

World Café on Effective Energy Efficiency Measures in the RAC Sector

Side Event at MOP35, Nairobi

Monday, 23 October, 18:00 - 20:00
Conference Room 10



Implemented by

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Agenda

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| Welcome Remarks | Dr. Claudia Hiepe Deputy Head of Division, Federal Ministry for Economic Cooperation and Development (BMZ) of the Republic of Germany |
| Introduction | Philipp Denzinger GIZ Proklima |
| World Café with 4 thematic tables | |
| Table 1: Assembly Sector | Facilitation: Ole Nielsen (UNIDO), Claudia Alvarez (GIZ) |
| Table 2: Manufacturing Sector / Conversion Projects | Facilitation: Etienne Gonin (UNDP), Bernhard Siegele, Susann Mende (GIZ) |
| Table 3: Servicing Sector | Facilitation: Tim Grabel (EIA), Philipp Denzinger (GIZ) |
| Table 4: Policy (MEPS / labels / registries / testing / certification) | Facilitation: Usamah Kaggwa (Ministry of Energy Uganda), Nils Hansen (GIZ) |
| Presentation of the results | |
| Conclusion and Closing Remarks | Bernhard Siegele GIZ Proklima |



Welcome Remarks

Dr. **Claudia Hiepe**, Deputy Head of Division, Federal Ministry for Economic Cooperation and Development (BMZ) of the Republic of Germany

MLF Funding Windows for Energy Efficiency

| EE related EXCOM decisions | Criteria | Budget (USD) |
|---|---|-----------------------|
| <p>Decision 89/6 (paragraph 16 of decision XXVIII/2 and paragraph 2 of decision XXX/5)</p> | <p>Low volume consumption (LVC) countries (1) pilot projects for small RACHP (2) Updating training material (3) MEPS and labelling (4) Certification scheme (5) Awareness</p> | <p>100k- 120k</p> |
| <p>Decision 91/65 UNEP/OzL.Pro/ExCom/91/63 (Criteria for pilot projects)</p> | <p>(1) Manufacturers: EE components (2) Assemblers and installers: Capacity building (3) Servicing sector: Capacity building for technicians, incentives (4) MEPS, testing and certification processes (5) Institutional coordination</p> | |

Decision 89/6 (Servicing Sector for LVCs)

| Sector | Criteria |
|------------------------------------|--|
| End users | Projects targeting end users for EE small refrigeration, air-conditioning and heat-pump (RACHP) equipment with low-GWP technology to facilitate market acceptance |
| Training material | Updating of training material to strengthen good practices, safety and energy efficiency during installation, maintenance and servicing of RACHP equipment |
| Coordination/ collaboration | Coordination/collaboration between national ozone units and relevant authorities including low-GWP refrigeration during the development of cooling / EE plans including MEPS |
| Certification | Development and implementation of competency-based certification schemes for technicians and the strengthening of national institutions |
| Awareness | Awareness and outreach programs to promote MEPS / labelling systems; certification; and energy-efficient RACHP equipment operating with low- or zero-GWP Refrigerants |

Decision 91/65 (93rd to 96th Excom)

| Sector | Criteria |
|--------------------------------|---|
| Manufacturing Sector | Conversion from HFC to maintain and/or enhance EE of <u>Domestic Refrigeration, stand-alone Commercial Refrigeration, Domestic And Commercial AC/Heat Pumps</u> |
| Assembly and installing Sector | Tech Assistance leading to the adoption of technology to convert from HFCs and maintain and/or enhance EE |
| Servicing Sector | Same as Decision 89/6 |
| Tech Assistance for SMEs | Tech Assistance for SMEs to adopt EE technologies and increasing |

Decision 91/65, cont.

| Sector | Criteria |
|--|---|
| Confirmation | MEPS put in place for the manufacturing sector |
| MEPS | National and/or regional MEPS, including a process or mechanism to monitor and assess their implementation in relation to the relevant sector/application |
| Confirmation for inter-agency coordination | NOU would coordinate with relevant EE authorities and national standard bodies |
| No overlapping with other funding sources | The project activities funded by other funding sources would not result in the duplication. |

World Cafe

- Table 1: Assembly Sector
 - Facilitation: Ole Nielsen, UNIDO, Claudia Alvarez, GIZ
- Table 2: Manufacturing Sector / Conversion Projects
 - Facilitation: Etienne Gonin, UNDP, Bernhard Siegele, Susann Mende, GIZ
- Table 3: Servicing Sector
 - Facilitation: Tim Grabiell, EIA, Philipp Denzinger, GIZ
- Table 4: Policy (MEPS / labels / registries / testing / certification)
 - Facilitation: Usamah Kaggwa, Ministry of Energy Uganda, Hubert Zan (TBC), Energy Commission Ghana, Nils Hansen, GIZ

Table #1: Assembly Sector

Guiding Questions:

- Reflection on EE Workshop – what was surprising, inspiring, etc.?
- Did you already develop a project proposal? What barriers are you facing with developing a project proposal? Where do you need support?
- What are technical challenges for the assembly sector? Where are the most prominent EE gaps and possibility for improvement?
- What kind of best practice examples for the assembly sector could serve as a role model from your point of view?

Assembly Sector: Results

Within the discussions at the thematic table “Assembly Sector” it became clear that the availability of components in the different countries is a big challenge as such. Associated with this, it was highlighted that there is a lack of capacity building in the sector so the participants would appreciate further assistance on the topic. Support would also be needed in developing guiding notes on energy efficiency.

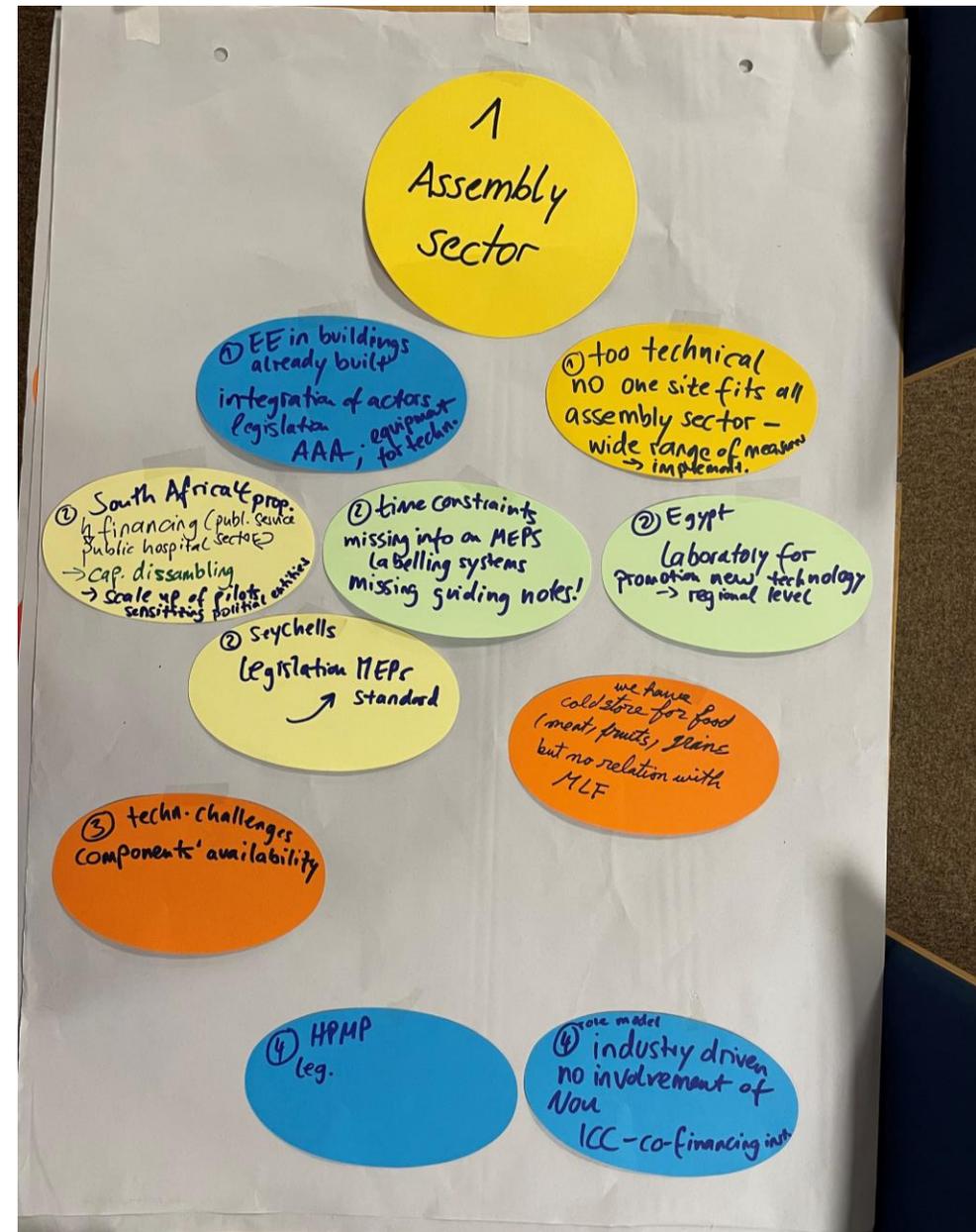


Table #2: Manufacturing Sector / Conversion Projects

Guiding Questions:

- Reflection on EE Workshop – what was surprising, inspiring, etc.?
- Did you already develop a project proposal? What barriers are you facing with developing a project proposal? Where do you need support?
- What are technical challenges for the manufacturing sector/conversion projects? Where are the most prominent EE gaps and possibility for improvement?
- What kind of best practice examples for the manufacturing sector could serve as a role model from your point of view?

Conversion Projects: Results

The group on "conversion projects" concluded early in the discussion that an integrative view is necessary on the topics ozone depletion, greenhouse gas potential and energy efficiency, combined with considerations of safety of a refrigerant. There was confidence that the industry can develop solutions if it gets clear directions to which refrigerants a country wants to move. CO₂ served as an example: initially, it was only considered as a technology for rather cold ambient temperatures – the Alps were seen as the CO₂ equator. However, it was adapted by parallel compressors to also function well in hotter temperatures. Further research might be necessary for some refrigerants. As a current example, Bernhard Siegele, programme manager of GIZ Proklima, mentioned the development of an energy efficient compressor for R290 to be financed by the Multilateral Fund in India.

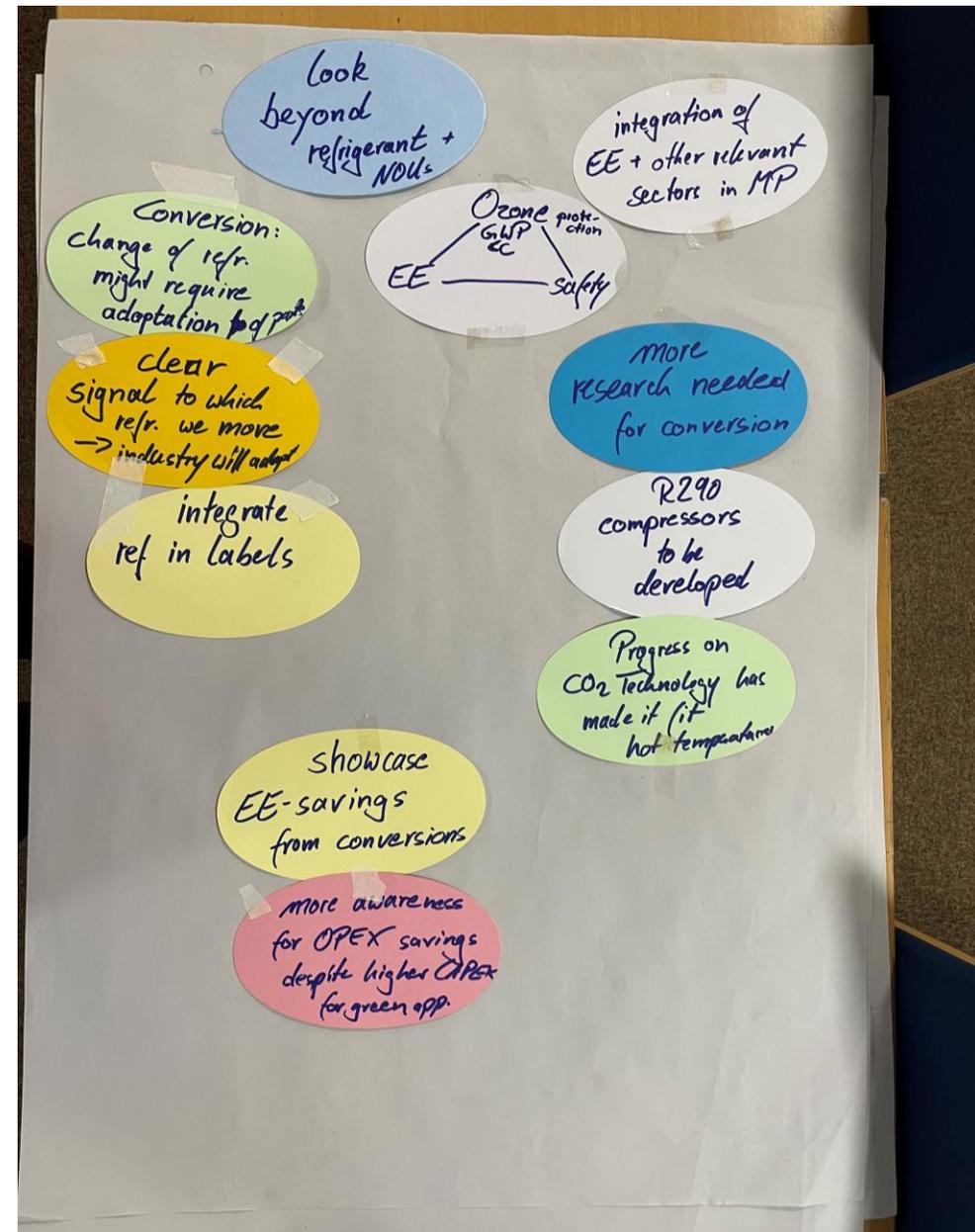


Table #3: Servicing Sector

Guiding Questions:

- Reflection on EE Workshop – what was surprising, inspiring, etc.?
- Did you already develop a project proposal? What barriers are you facing with developing a project proposal? Where do you need support?
- What are technical challenges for the servicing sector? Where are the most prominent EE gaps and possibility for improvement?
- What kind of best practice examples for the servicing sector could serve as a role model from your point of view?

Servicing Sector: Results

The participants of the two discussion rounds related to the servicing sector started by mentioning general needs and challenges. Those comprise the availability of tools, trainings, certification, integration of the informal sector and others. The participants then discussed more concretely potential project activities under the two MLF energy efficiency funding windows. Examples are the development of National Cooling Action Plans (NCAP), pilot projects such as fridge replacement, and awareness raising of technicians and end users.



Table #4: Policy / MEPS / Labels / Registries / Testing / Certification

Guiding Questions:

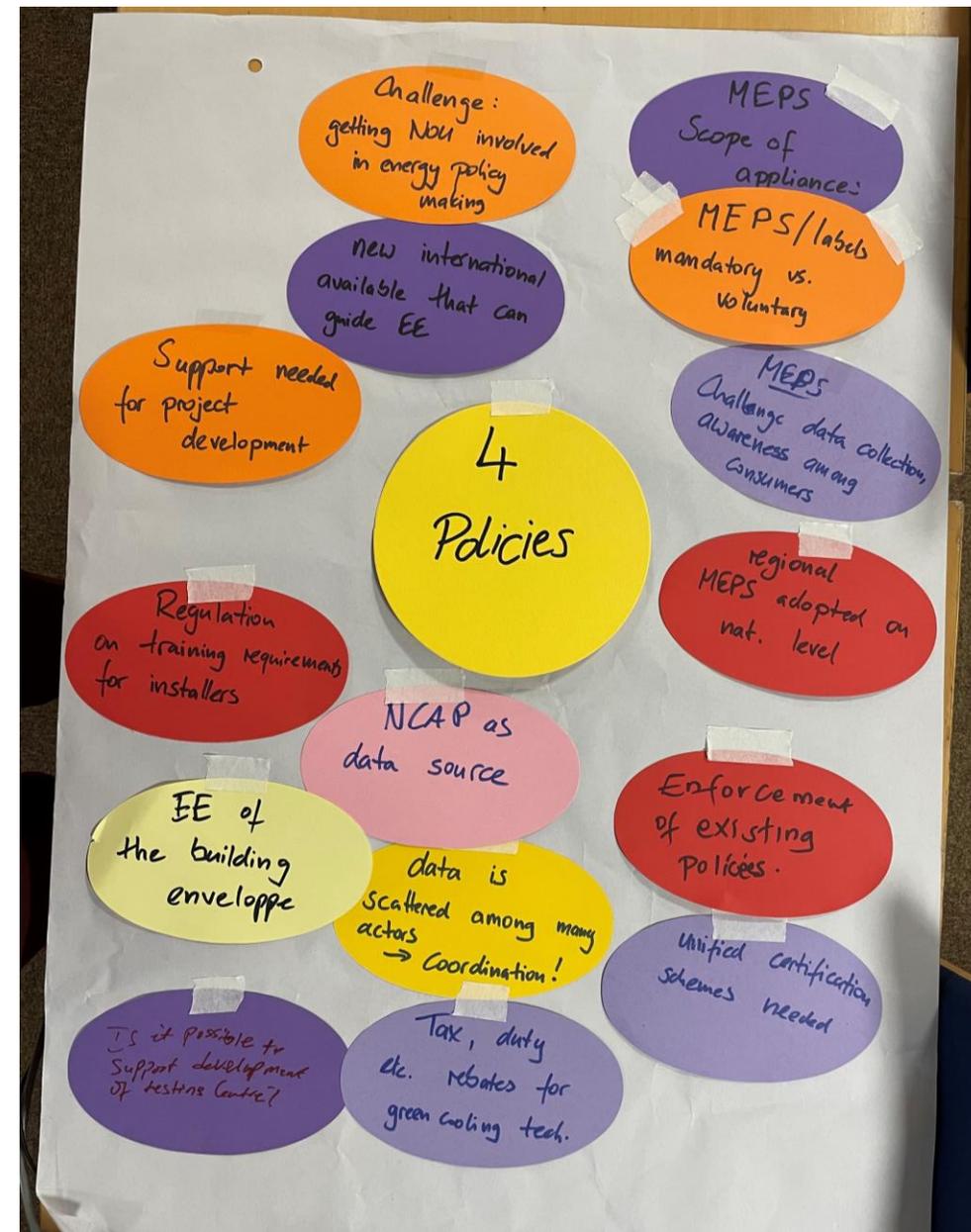
- Reflection on EE Workshop – what was surprising, inspiring, etc.?
- Did you already develop a project proposal? What barriers are you facing with developing a project proposal? Where do you need support?
- What are challenges regarding MEPS / labels / registries / testing / certification? Where are the most prominent EE gaps and possibility for improvement?
- What kind of best practice examples on EE related Policy / MEPS / labels / registries / testing / certification could serve as a role model from your point of view?

Policy Measures: Results

The two group discussions on policy measures focussed mostly on Minimum Energy Performance Standards (MEPS). These can be defined with different scopes:

- covering only specific equipment or
- general MEPS over different types of electrical appliances.

Regional MEPS already exist in some places around the world but must be nationalized before being implemented. It was discussed that MEPS are often only voluntary, and that enforcement is difficult where mandatory MEPS exist. National Ozone Units (NOUs) also face the challenge that different stakeholders need to be involved. First of all, they must convince their energy colleagues of the need for MEPS in the refrigeration and air conditioning (RAC) sector. The same holds true for data accessibility. While necessary data for MEPS development often exist in the countries, these are scattered across too many stakeholders. NOU Grenada reported of the successful implementation of different regulatory and policy measures in the RAC sector, i.e. MEPS, tax and duty exemptions for RAC equipment with natural refrigerants.





Conclusion and Closing Remarks

Bernhard Siegele, GIZ Proklima

Request our support here:



Contact: ndc4@giz.de

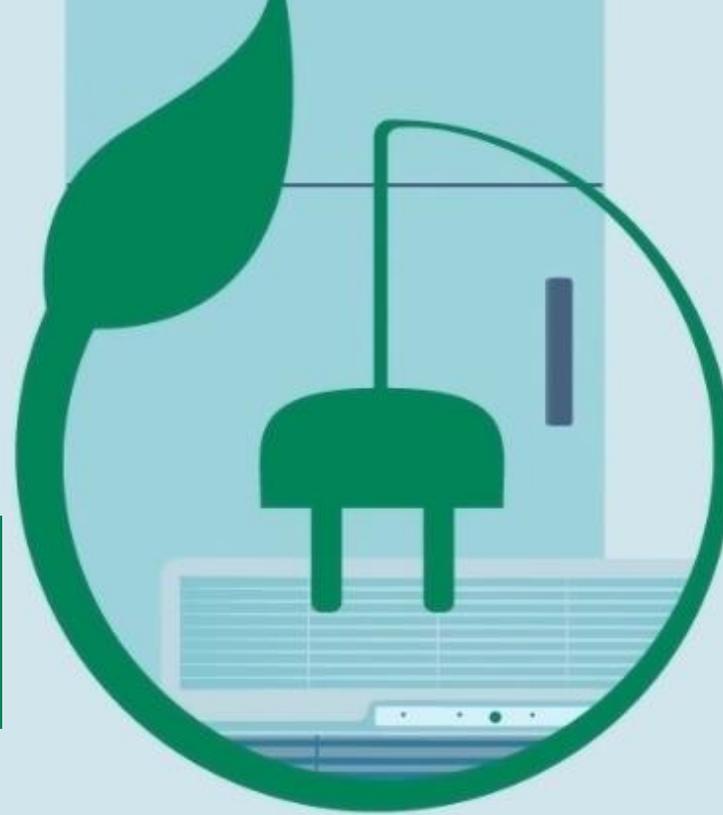


NDC Helpdesk for the cooling sector



<https://www.green-cooling-initiative.org/green-cooling/ndc-helpdesk>

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