Financing energy efficiency and sustainable RAC

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Background

CONTEXT

Finance hurdle
Securing and deploying adequate finance is a key challenge for achieving low-carbon transformation aligned with Paris Agreement goals.

RAC Sector Complexity
The RAC sector, spanning manufacturing to energy end-use, faces unique finance challenges due to its cross-sectoral nature and diverse institutional responsibilities.

PUBLICATION

The paper focuses on questions related to the financing of the low-carbon transition of the RAC sector.

The objective of the paper is
- to provide an overview of the (climate) finance situation in the sector
- to analyse the different available sources of finance, and
- to identify roles of different actors

- GIZ Proklima – Cool Contributions fighting Climate Change (C4) publication
- Authorship: HEAT GmbH and NewClimate Institute
Financing low-carbon development in the RAC sector

- Capital investments are needed to facilitate the development, manufacturing, distribution and deployment of low-carbon cooling technologies.
- This covers both the supply side as well as the demand side across a wide range of industries and end use areas.

*Financing low-carbon development in the RAC sector must address two aspects*

The HCFC phase-out and the HFC phase-down is supported through the Multilateral Fund (MLF)

**Financing direct emissions reductions**

**Financing indirect emissions reductions**

Sources for funding energy efficiency measures are more scattered and involve many stakeholders as well as institutional mandates.
Barriers to finance low-carbon development in the RAC sector

- Lack of stringent policy framework
- Negative impact on investment environment and long-term certainty to potential investors
- Lack of coordination between key institutional and private sector actors
- Lack of capacities and skills in key institutions
- Lack of knowledge and data on mitigation options, potentials and technology choices
- Lack of awareness around availability and benefits
- Lack of access to capital markets and commercial finance
- High transaction & upfront costs
- Risk perception of new and innovative technologies
- Related to “split incentives” in the building sector
- Availability of technologies an inertia of incumbents in the market
### Integrated approach: Intervention measures

#### FINANCIAL INTERVENTIONS
- Bonus or penalty scheme
- Tax breaks / subsidy reforms
- Increased (public) budget to create institutional capacities
- Subsidies/loans/credit lines
- Guarantees/risk sharing
- Grant schemes
- PPP co investments
- Tax breaks and subsidy reform
- Subsidised loans/ dedicated credit lines

#### NON-FINANCIAL INTERVENTIONS
- Integrated policy planning
- Normative frameworks
- Monitoring and enforcement capacities
- Demonstration projects
- Capacity building
- Testing facilities for products
- Project bundling
- Improved RAC stats
- Sharing market information on prices and efficiency
- Training & qualification
- Market reform and R&D
- Conversion of manufacturers
## Integrated approach: Actor landscape

<table>
<thead>
<tr>
<th>NATIONAL GOVERNMENT</th>
<th>INT PUBLIC SUPPORT</th>
<th>PRIVATE SECTOR</th>
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</thead>
<tbody>
<tr>
<td><strong>Central role:</strong> create an enabling environment to mobilise private sector investments</td>
<td><strong>Central role:</strong> “Bridging the gap” / leveraging private sector capital</td>
<td><strong>Central role:</strong> Provision of lion’s share of required investments to reach market suitability</td>
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<tr>
<td><strong>Areas for action:</strong></td>
<td><strong>Areas for action:</strong></td>
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<tr>
<td>• Optimising regulatory and policy framework</td>
<td>• Provision of financial support through, e.g., guarantees, grants, concessional finance, etc.</td>
<td>• Scaling up and sustaining (public) climate and energy investments, in the supply &amp; the demand sector</td>
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<tr>
<td>• Strengthening national institutions</td>
<td>• Provision of technical assistance and capacity building as well as support in awareness raising</td>
<td>• Promote innovative finance mechanisms</td>
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<tr>
<td>• Facilitating dialogue between public and private sector actors</td>
<td></td>
<td>• Co-financing large-scale energy infrastructure projects</td>
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<tr>
<td>• Creation of financial incentives</td>
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- With favourable policy environment and competent institutions, more private sector finance and int. support can be mobilised
- With streamlined international supported national governments can be supported and private sector actors are encouraged to invest in climate-friendly RAC
- Private sector engagement is relevant and appropriate since most EE investments are cost effective and present short payback periods
Unlocking private sector finance – selected examples

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Description</th>
<th>RAC sector use cases (e.g.)</th>
<th>Benefits</th>
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<tbody>
<tr>
<td><strong>Supply side</strong></td>
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<tr>
<td>Blended finance*</td>
<td>Strategic use of public and private funds to mobilise additional capital, combining concessional financing with commercial investment.</td>
<td>Financing of production conversion</td>
<td>• Incentives for production conversion through preferential conditions&lt;br&gt;• Compliance with international standards by imposition of compliance requirements</td>
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<td><strong>Demand side</strong></td>
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<td>ESCO*</td>
<td>Third-party company providing and financing energy-efficient solutions to clients, with the ESCO receiving a share of the resulting cost savings.</td>
<td>Replacing inefficient RAC equipment in larger existing buildings / commercial setting (mostly B-2-B)</td>
<td>• Unlock demand in untapped sectors&lt;br&gt;• Lowering upfront cost hurdle for EE investment&lt;br&gt;• Lowering prices and thus increasing cash sales</td>
</tr>
<tr>
<td>Leasing / credit financing*</td>
<td>Financial products that enable customers to purchase and install state-of-the-art technology by means of instalment payments.</td>
<td>Enabling end-users to acquire energy efficient and climate-friendly RAC technology</td>
<td>• Similar to above – but among different target audience</td>
</tr>
<tr>
<td><strong>Support measures</strong></td>
<td></td>
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<tr>
<td>Green Public Procurement*</td>
<td>The acquisition of goods and services by the public sector through public contract with focus on environmental criteria.</td>
<td>Increase the share of energy efficient and climate friendly RAC technology in public buildings</td>
<td>• Set examples to private consumers&lt;br&gt;• Raise awareness&lt;br&gt;• Set standards (GWP / EE)&lt;br&gt;• Drive prices down</td>
</tr>
<tr>
<td>ESG Standards</td>
<td>Investors and stakeholders use ESG standards to assess sustainable practices of a business, influencing investment decisions and promoting responsible corporate behaviour.</td>
<td>Accelerate the transformation in the RAC sector, when large, internationally active banks adopt GWP / EE standards</td>
<td>• Similar to above – but potentially with an international dimension</td>
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</table>

* Covert in one of the Case Studies identified by the Secretariat as part of this event
A comprehensive finance strategy should be based on careful analysis of local barriers, needs and costs, to identify appropriate instruments to enable mitigation action in the RAC sector.

A RAC sector finance strategy on country level should outline a clear breakdown of action, impact and contributions to be made by national budgets, international support and the private sector.

Private sector engagement is key for long-term, low-carbon development in all sectors, including the RAC sector.

The inclusion of development issues in RAC sector financing is an incentive for national stakeholder engagement and produces multiple benefits.

Enhanced coordination of finance flows under the ozone and the climate regime, can increase effectiveness of international mitigation efforts in the RAC sector.
THANK YOU FOR YOUR ATTENTION
Back-up slide – Rational for financing Green Cooling

- Need for credit schemes
  - "Trade off"
  - Energy savings increase creditworthiness of clients

Life-cycle costs (customer perspective)

- Purchase costs
- Operating and maintenance costs
- Disposal costs

Time