

Sustainable Energy Systems for Developing Communities WG – Position Paper

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SESDC Working Group Meeting
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Timeline

1. Original Draft ToC in 2011 by Joseph Mutale and Graham Ault
2. Update in 2013 (Peter Dauenhauer, Damien Frame)
3. Update in 2014 (Adriaan Zomers, Peter Dauenhauer, Joseph Mutale, Henry Louie)

Context / Underlying Issues

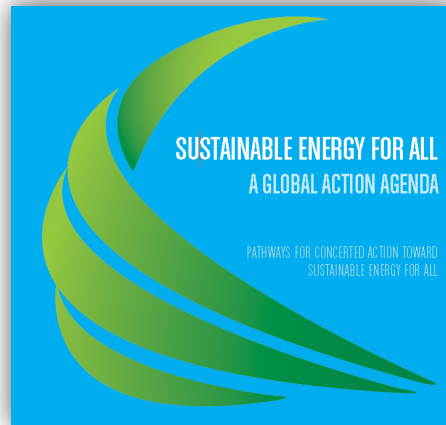
- Importance of energy for sustained economic growth
- Climate Change (Low carbon solutions, just development)
- Drive for Universal Energy Access
- Access for All (1.2 billion without now)
- Adoption of New Technologies
- Huge Investment needed (\$1t)

Recognition of Actors

- International Initiatives
- Rural Electrification Initiatives
- Humanitarian Initiatives
- Academic Led Initiatives
- Grassroots Initiatives
- Development Sector / Best Practices
- Other Technical Groups



Community
Solutions
Initiative



Alliance for
Rural
Electrification
Shining a Light for Progress



SESDC Rationale

- Well positioned to support goals of SE4ALL
 - Multi-disciplinary
 - Members constitute a worldwide footprint
 - Diverse Backgrounds
 - Relevant Experience
 - Great network
 - Only WG in PES that centered strongly on developing communities

Format / Approach

Activities

- Formation of Task Forces (Primary Means)
- Panel Sessions
- Collaborative Research Initiatives
- Networking
- Education / Training
- Outreach

Outputs

- Publications
- Reports
- Recommendations
- Education Provided
- User-oriented Materials

Potential Task Force

- “Impact of institutional arrangements on the electrification of rural and remote areas in the developing world”
 - **Task 1** – Identification and description of the various dimensions of sustainability of electricity services to rural and remote areas in the developing world.
 - **Task 2** - Critical review of world-wide Rural Electrification (RE) experiences with particular reference to the impact of power sector reform and resulting institutional arrangements on the sustainability of electricity service in developing countries. This task will identify sample countries that will form the base cases for detailed study. The regions of focus are Africa, Latin America, the Caribbean’s, and Asia.
 - **Task 3** - Comparative analysis of country reports from Task 1.
 - **Task 4** – Development of options and approaches to maximise long-term sustainability of electrification. The development of these options and approaches will involve a process of brainstorming and analysis of outputs of Task 2.

Initial Areas of Interest

- **Off-grid energy project sustainability indicators**
- Impact of institutional arrangements on the electrification of rural and remote areas in the developing world
- Up scaling energy interventions in developing countries
- Framework for smart grid technology appropriateness for rural electrical systems in developing countries
- Educational needs for NGO-led energy interventions
- Electricity and non-electric solutions: evaluation of appropriateness for the need; gender issues; electricity for productive uses.
- **High tech prototyping in developing communities**
- Sustainability of end-of-grid applications
- Successful business models for rural and peri-urban electricity service
- Rural energy services leap-frogging opportunities and challenges
- Technical Capacity building for sustainable rural electrification
- Entrepreneurship training for sustainable electrification
- **Community based business models in rural electrification**
- Templates for integrated rural development
- Safe end of life disposal and management of batteries
- Engagement of local communities in rural electrification
- Sustainable total energy solutions for rural communities
- PV based electricity supply for electrification of remote rural communities
- **MORE?**

Intended Result

- **Flexible** organization of WG members resources and interests
- **Relevant** to the important issues
- **Clear** approach and method for achieving outputs
- **Fostering Opportunities** for networking and research collaboration

Proposal for Next Steps

- Formal adoption of the Position Paper
- Member Interests and background
- Proposals for formation of Task Forces
- Periodic meetings

Thank you

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