Sustainable Energy Systems for Industrial Development Project

MEETING MINUTES

Meeting:	TECHNICAL WORKING GROUP (TWG)
Date:	11 April 2025 (09h30 – 12h00)
Chairperson:	Victor Manavhela
Secretariat:	NCPC-SA

Attendance Register

Mr Victor Manavhela – NCPC-SA (Chairperson)
Mr Lee-Hendor Ruiters – NCPC-SA
Ms Mbali Moroe – NCPC-SA
Ms Phumla Makae – NCPC-SA
Mr Jan Hendrick Grobler – CSIR Energy Centre
Mr Mchenge Nyoka – UNIDO
Mr Shakespeare Mudombi – SECO (Embassy of Switzerland)
Dr. Richmore Kasake – SANEDI
Mr Excellent Tshirangwana – IDC, Industrial Zone Program
Mr Shaun Moses – DTIC

1. Welcome and Opening Remarks

The meeting was opened by Mr. Victor Manavhela, who welcomed all participants and acknowledged the heavy schedules many are facing due to year-end activities and the long weekend. He emphasized that this TWG meeting marks the first formal sitting of the group under the SESID project. He highlighted the role of the TWG in providing guidance and technical oversight to ensure successful implementation of the SESID project, which is funded by the Global Environment Facility (GEF) and coordinated by UNIDO.

Apologies:

• GIZ representative

• Cities Support Programme (CSP) representative

Safety Briefing

A safety moment was provided, focusing on seasonal hazards such as falling branches due to heavy rains. Attendees were advised to park in designated carports rather than under trees to avoid potential danger. Emergency exit procedures were outlined, with reminders not to panic or run, and to leave personal belongings behind in an emergency. The importance of designated assembly points and internal safety officers in the building was emphasized.

2. Round of Introductions

Participants introduced themselves, representing institutions including NCPC-SA, UNIDO, SECO (Swiss Secretariat for Economic Affairs), DTIC, CSIR Energy Centre, and other government departments and stakeholders. All participants shared their respective roles and areas of focus within the project or related programs.

3. Project Overview and Technical Scope

Mr. Mchenge Nyoka from UNIDO delivered a comprehensive presentation on the SESID project, providing context, rationale, structure, and implementation strategy. The overview aimed to ensure that all TWG members had a shared understanding of the project's scope and their role in supporting its delivery.

SESID is a Global Environment Facility (GEF)-funded project implemented by UNIDO and executed by NCPC-SA, targeting energy transformation in South African industrial parks and Special Economic Zones (SEZs).

Project Objective:

To reduce greenhouse gas emissions and other environmental impacts by accelerating the decarbonization and transformation of industrial energy systems focusing on both supply and demand within industrial parks and SEZs.

1. **Component 1: Policy, Planning, and Coordination**
    - Foster institutional coordination between park management entities, municipalities, and national stakeholders.
    - Develop and pilot integrated energy plans for selected industrial parks.
    - Establish a national data platform and conduct energy profiling of parks and their tenants.
    - Build capacity on sustainable energy planning among public and private stakeholders.
2. **Component 2: Technology Demonstration**
    - Select three demonstration sites from six pre-identified industrial parks.
    - Conduct energy audits and feasibility studies.
    - Provide technical support and linkages to financing instruments (e.g., IDC, DBSA).
    - Develop case studies from pilot projects to inform replication.
3. **Component 3: Scale-up Strategy and Financial Mechanisms**
    - Develop a national scale-up framework, including policy, incentive, and investment recommendations.
    - Design and implement a virtual marketplace platform for knowledge exchange, project matchmaking, and technical collaboration.
    - Launch national stakeholder engagement events and roundtables to disseminate findings and align efforts.

Project Implementation Arrangements:

- UNIDO serves as the GEF Implementing Agency (providing oversight and reporting to the donor).
- NCPC-SA/CSIR acts as the Executing Entity, managing daily implementation, procurement, and stakeholder coordination.
- A Project Steering Committee (PSC) provides strategic oversight.
- The Technical Working Group (TWG) and a future Financial Working Group (FWG) support the PMU with expert review and guidance.

Target Parks/SEZs:

The project focuses on six geographically distributed sites:

1. Atlantis Special Economic Zone
2. Coega Industrial Development Zone
3. East London Industrial Development Zone
4. Ekandustria Industrial Park
5. Phuthaditjhaba Industrial Park
6. Umbongitwini Industrial Complex

Challenges Addressed:

- Poor coordination across energy governance levels (municipal, provincial, national)
- Limited data on energy usage within parks
- Barriers to adopting new technologies and accessing finance
- Regulatory and operational challenges (e.g., grid access, tariff structures)

Timeline and Funding:

- Originally scheduled to start in October 2022, but officially began in October 2023
- End date currently projected as September 2027
- Total budget: USD 5.2 million, with approx. 85% allocated to NCPC for implementation

Discussion Highlights:

- Participants welcomed the integrated approach but emphasized the need for speed due to time lost.
- Energy efficiency must be treated as a non-negotiable foundation.
- Importance of aligning pilot selection with readiness and existing audit data.
- Questions were raised about IPP licensing, ESCO models, tenant-management dynamics, and metering systems.
- TWG members committed to supporting pilot review, training design, and capacity-building efforts.

4. Terms of Reference for TWG

The Secretariat presented the draft Terms of Reference (ToR) for the Technical Working Group (TWG), outlining its role, structure, and key responsibilities within the SESID project governance framework.

Key Points Discussed:

- **Purpose of the TWG**:
  The TWG serves as a strategic and technical advisory body supporting the Project Management Unit (PMU) and the Project Steering Committee (PSC) in ensuring the effective implementation of the

SESID project. Its primary function is to provide expert input and review across the three project components coordination and planning, technology demonstration, and scale-up strategy.

- **Mandate and Scope**:
    - Advise on technical design, pilot selection, feasibility, and integration of sustainable energy systems in industrial parks.
    - Review and provide input on capacity-building initiatives, training materials, and knowledge products.
    - Support stakeholder engagement and alignment with related national programs and municipal frameworks.
    - Contribute to the design and review of tools such as benchmarking databases, the virtual marketplace, and integrated energy strategies.
    - Ensure coherence between project activities and existing energy and development policies.
- **Meeting Frequency**:
  The draft ToR proposed quarterly TWG meetings, but members agreed that more frequent engagements will be necessary in the short term—especially during the active planning and pilot launch phases in 2025.
- **Membership and Representation**:
  The TWG comprises representatives from key government departments, research institutions, funders, and technical experts. Members participate in their institutional or individual capacity based on their experience in energy, sustainability, policy, or industrial development.
- **Coordination with Other Governance Structures**:
  It was emphasized that the TWG will work closely with the PMU and report to the PSC. A TWG member will be nominated to serve on the PSC to ensure continuity, technical oversight, and alignment across decision-making bodies.
- **Next Steps**:
    - The final ToR will be circulated for comments, and members were invited to suggest refinements.
    - The nomination of a TWG Chairperson and Rapporteur (to lead facilitation and documentation) will be concluded in the next session.
    - Once endorsed, the ToR will serve as a formal framework for TWG operations, decision-making, and accountability.

5. Nomination and Confirmation of TWG Chairperson and Rapporteur

The appointment of a Chairperson and Rapporteur for the Technical Working Group (TWG). The need for these roles is aligned with the Terms of Reference for the TWG, which outlines a structured and accountable governance model for supporting SESID implementation.

- **Chairperson's** responsibilities would include:
    - Guiding TWG meetings to ensure focus and alignment with project objectives
    - Coordinating with the Project Management Unit (PMU) and other stakeholders
    - Representing the TWG at PSC meetings and related platforms as needed

Shaun was nominated and approved during the meeting. Shaun accepted the role.

Rapporteur responsibilities would include:

- Supporting documentation of discussions, action items, and decisions
- Ensuring accurate and timely dissemination of meeting outcomes
- Assisting with follow-up on TWG tasks and commitments

6. Work Planning and Meeting Schedule

The discussion focused on the significant volume of technical work that needs to be carried out within the current project year, particularly in light of the delayed start of the SESID project. The TWG was informed that the Year 2 Work Plan is in the final stages of development and will be shared with members shortly for input.

Key points discussed include:

- **Compressed Implementation Timeline**: Because the project officially began a year later than initially planned (October 2023 instead of October 2022), there is a need to compress multiple deliverables into a shorter timeframe. This includes initiating pilot site selection, developing training materials, launching energy audits, and establishing key data platforms, all within the current reporting cycle.
- **TWG Role in Implementation**: TWG members were urged to play an active advisory role in key areas such as:
  - Reviewing the Work Plan and deliverables
  - Contributing to pilot project selection criteria
  - Advising on training content and methodology
  - Supporting stakeholder coordination through their networks
- **Meeting Frequency**: While the original TOR suggested quarterly TWG meetings, it was agreed that more frequent engagements may be necessary during high activity periods, especially over the next 3–6 months. The need for flexibility in scheduling was emphasized to ensure the TWG can provide timely input on emerging deliverables.
- **Upcoming Priorities**:
  - Finalization of the Year 2 Work Plan
  - Launching pilot project identification and assessment
  - Designing and approving capacity-building modules
  - Initiating energy data benchmarking tools
  - Supporting the mid-term review scheduled for May 2025
- **Integration with PSC**: The TWG will closely coordinate with the Project Steering Committee (PSC), and it was suggested that a TWG representative be nominated to sit on the PSC to ensure continuity and alignment across decision-making structures.
- **Follow-up Session**: A dedicated follow-up session will be scheduled specifically to take TWG members through the finalized work plan, discuss sequencing, clarify roles, and establish key milestones for the upcoming quarter.

7. Open Discussion and Q&A

This session invited TWG members to share reflections, questions, and insights on the SESID project scope, implementation structure, and upcoming deliverables. The discussion was robust and multi-faceted, touching on both strategic and technical considerations critical to the project's success.

Key Topics Raised:

- **Energy Efficiency as a Priority**: Multiple participants stressed that energy efficiency (EE) must precede renewable energy integration in industrial parks. Without clear baselines and efficiency improvements, renewable systems risk being oversized and underperforming. It was noted that many parks still lack proper energy audits and metering systems, which complicate planning.

- **Data Gaps and Benchmarking**: Members emphasized the need for a reliable and centralized **energy data platform** to support benchmarking, planning, and reporting. The lack of accurate demand-side data was highlighted as a recurring issue in energy master plan development across industrial spaces.

- **Capacity Building and Skills Development**: There was a strong call to train and deploy facility-level energy professionals within parks, who can support ongoing EE measures and liaise with stakeholders. Suggested certifications included Certified Energy Manager (CEM) and Measurement & Verification (M&V) credentials. It was proposed that TWG contribute to developing a practical training model and assist with identifying candidates and institutions.

- **Financing Models**: The group explored a range of implementation and financing models, including Special Purpose Vehicles (SPVs), Energy Services Companies (ESCOs), and Independent Power Producers (IPPs). Concerns were raised about who bears investment responsibilities—particularly in parks where infrastructure is owned by management companies and operations by tenants.

- **Regulatory Barriers**: Several members cited challenges with tariff structures, licensing, and grid access, particularly when engaging with municipalities and Eskom. Questions were raised about how IPPs can legally sell power within park boundaries and how to address fixed demand charges that discourage efficiency investments.

- **Project Selection and Readiness**: TWG members requested clear visibility into the status of the six industrial parks, including any prior audits, studies, or pre-feasibility work. It was suggested that readiness levels be factored into the pilot site selection process to ensure realistic timelines and impact.

- **Technical Support Role of TWG**: There was a consensus that TWG's role should be more than advisory. Members expressed willingness to contribute directly to tool development, training content, project review, and stakeholder coordination. They asked for regular updates and a calendar of technical milestones requiring input.

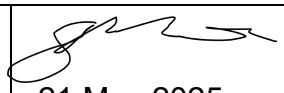
8. Closing Remarks

Mr. Victor Manavhela, Chairperson of the session, delivered the closing remarks by thanking all participants for their time, active engagement, and valuable contributions throughout the inaugural Technical Working Group (TWG) meeting. He noted that a strong foundation was established and expressed appreciation for the depth and quality of the discussions, noting that they had laid a strong foundation for TWG's role in guiding the SESID project's technical direction. He acknowledged the rich expertise and institutional experience present in the TWG and emphasized that such collaboration will be instrumental in driving the successful implementation of SESID's components particularly those requiring technical review, strategic coordination, and policy alignment.

- Next Steps:
    - The PMU will finalize and share the Year 2 Work Plan with the TWG.
    - A follow up session will be scheduled to talk through key activities, milestones, and areas where TWG input is required.
    - TWG will soon be consulted on pilot project selection criteria, training frameworks, and the technical elements of components 1 to 3.

Action Items and Responsibilities

Action Item	Responsible Party	Timeline
Finalize and circulate the Year 2 Work Plan for review and input	PMU / Secretariat (NCPC-SA)	April 2025
Schedule a dedicated TWG session to review the work plan and set priorities	Secretariat	April–May 2025
Develop and share draft selection criteria for pilot sites	PMU with TWG input	May 2025
Begin pilot energy audits in selected industrial parks	PMU and appointed consultants	May–June 2025
Design capacity-building programme, training modules, and stakeholder pathways	NCPC-SA Skills Development Unit	May–June 2025
Consolidate and share the status of existing energy assessments across all 6 parks	PMU	April 2025
Prepare technical and strategic inputs for the upcoming mid-term review	PMU and TWG	May 2025
Initiate the development of the energy benchmarking platform	NCPC Technical Team	May–July 2025
Proposing a model for deploying park-based energy efficiency teams or auditors	TWG Members	June 2025

Chairperson Signature **Date:**	 21 May 2025