out in Q2 of 2018.
- UNIDO agreed in-principle to the Project PMU's proposal to avoid CAPEX approach by redefining and rename this project deliverable to Malaysian Sustainable Cities Network (mySCNet).
- mySCNet focus on provide regional linkages between federal-state and multiple stakeholders on various city contents in partnership with regional corridor developers. However, the latter are also under review by the new government.
- Nevertheless, PMU has put together alternative proposal on mySCNet as virtual stakeholders platform with project partners in 2019.

Overview on Key Project Activities – Output 1.2.1

Smart Grid Demonstration Project

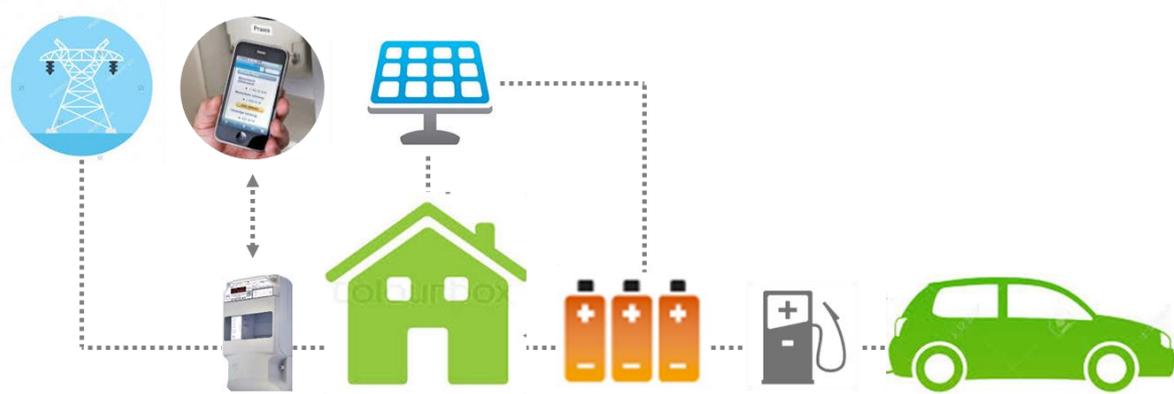
Project Components

Output 1.1.1 - National and State Policies on Sustainable Cities

Output 1.1.3 - Awareness

Output 1.1.2 - Capacity Building

Output 1.2.1 - Smart Grid Demonstration Project



To be tabled under Agenda 6 – Proposal on Terms of Reference for Smart Grid Demonstration Project

Project Financing – Update on Progress

	PROJECT PAYMENT SCHEDULE	AMOUNT (USD)	REMARKS
1	Upon signing of the Contract by both Parties (2017)	187,458.60	Paid to MIGHT – to support project mobilisation and launching with initial capacity building activities.
2	Upon receipt and acceptance by UNIDO of the Project Progress Report (2017-2018)	To be Determined	To be submitted by MIGHT end Nov 2018.
3	Upon receipt and acceptance by UNIDO of the Annual Work Plan & Budget Report for 2019	To be Determined	To obtain approval of the Project Steering Committee.
4	Upon receipt and acceptance by UNIDO of the Annual Work Plan & Budget Report for 2020	To be Determined	To obtain approval of the Project Steering Committee.
5	Upon receipt and acceptance by UNIDO of the Annual Work Plan & Budget Report for 2021	To be Determined	To obtain approval of the Project Steering Committee.
	TOTAL	937,293.00	

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BACKGROUND :

1. Under the Output 1.2.1 of the project contract with UNIDO, the project needs to deliver a Smart Grid Demonstration with integration of renewable energy, energy efficiency and electric charging stations with an allocated project budget of USD 1.6 million.
2. To date, the State of Melaka has progressed on various green initiatives involving energy related projects namely solar PV farm, electric mobility, energy efficient building, and smart meters.
3. However, each of the energy saving related efforts is standalone and not connected/linked up to provide the state government with the bigger picture on energy management at the state level.
4. This proposed on TOR aims to outline project scope, deliverables, time schedule and recommendations for approval.

OBJECTIVES OF THE PROJECT :

The key objectives of the Smart Grid Demonstration Project are as follows:

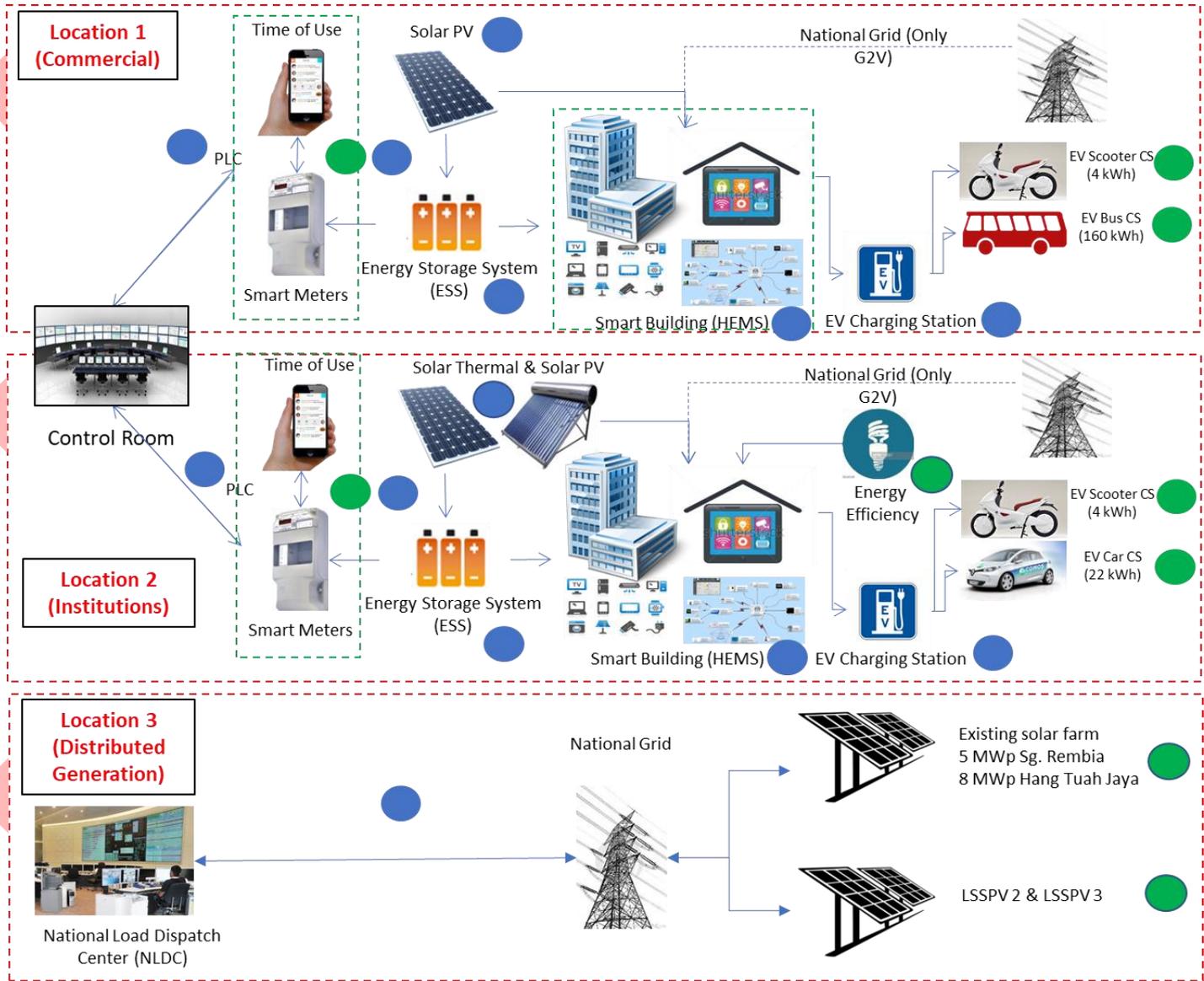
1. Introducing best practices and technology transfer through smart grid infrastructure and networking to reduce emissions and thereby promoting the adoption of industrial energy efficiency programs and renewable energy usages amongst the communities in the selected city of Melaka.
2. Implementing smart city applications in the energy space for monitoring, reporting and verification of energy consumption and energy savings based upon solar energy generation, as well as derived abatement of emissions of greenhouse gases from low-carbon road transports (such as electric vehicles) and that support sustainable industrialization and urbanization.

Proposed Scope & Phasing of Work

Phase 1
Prelim Data Integration & Reporting of Selected Energy Projects in Melaka

Phase 2
Data Integration & Analytics for Selected Energy Projects in Melaka, Future Large Scale Solar (LSS) & Rooftop Solar PV Projects via Net Energy Metering (NEM) and setting-up of Integrated Server Room in Melaka which is also ready for NLDC Connection

Phase 3
Data Integration & Visualization of Selected Energy Projects in Melaka, Future Large Scale Solar (LSS) PV & Rooftop Solar PV Projects via Net Energy Metering (NEM) and Future Green Mobility Project connected to National Load Dispatch Center (NLDC)



● Co-Financing ● Direct Financing

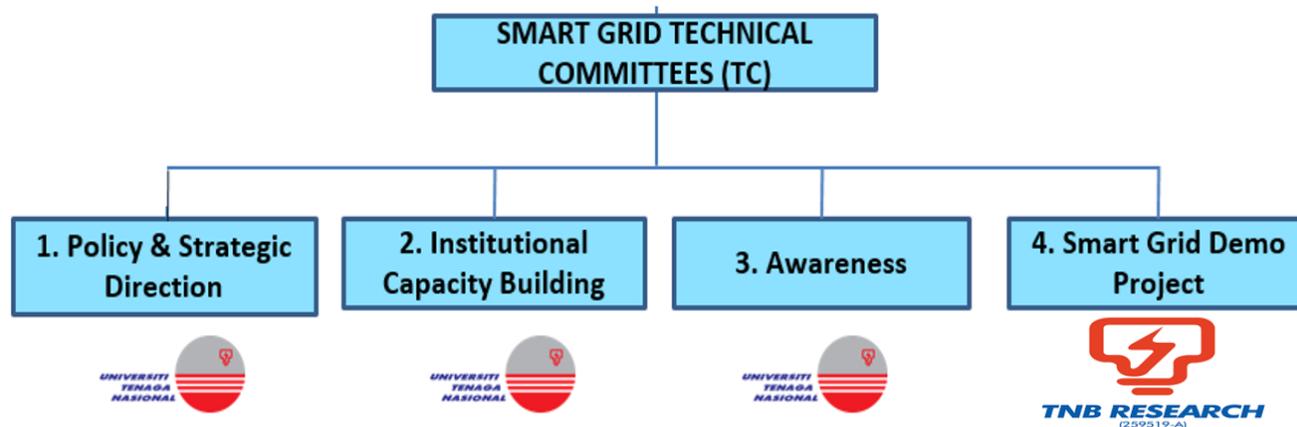
Proposed Time Schedule

NO	SMART GRID ACTIVITIES	2019											
		Q1			Q2			Q3			Q4		
1.0 PHASE 1 - 2019 :													
1.1	Prelim Data Integration & Reporting of Selected Energy Projects in Melaka, Setting up of a Server Room and Common Infrastructure for Integration :												
	1. Technical and commercial submission												
	2. Site Assessments												
	3. Installation												
	4. Testing & Commissioning												
	5. Handing Over												
2.0 PHASE 2 - 2020 :													
2.1	Data Integration & Analytics for Selected Energy Projects in Melaka, Future Large Solar Scale (LSS) PV & Rooftop Solar PV Projects via Net Energy Metering (NEM) and setting up of Integrated Server Room in Melaka which is also ready for NLDC Connection :												
	1. Technical specs refinement and procurement												
	2. Site Assessments												
	3. Installation												
	4. Testing & Commissioning												
	5. Handing Over												
3.0 PHASE 3 - 2021 :													
3.1	Data Integration & Visualization of Selected Energy Projects in Melaka, Future Large Solar Scale (LSS) PV & Rooftop Solar PV Projects via Net Energy Metering (NEM) and Future Green Mobility Project connected to National Load Dispatch Center (NLDC) :												
	1. Software specification												
	2. Software engineering												
	3. Installation												
	4. Testing & Commissioning												
	5. Project Handing over												

Proposed Implementation Partners for the Project

As TNBR and UNITEN have extensive experience and have been actively involved in local Smart Grid development and in line with adding value to existing local capabilities, it is proposed TNBR and UNITEN to be the implementation partners due to the following:

- To leverage on TNBR and UNITEN experience in executing Smart Grid pilots.
- To leverage on related knowledge within the TNB subsidiaries.
- To ensure uptake of the project by TNB during post-completion through their upfront participation in the project.



With the foregoing information, this proposal seeks the approval of the Project Steering Committee on the following :

1. Proposed Scope for the Smart Grid Demonstration project;
2. Proposed Phasing for the Smart Grid Demonstration project;
3. Proposed Time Schedule for the Smart Grid Demonstration project;
4. Proposed Project Implementation Partners.

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With the foregoing information, this proposal seeks the approval of the Project Steering Committee on the following :

1. To approve the Proposed Work Plan & Budget related to Project Management Unit (PMU) for 2019.
2. To approve the Proposed Project Workplan & Budget related to Policies, Awareness & Capacity Building for 2019.
3. To approve the Proposed Project Work Plan & Budget on Smart Grid Demonstration Project for 2019.
4. To approve the proposed budgets for the above works with tolerance of 10% as contingencies.

GLOBAL PLATFORM FOR SUSTAINABLE CITIES (GPSC)

GPSC MALAYSIA : SUSTAINABLE CITY DEVELOPMENT IN MALAYSIA PROJECT (2017-2021)

NATIONAL STEERING COMMITTEE MEETING NO 1/2018

8 November 2018



BACK-UP SLIDES

Centres of Excellence



Institute Of Power Engineering (IPE)
(2005)

Institute Energy Policy and Research (IEPRe)
(2009)

Institute of Sustainable Energy (ISE)
(2012)

Institute of Energy Infrastructure (IEI)
(2016)

Institute of Informatics and Computing in Energy (IICE)
(2016)

Research Clusters

1 Sustainable Clean Energy



2 Power & Energy Convergence



3 Energy Social Sustainability



4 Energy Infrastructure



5 Information & Communication Technology



TNBR's CORE ACTIVITIES

Involved in the entire power delivery chain

