



Adaptation Futures, Rotterdam

Issue 10: Finance, investment and business

10.1 Climate change adaptation and SMEs

Case studies from several parts of the world and different sectors

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11th May, 2016



Knowledge partner

- **Aim:** Sensitisation and capacity building on climate change adaptation in the private sector including recommendations development for financing options
- **Target groups:** SMEs in developing countries, associations, consultants, financial sector, policy-makers
- **Project activities**
 - awareness & training materials
 - methodology & website „Climate Expert“
 - implementation of workshops and trainings
 - individual assessment & consultancy
 - publication of case studies
 - analysis and promotion of project results
- **Financed** by German Federal Ministry for Economic Cooperation and Development
- **Implemented** by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); supported by knowledge partner adelphi





Global Programme Private Sector Adaptation (PSACC)

Approach: identify, test, assess and disseminate adaptation concepts for SMEs in four selected countries in various sectors (except agriculture)

Local perspectives as a basis for global recommendations: country-specific approaches for SME in Rwanda, Bangladesh, Morocco and Central America (Costa Rica)

Project period: 2014-2017





Supporting a climate-resilient & competitive private sector

Sensitization

Raising awareness of private sector actors in terms of actions and opportunities regarding CC impacts

Capacity Building & Mainstreaming

Anchoring instruments to enhance the adaptability of the private sector & the use of business opportunities from CC

Financing strategy

Testing instruments for the use of the financial sector to finance adaptation to CC and providing advisory services on adaptation financing for SME

Knowledge network

Strengthen the dialogue and cooperation on effective approaches within German and international development cooperation



PSACC delivers various products and services

Awareness raising for
companies and associations

- Awareness Raising Workshops
- **Company Case Studies**
- Various communication activities

Methodology testing for SME
climate risk management

- **Vulnerability assessment and adaptation strategy and measures (Tools, Cost-Benefit)**
- Manual for Industrial Zones (IZ)

Training development and
implementation

- **Training manual for SMEs**
- Training manual for IZ managers
- Cooperation with local service providers

Information on Finance
Mechanism

- **Gap analysis of SMEs' adaptation finance needs**
- Advisory/ manual on adaptation finance opportunities for SMEs
- Case Study



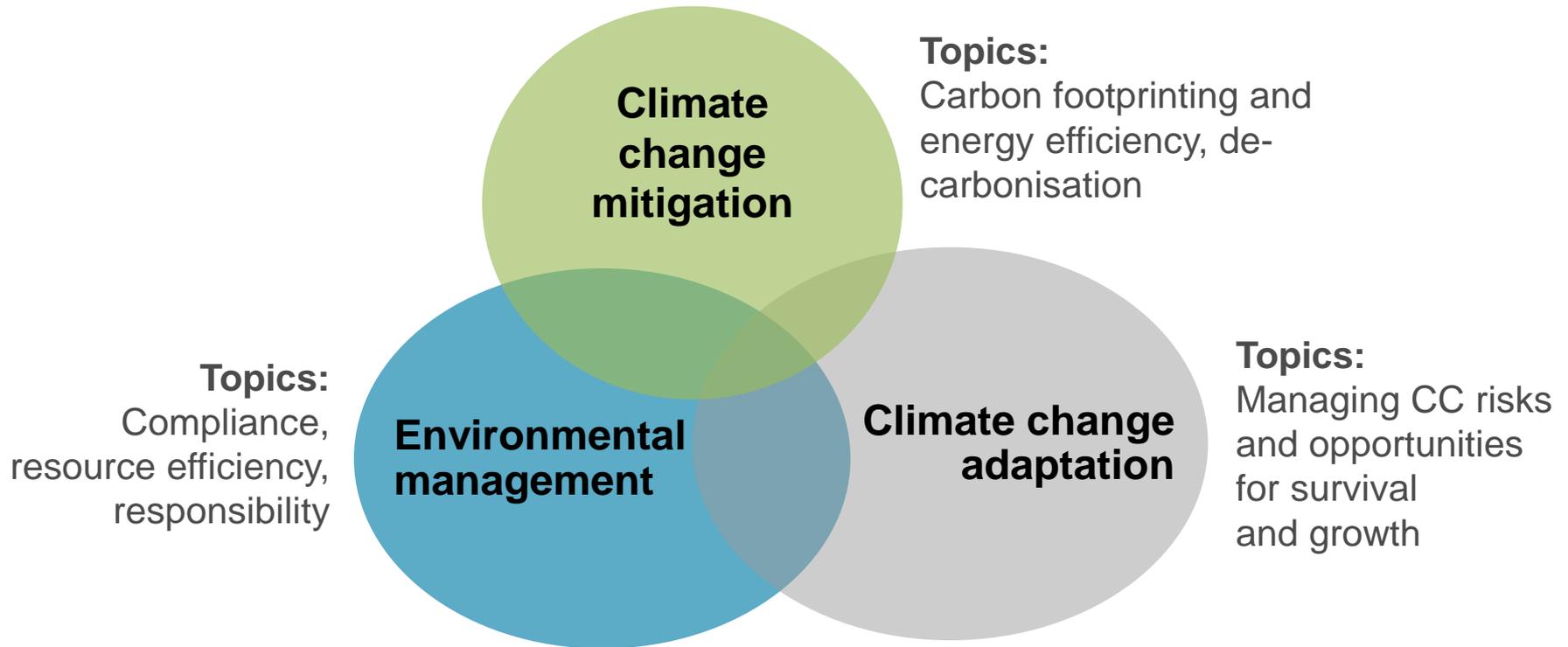
Climate Change Adaptation and SME - Concepts and insights from the PSACC projects

Cosima Stahr, adelphi



adelphi

Knowledge partner



Overlap: some activities in one field support and contribute to the other

SME as an entry point for adaptation

SMEs are of high relevance for developing countries & emerging economies and highly affected by CC...

...and SMEs are **important drivers for societal adaptation**

- SME are the backbone of economies, provide most employment and growth opportunities
- SMEs' exposure and sensitivity to CC impacts is high
- SME often lack resources to develop long-term strategies and to manage risks comprehensively



- SME are localised players and strongly integrated into their communities
- If SME are mobilised, they can drive a wide range of key adaptation issues, including innovation, building community resilience, forging partnerships with public authorities, etc



Direct impacts

damage buildings and plant processes straightaway

- Rooftops are damaged during heavy storms
- Raw materials in stock become spoiled by fungi after heavy rains
- Machinery overheats during periods of extreme heat
- Workers' health deteriorates during heat waves

Indirect impacts

affect a company by way of an impact on *another* system outside of the company's control

- Reduced availability of energy / water from the grid
- Delayed deliveries from suppliers whose premises had been flooded
- Stricter regulation concerning energy efficiency and water use
- Reduced demand for specific products due to changed weather conditions

Assessing climate change impacts



Infrastructure and
processes



Building / Location



Processes



Logistics and stock

Stakeholders



Employees and community

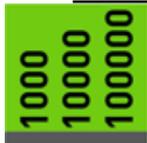


Government and regulation

Markets and
finance



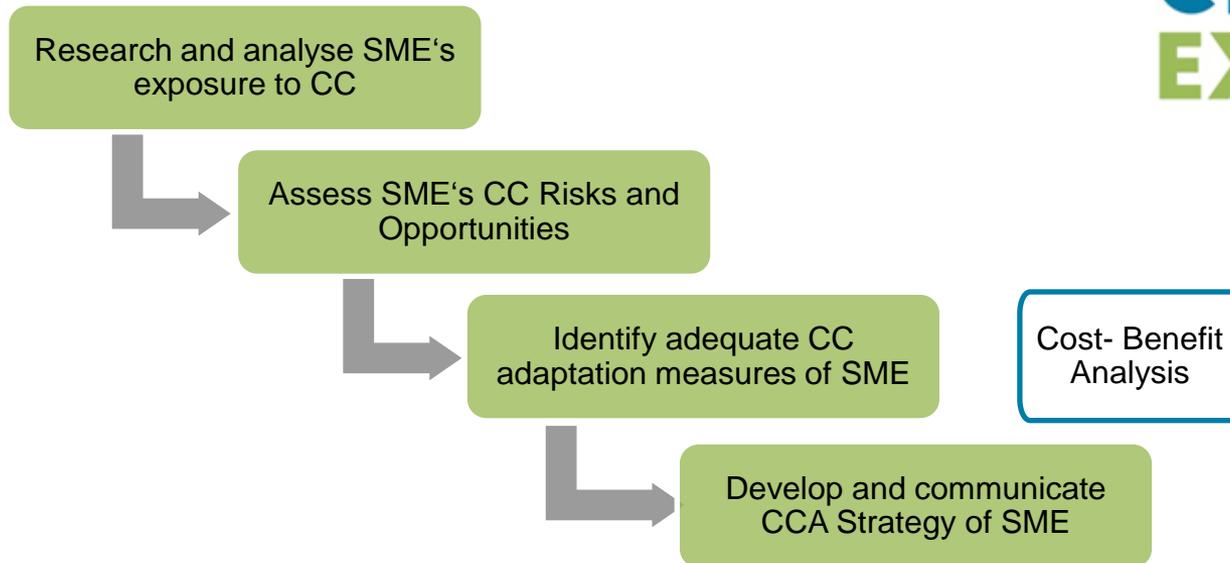
Markets



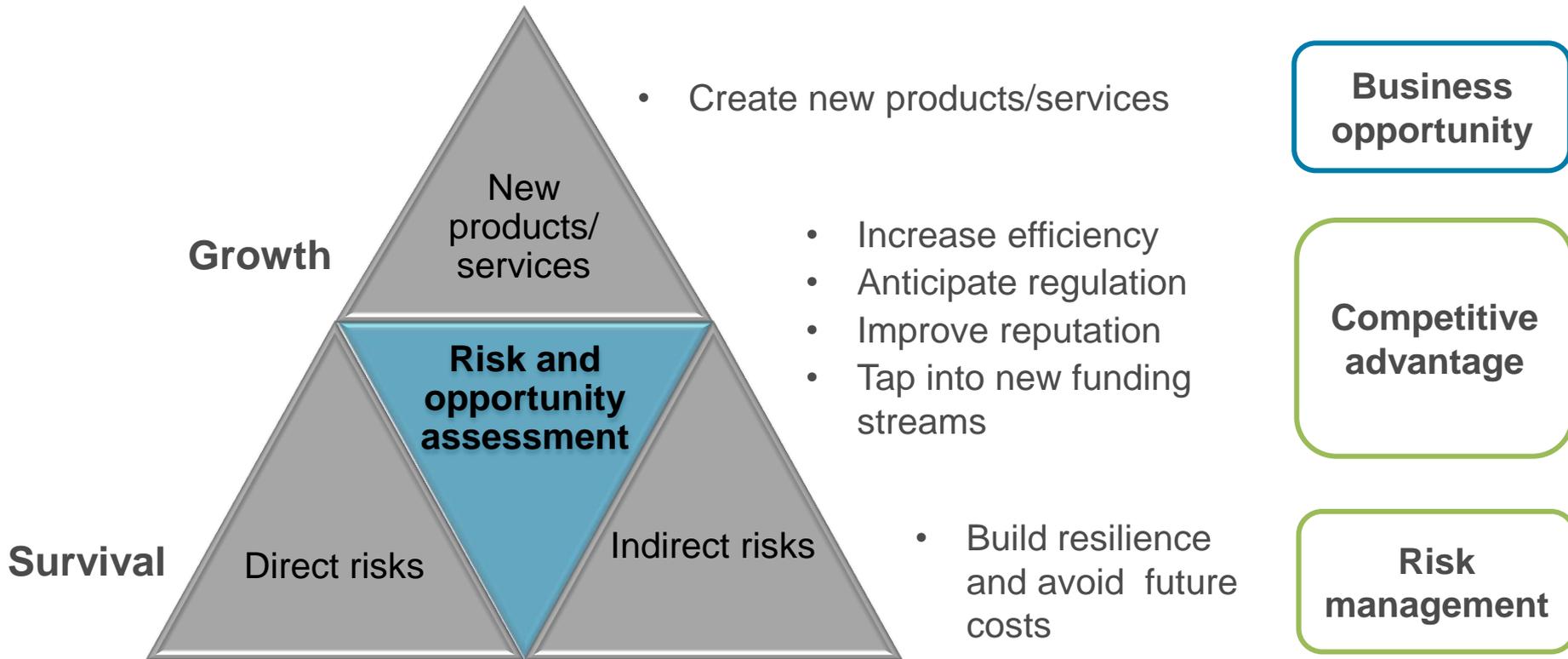
Finance



CLIMATE EXPERT



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Why adapt?

Adaptation assures survival and enables growth of businesses in times of changing climate

CCA opportunities for business: five areas



1. Operations

- Opportunities for cost reduction in operations

2. Reputation

- Opportunities for improving a company's reputation among key stakeholders

3. New skills and repositioning

- Opportunities for developing the skill-base of the future

4. Regulation

- Opportunities for anticipating regulation and becoming a first-mover

5. Market

- Business opportunities in new markets for adaptation products and services

Competitive advantage resulting from measures for reducing risks

Business opportunity

Opportunities for...



1. Products that cater to **new needs resulting from climate change**
2. Products and services which help **cope with/adapt to changing climate**
3. Products which are **easier to produce** because of the change of climatic conditions

Example:
**Temperature rise /
heat waves**

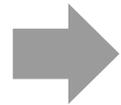
- Protect people from heat
- Protect goods from heat



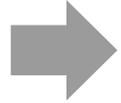
- Energy efficient ventilation systems
- Heat-resistant coating

A measure analysis helps identify & prioritise

Assess measures
considering their...



Potential for risk reduction



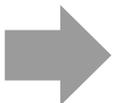
Feasibility

- Technical feasibility
- Internal feasibility (skills)
- Investment and running costs



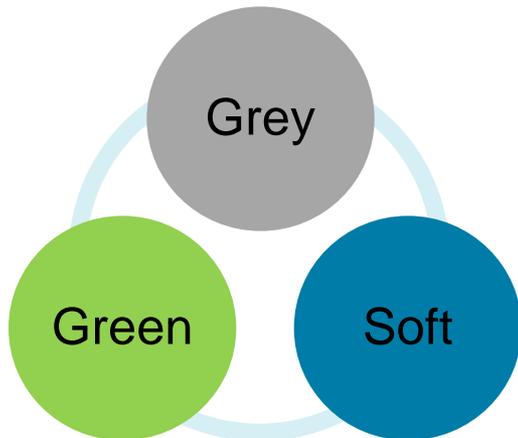
Positive side effects

- Potential for cost reductions
- Synergies with other measures
- Positive climate / environmental / social impacts
- Reversibility



Negative side effects

- On climate / environment / community
- On existing processes and approaches





Options of a dockyard company facing more intense/ frequent heat periods

Impacts on	Shipping and repair services company in Bangladesh – identified options
Processes – energy interruptions	Training on energy efficiency / energy-efficient electrical appliance
Logistics and Stock – heat strains	Heat-resistant roof for storage depot
Employees – lower productivity	Fixed shade construction/ Tree plantation
Market – need for resilience	Offering resilience services for heat periods, e.g., heat-resistant materials for roofs/platforms
Finance – need for alternative energy generation	Credit for alternative energy investment – but lack of affordable options!



Options of a fish processing company in Morocco regarding floods

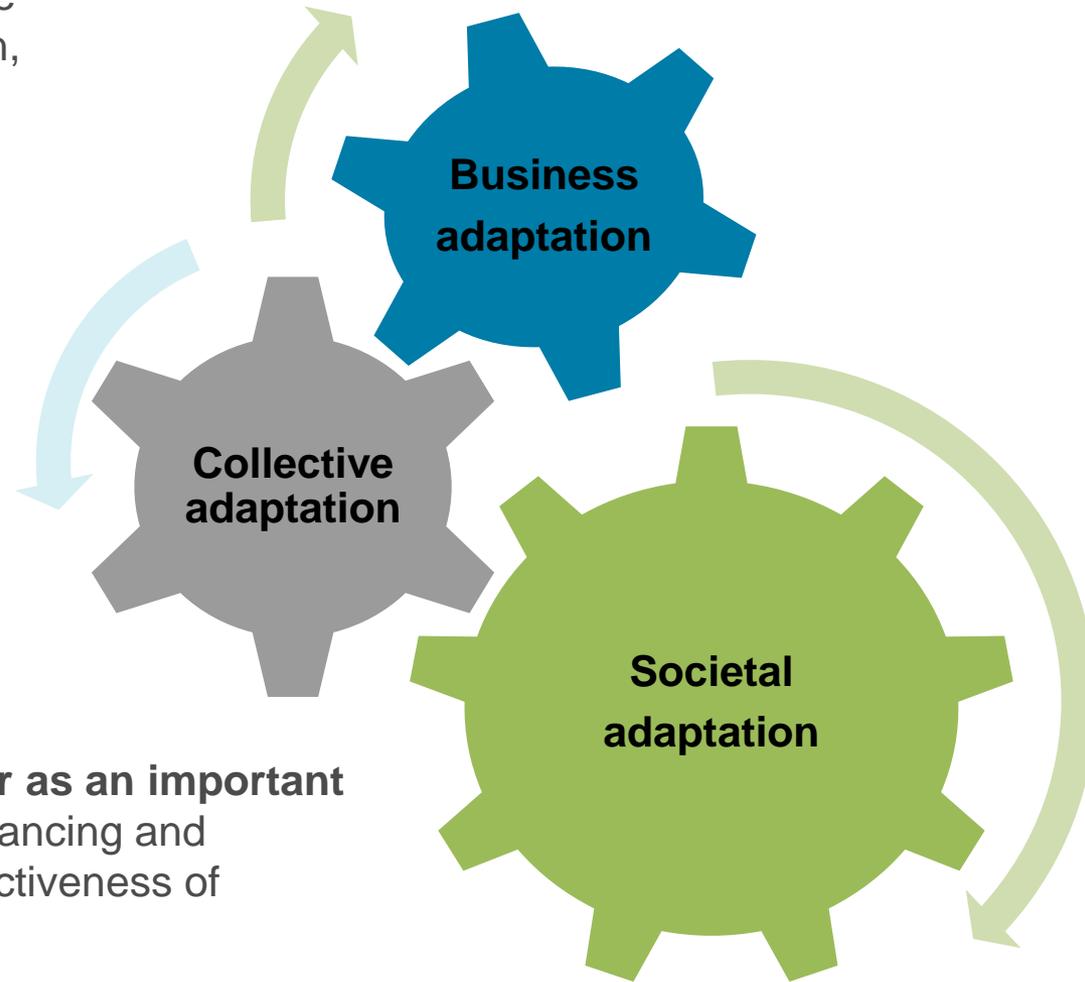
Impacts on	Extreme weather – flooding:
Buildings / Infrastructure	Secure most important machinery from floods, install pavements, flood barriers
Logistics and Stock	Strategic inventorial management, e.g.m emergency plan for keeping up supply to market
People	Install weather warning system for fishermen
Market	Regional diversification of buyer base
Finance	Insurance against damages from extreme weather

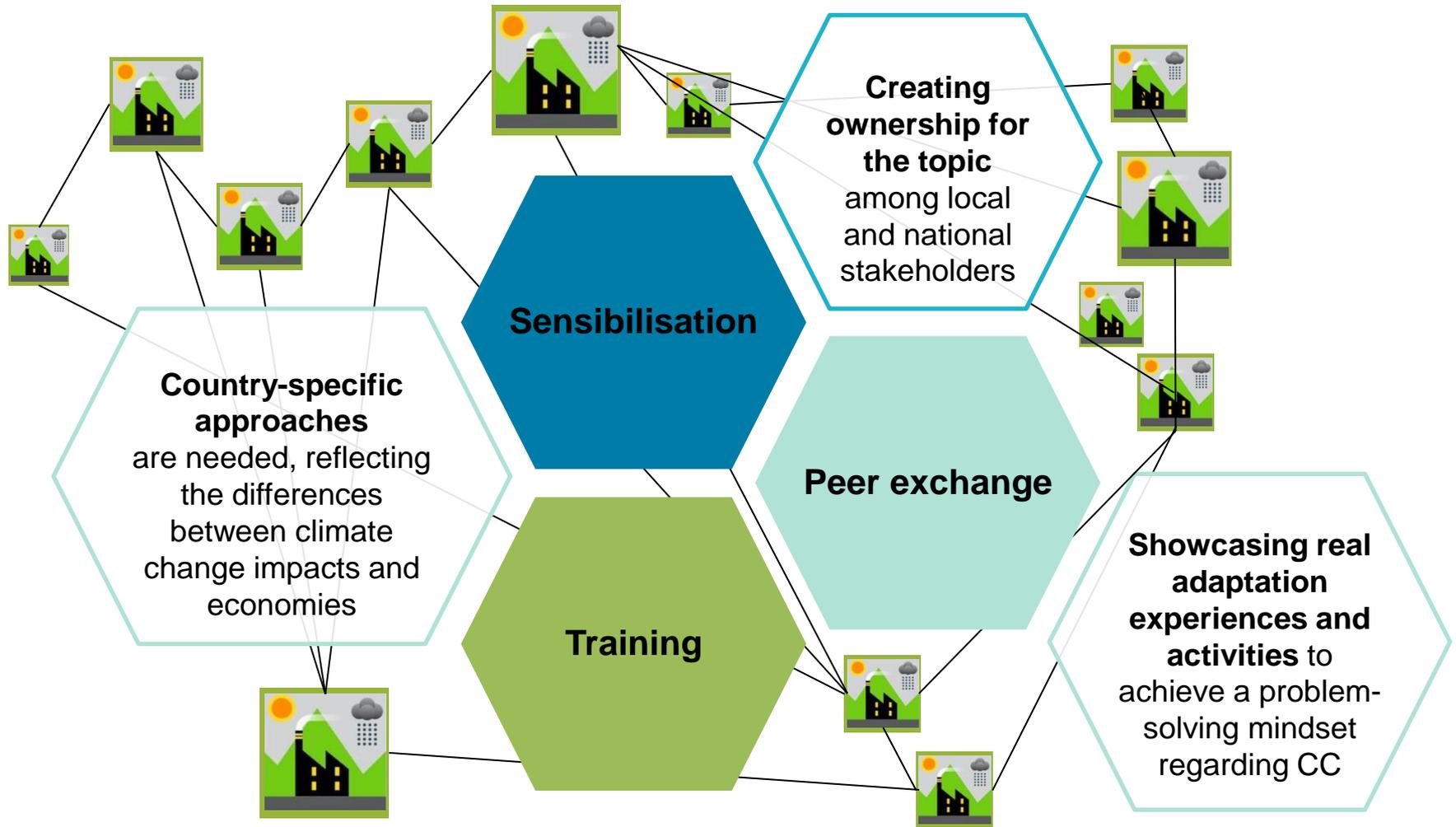


Business adaptation: e.g., resource efficiency, supply chain preparation, product development

„Collective“ adaptation:
Solving pressing problems jointly, between public, private, civil sectors, e.g., co-financing from private sector for infrastructure improvement, community health management

Societal adaptation: **private sector as an important supporting actor**, including for financing and implementation; influenced by effectiveness of collective/business adaptation







Thank you for your attention!

For more information contact

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