



Technology transfer to the zero carbon economy

14 November, COP22 - EU Pavilion

Technology transfer to the zero carbon economy

Moderator:

Anneli Pauli, European Commission DG Climate Action

Update on the negotiations:

Karsten Krause, European Commission DG Climate Action

Panel:

Sara Traerup, UNEP-DTU Partnership

Jukka Uosukainen, Climate Technology Centre & Network

Pradeep Monga, Global Cleantech Innovation Programme

Mike Cherrett, Climate-KIC

Jill Duggan, Cambridge Institute for Sustainability Leadership and
The Prince of Wales's Corporate Leaders Group

The Technology Needs Assessment project

*COP-22, Marrakech,
14 November 2016*

*Sara Traerup
slmt@dtu.dk
UNEP DTU Partnership*

What are the Technology Needs Assessments?

TNAs are set of country-driven activities that identify mitigation and adaptation technology priorities of developing countries, which:

- **identify and prioritise mitigation and adaptation technologies** for selected sectors;
- **identify, analyse and address barriers** hindering the deployment and diffusion of the prioritised technologies, including the enabling framework for the said technologies;
- conduct **Technology Action Plans (TAPs)**

Scope of the global Technology Needs Assessment project



From Technology Needs Assessments to Technology Action Plans

Step 1

- *Identification and Prioritisation of Sectors and Technologies*
 - Multi criteria analysis, development priorities, marginal abatement costs, local employment, etc.

Step 2

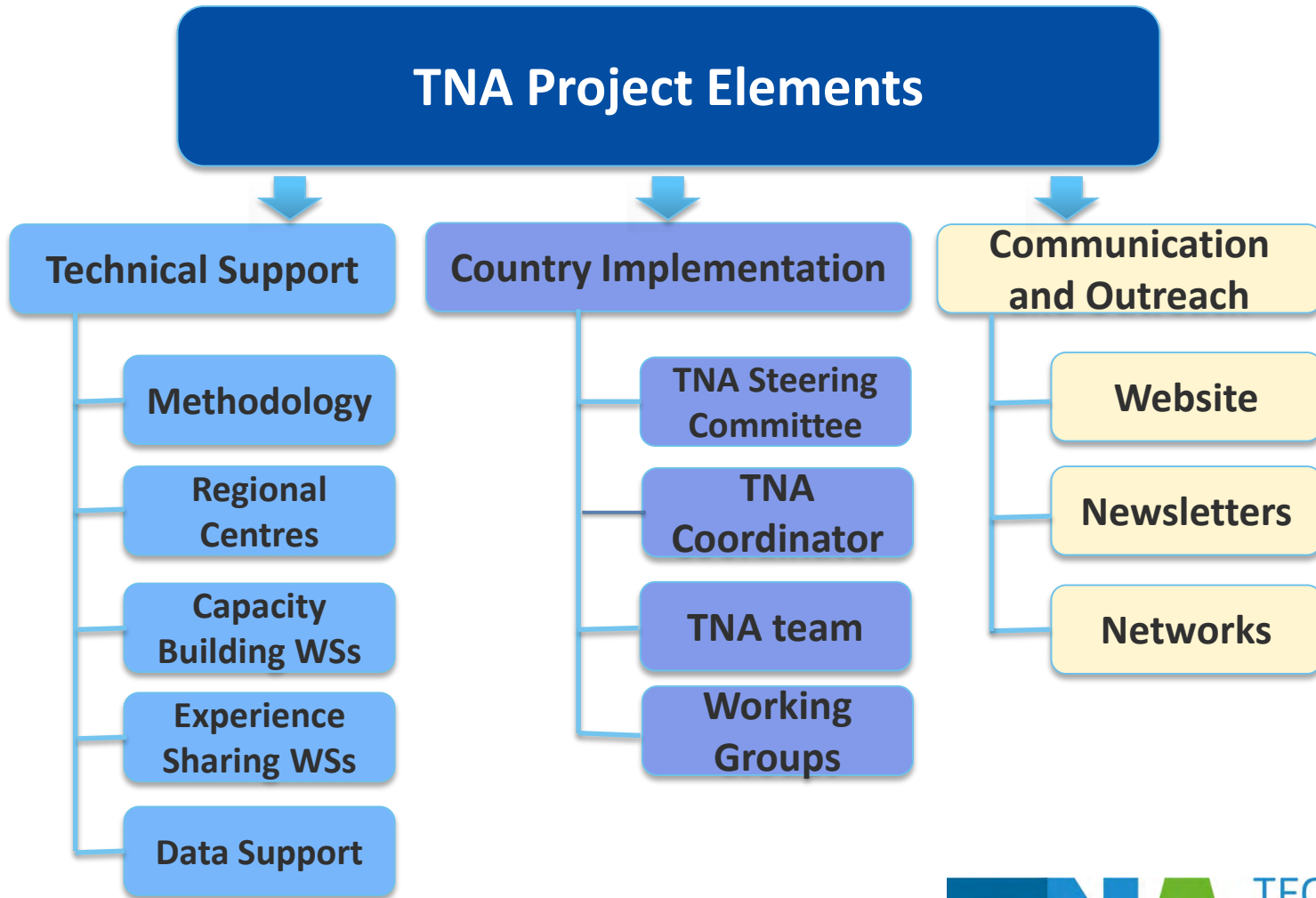
- *Barrier Analysis and Enabling Framework*
 - Legal, institutional, social, knowledge
 - Policy options for creating an Enabling Framework
 - Legal, institutional, financial, etc.

Step 3

- *Technology Action Plan (TAP)*
 - Prioritised policy options
 - Project ideas

How we work

- project elements



TNA Guidebooks

Process guidance

- ✓ Multi Criteria Assessment (MCA), TNA Stakeholder guide note; Organising the TNA process; Barrier Analysis and Enabling Frameworks guidance, Technology Action Plan guidance



Enhancing Implementation
of Technology Needs
Guidance for Preparing a Technology Action Plan



Mitigation



Adaptation



Finance



available at www.tech-action.org

Final remarks

The TNA results support

- national strategies
- policies
- programmes
- projects
- inputs to NDCs and other processes under the Convention, such as National Adaptation Plans and NAMAs

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Technology Transfer to a Zero-Carbon Economy

Jukka Uosukainen
CTCN Director

Linking UNFCCC process and technology expertise

- 155 country focal points
- 250 expert implementing partners

157 requests for Technical Assistance (TA) from 67 countries

- Technology identification and prioritization
- Strengthen technology policies and regulations
- Enhance project readiness and facilitate financing
- Basis for scaled-up investment

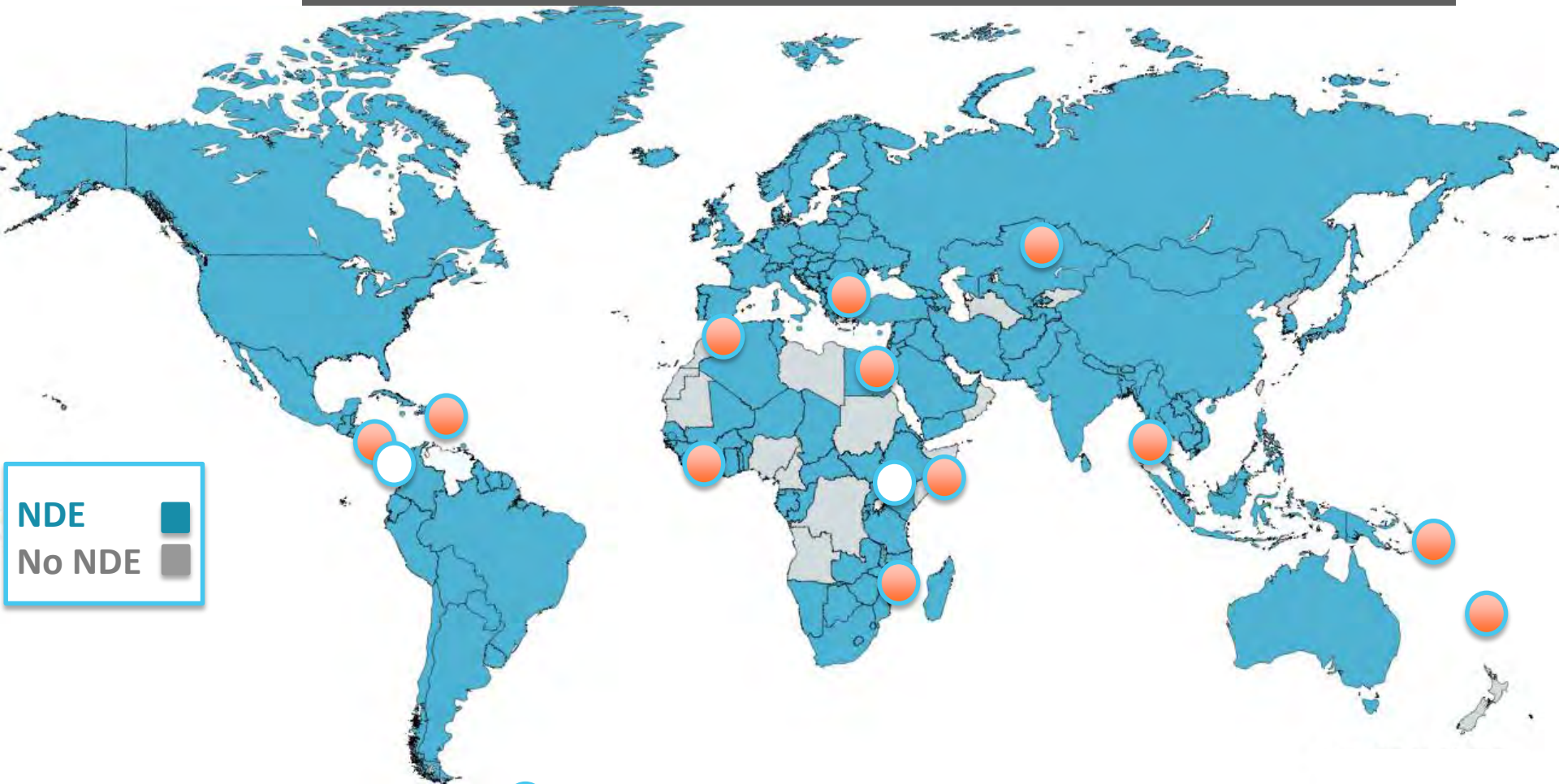
Capacity Building and Knowledge Management





National Designated Entities: Accelerating climate technology transfer at the national level

- Coordinate the formulation, selection and submission of requests
- Facilitate and monitor CTCN implementation
- Foster collaboration and access to information among stakeholders





NDE 
No NDE 

-  Regional forums
-  Stakeholder forums

Global distribution of Consortium and Network members in 50+ countries: 250 partners implementing CTCN technology solutions



● Network members are based in over 50 countries

CTCN Network draws from many different types of organizations



Challenge

Modern energy efficiency & industrial symbiosis options untapped in Senegal

CTCN collaboration and action

With expertise from UNIDO, Sofies SA, ENDA, & key national institutions, identifying high-potential technology improvements; developing recommendations and disseminating best practice for technology transfer; developing pilot plans

Intended Impacts

Design technology solutions with potential to deliver 10% reduction in energy consumption & GHG emissions



Example: Catalysing Finance for Technology District Energy in Bosnia and Herzegovina

Challenge

Significant air pollution & energy losses from individual heating

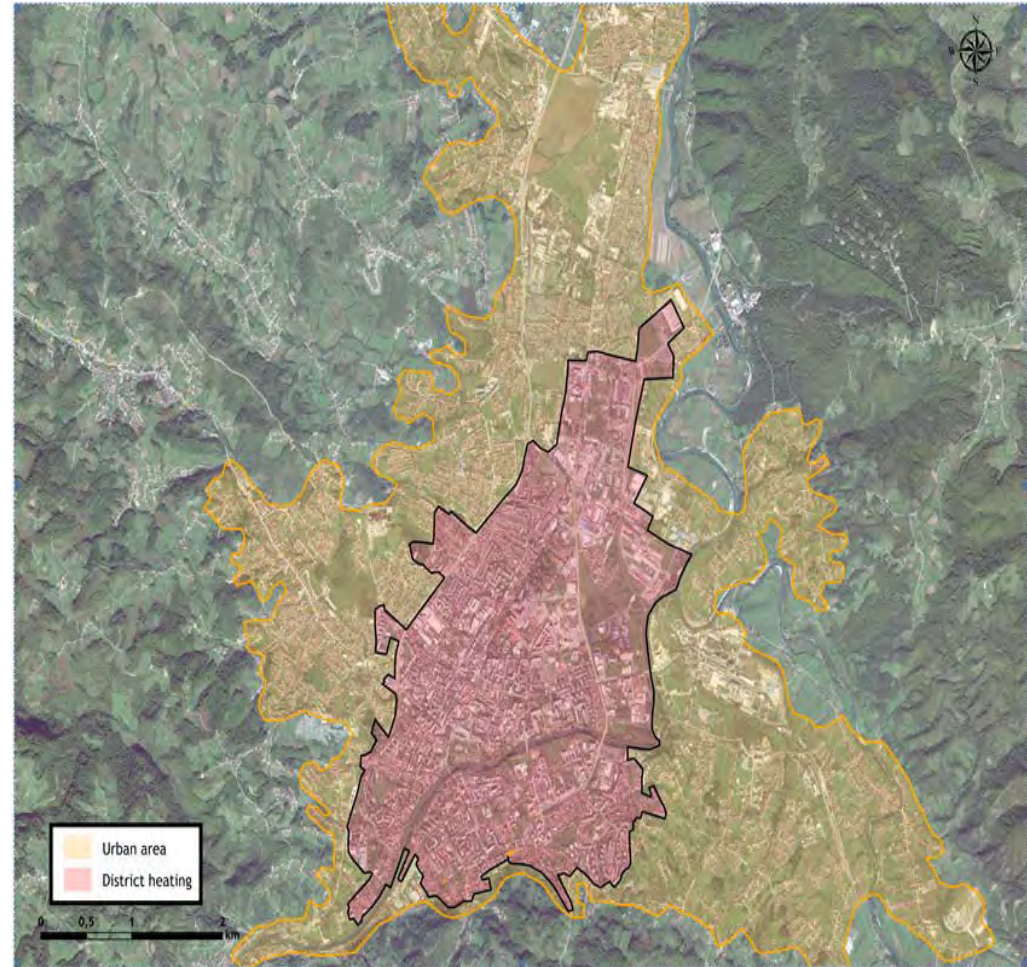
Financial pressure on city and District Heating company

CTCN collaboration and activities

Development of policy/regulatory gap analysis and investment and policy development plan that enables the City of Banja Luka to establish new partnerships with external investors

Intended Impacts

Supported successful EBRD loan application (~€42m)



DISTRICT HEATING SUPPLY AREA
Banja Luka, Bosnia & Herzegovina

Challenge

Jakarta is increasingly threatened by flooding due to extreme weather.

CTCN collaboration and activities

Establish collaboration between UNEP DHI Partnership and the Jakarta Research Council and national universities

Activities include: hydrodynamic modelling; Socio-cultural survey; recommendations for climate resilience infrastructure; and technology transfer workshops

Intended Impacts

Strengthened expertise for climate resilient city planning in Jakarta



Carrying strong Paris mandate into COP22

- Focused on implementation + delivering value
- Technology Framework

Matching developing country needs with private sector solutions

- Stakeholder Forums in priority sub-regions
- Engagement with Business Dialogues
- Stronger Developed Country NDE Engagement

Enhancing Linkages with the Financial Mechanism

- GEF Pilot Programmes
- GCF collaboration under Readiness & PPF

Thank you



CLIMATE TECHNOLOGY CENTRE & NETWORK



Norwegian Ministry
of Foreign Affairs



European
Commission

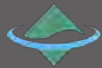
UDENRIGSMINISTERIET

DANIDA

Canada



METI
Ministry of Economy, Trade and Industry



環境省

Ministry of the Environment



MINISTRY FOR FOREIGN
AFFAIRS OF FINLAND



Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government

Governments of Switzerland
and Germany

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FREE THE SEED

Malaysia



“Waste'to'Wealth”



Just Green

**BIODEGRADBLE PACKAGING
PRODUCTS
FROM AGRO WASTE.**

Waste to Wealth....

From Rice's straw Waste to Biodegradable Packaging



Compost naturally...in 180days!



Day-60



Day-100



Day-120



Day-180



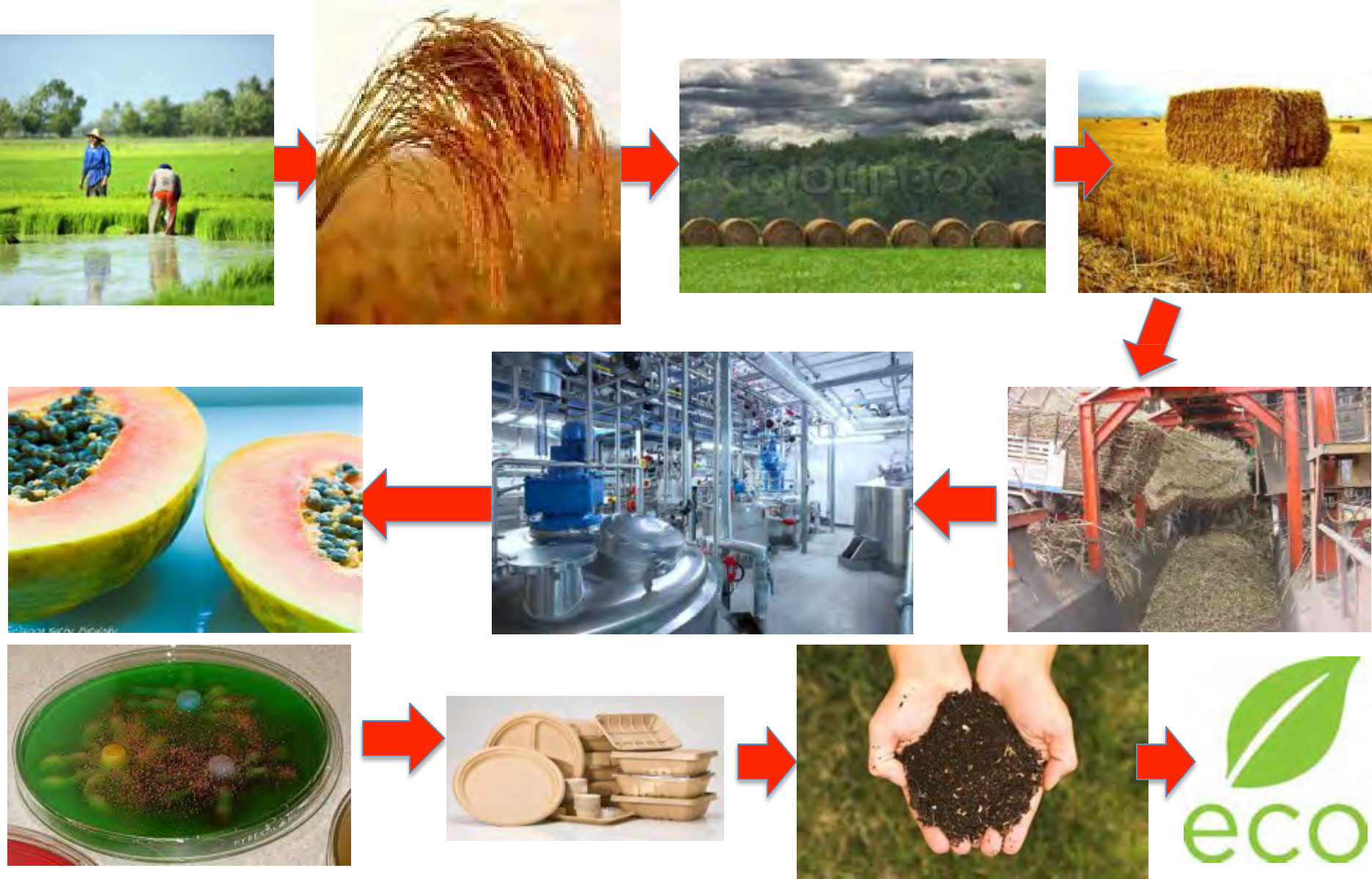
Small plants grown in the compost. The compost is rich in nutrients and is a great soil amendment.

Eco'friendly !

Seed



Lower Carbon Footprint



SocioJeconomic Impact.....
Helping Farmers Poverty Eradication Programme



Thank You

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Technology Transfer: Climate-KIC perspective



Mission

We bring together,
inspire and empower a
dynamic community to
build a net zero carbon
economy and climate
resilient society

Climate-KIC – Knowledge Innovation Community

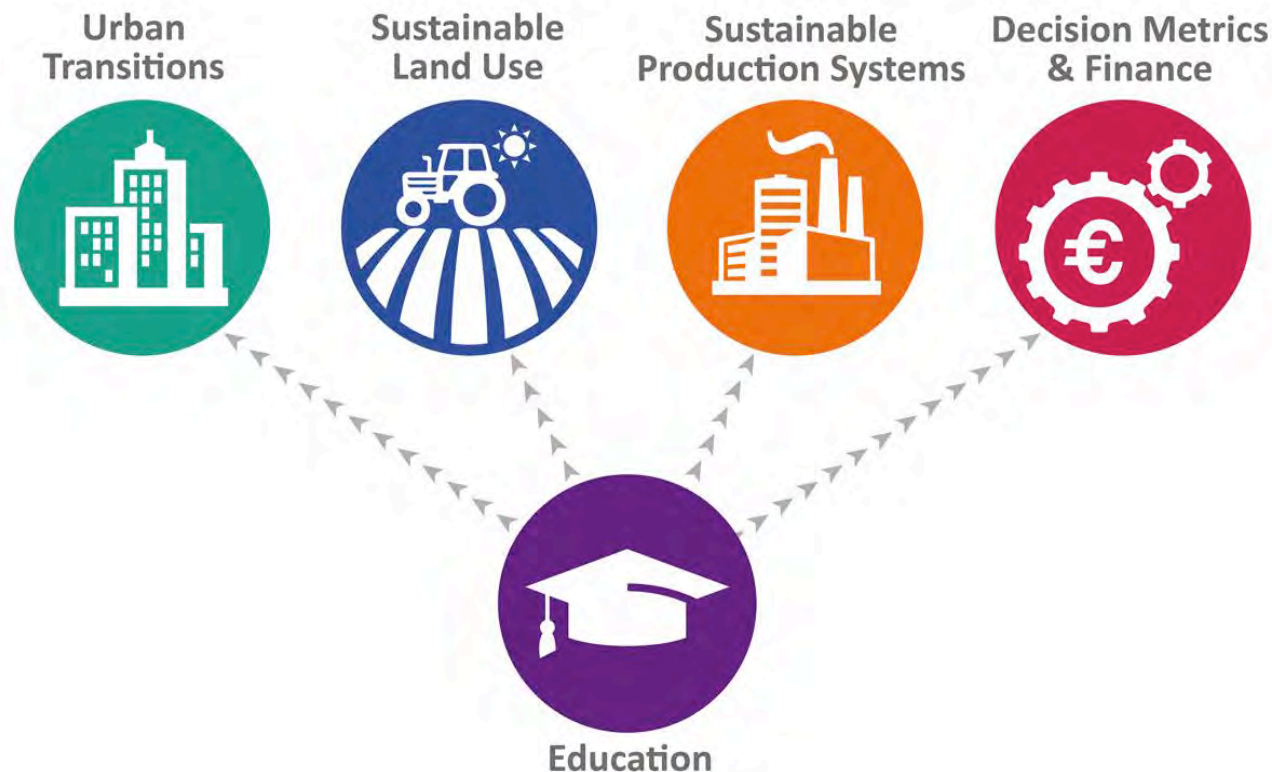


Our partner community



Where we focus

We address climate change across four priority themes:



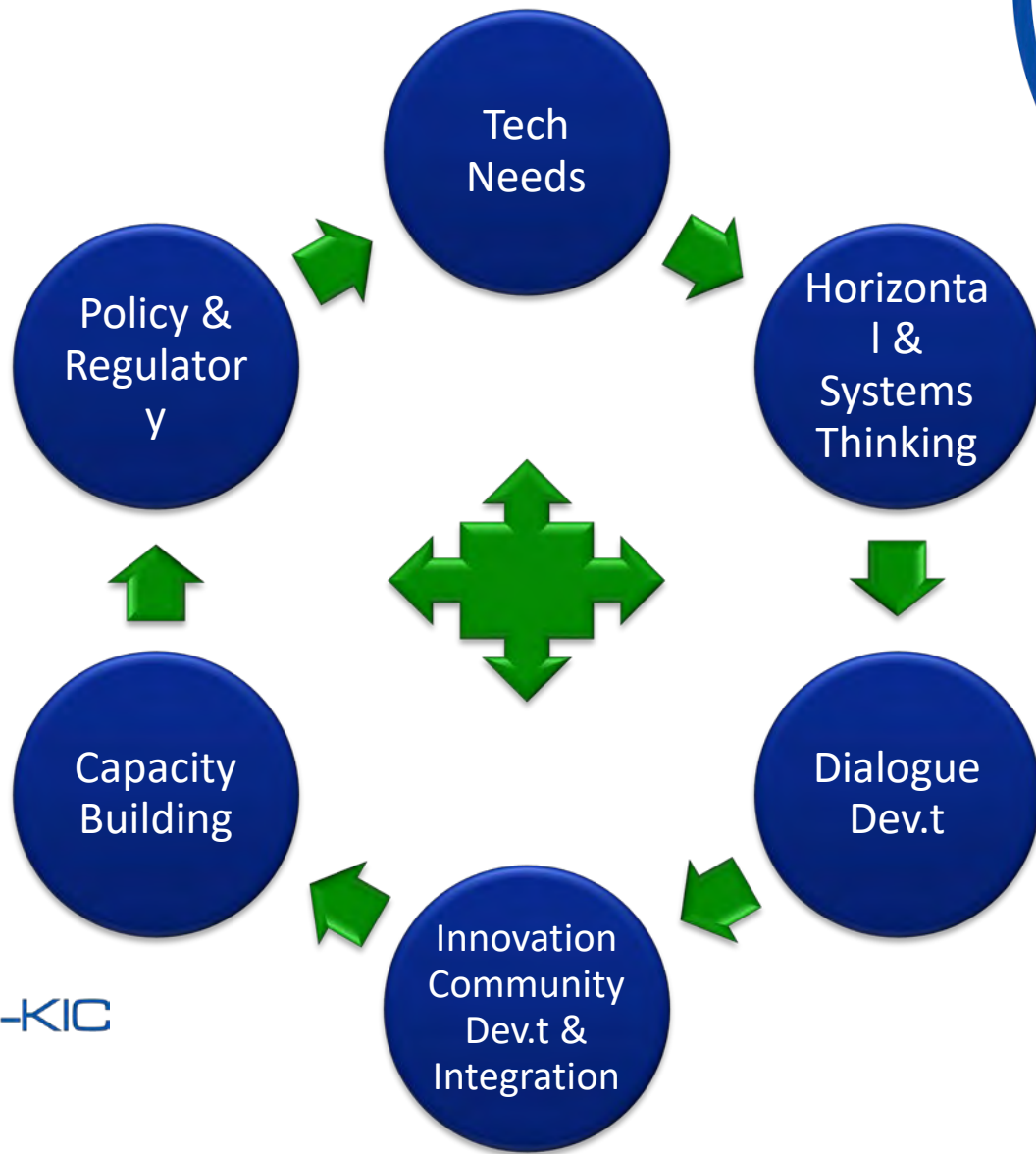
Our value proposition



What our Partners value:

- Climate change is a systemic challenge – need systemic solutions.
- No one organisation is smart enough alone – we need collective smartness.
- Need to better connect supply and demand sides.
- Trust and honest broking are critical values in the Community.
- Pan-European connectivity and ability is important – and ability to work beyond Europe increasingly so.

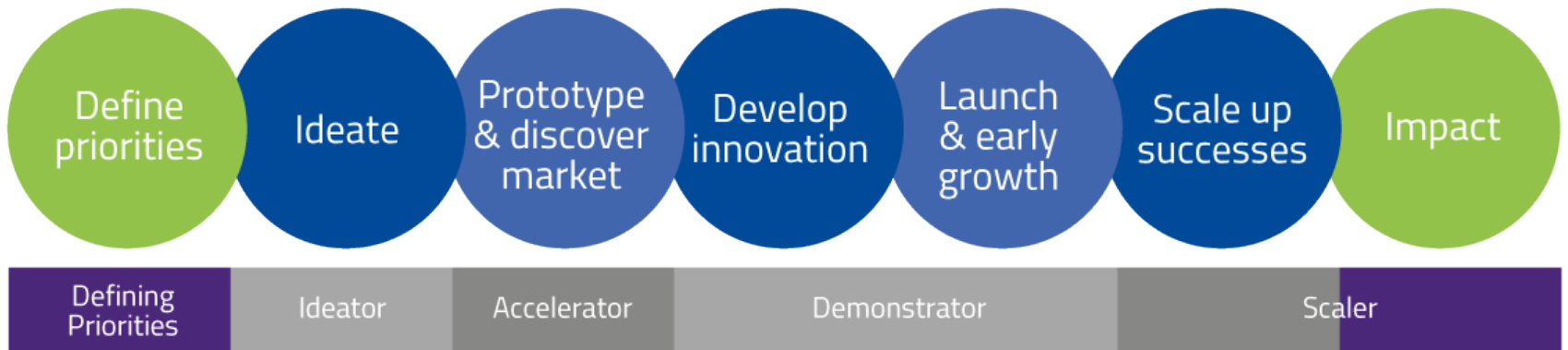
Elements of technology transfer



What we do



Climate-KIC Innovation Framework

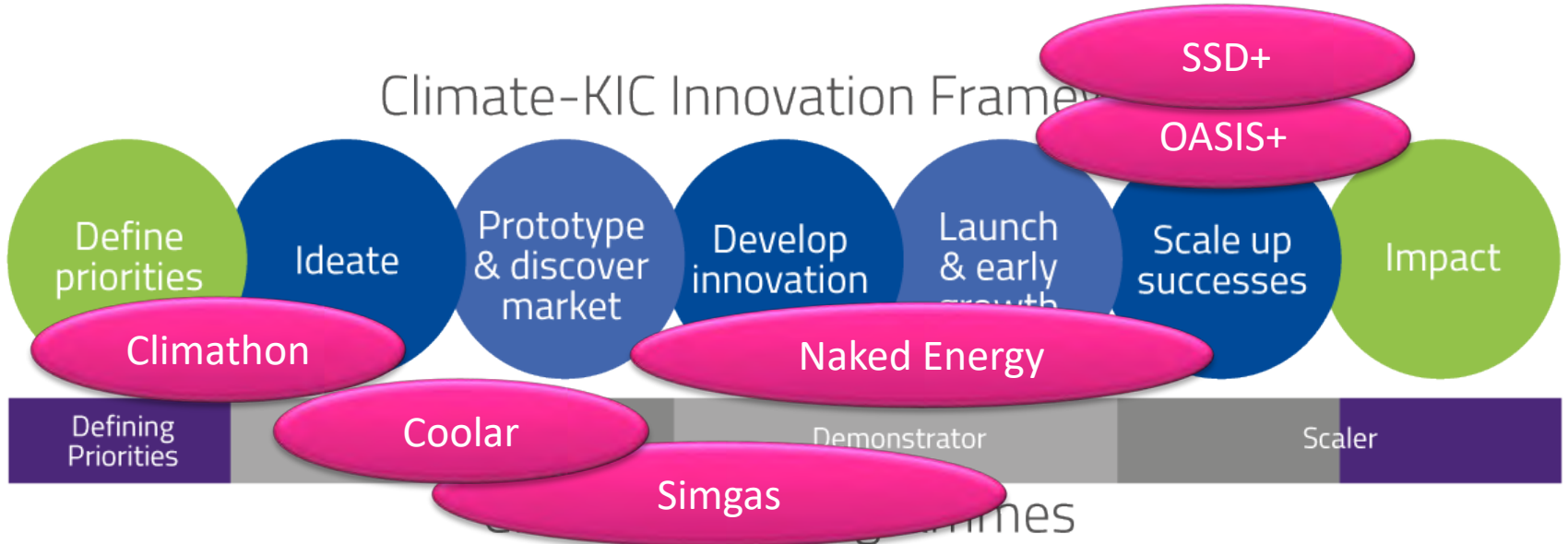


Climate-KIC Programmes

What we do



Climate-KIC Innovation Framework



Smart Sustainable Districts: Joined up infrastructure



OASIS+:

Data as enabler



OASIS+

Open access catastrophe modelling
driving adaptation to enable resilience
in an uncertain future



Naked Energy

Hybrid solar panel providing electricity and hot water

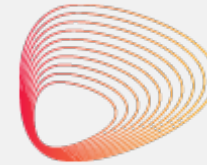
Combined Photo Voltaic and thermal energy system

PV inside the tube with water flowing through

PV provides electricity

Water keeps PV at optimal temperature and provides source of hot water

Unprecedented efficiency; cheaper renewable energy

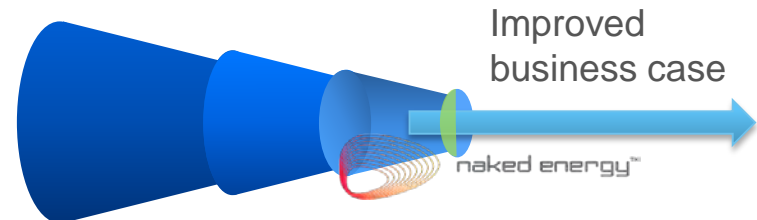


naked energy™



Climate-KIC SME partner

Support from Climate-KIC UK CLC for measuring and characterising performance



Simgas



Coolar

Education Success –
Journey from EIT Graduate Label to Entrepreneurs

COOLAR

- EIT LABEL ▶ 2012
- JOURNEY ▶ 2012
- GREENHOUSE ▶ 2014
- Accelerator Stage 1 ▶ 2015
- Accelerator Stage 2 ▶ 2016

Forbes 30 UNDER 30

Environmentally friendly solar thermal refrigerator that enables reliable cooling of medicine and food

Team
Arno Zimmermann
Julia Römer
Christoph Göller
Sandra Zickerow
Kilian Mähne



Climathon

59 cities
6 continents
24 hours
1 goal



#Climathon

Over 1400 applications · 10,194 posts · 16.8m absolute reach

Drive climate action!



“ If we remember, may EIT’s Climate-KIC Climathon contribute greatly to train a new generation of entrepreneurs and innovators. ”

*Tibor Navracsics,
European
Commissioner for
Education, Culture,
Youth and Sport*



Citizens around the world take direct climate action by coming up with innovative solutions to local climate change challenges



Students, start-ups, entrepreneurs, big thinkers, technical experts and app developers meet simultaneously for a 24-hour marathon session



Locations include major universities, research centres, government facilities and corporate offices around the world



www.climate-kic.org



Climate-KIC is supported by the
EIT, a body of the European Union

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