Low Carbon
SO2 & SO3

Interreg North-West Europe
European Regional Development Fund

Project Ideas Lab

Low Carbon SO2 & SO3

Investing in Opportunities

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Who is in the room?

- Are you involved in Interreg NWE already?
- Who's preparing a concrete idea already?
- Who's still in doubt what programme / source of finance to use?

- Which type of organisation do you represent:

Public authority?, University/ research? NGO/sectoral agency/cluster organisation? Private enterprise/SME? Private consultant?

Main objectives

To reduce GHG emissions in NWE by:

+ the implementation of low carbon, energy or climate protection **strategies** **(specific objective 2)**

+ the uptake of low carbon **technologies, products, processes and services** **(specific objective 3)**

+ *the implementation of transnational low carbon solutions in* ***transport systems*** ***(specific objective 4)***

Approved projects – low carbon priority, SO2 & SO3

14 projects approved

61,41 m EUR allocated

37 m EUR still available for prio 2 on CO2 (SO2 and SO3)

4 new SO2/SO3 projects step 1 approved in call 5 (sept 2017)

In total 23 projects step1 approved but not yet submitted

Approved projects – low carbon priority,

SO2 (6) 27.3 ERDF

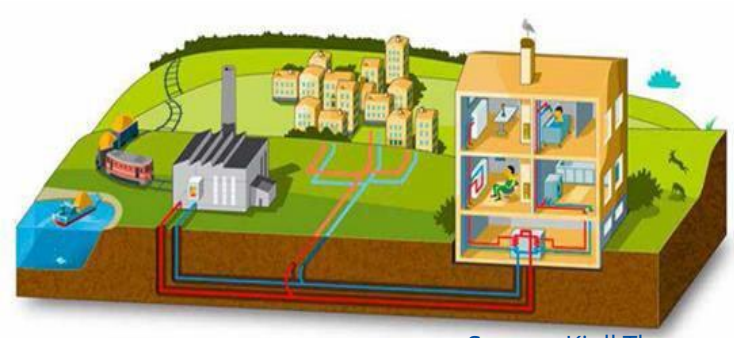
Heatnet	district heating
ACE	Energy retrofitting condominiums
CAN	Energy retrofitting underpriviliged neighbourhoods
E=0	Energy retrofitting for zero energy large scale
Cvpp	virtual power plants, energy coops
ECCO	energy cooperation urban

SO3 (8) 34,12 ERDF

LOGIC	off grid communities
FORESEA	testing marine energy
ITEG	grid integration tidal
GENCOMM	hydrogen, storage
CLEANMOBENERGY	storage
GROOF	greenhouses on roofs
UPSTRAW	straw buildings
powerVIBES	sustainable energy for festivals

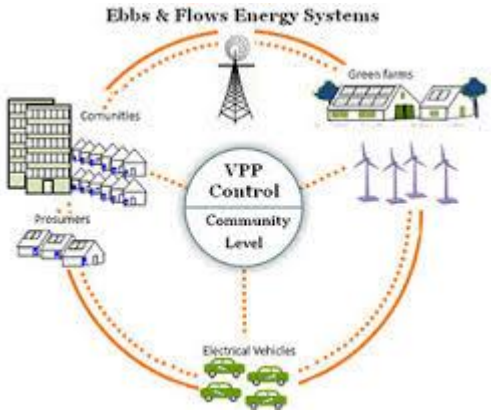
Types of project activities

Source: EnergieSprongNL



Source: Kjell Thorsson/Fortum

Source: http://assets.inhabitat.com



Characteristics

- Focus on the implementation of **existing** strategies that should reduce GHG in cities and regions
- Involvement of **public stakeholders**
- Can include: awareness raising, trainings, capacity/skills enhancement, demos of good practices, citizens' involvement

Related output indicators, for example

- **no. of solutions facilitating delivery of strategies (compulsory)**
- no. of households with improved energy classification

E=0: Desirable, warm, affordable homes for life

FR|LU|NL|UK

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Challenge

- Poor energy performance of residential buildings
- Current retrofit measures are piecemeal
- Lack of holistic policies with compartmentalised funding

Objective

- E=0 aims to support the creation of a mass market for net zero energy retrofits across NWE

Result

- 25% cost reduction in E=0 approach to boost its roll out
- 41 buildings retrofitted, 5 archetypes demonstrated

Specific objective 3 – technologies, products, processes, services

Types of project activities

Source: emec.org.uk

Source: Sipa Press/Rex Features

Source: lassedesignen - Fotolia.com

Characteristics

- Focus on the implementations of existing solutions
- Involvement of private partners
- Usually technology oriented (TRL, business support, vouchers, bringing closer to market, cost reduction, energy efficiency etc.)

- Related output indicators, for example
  - **no. of enterprises cooperating with research institutions** (**compulsory**)
  - no. of adopted/applied low carbon technologies
  - additional capacity of renewable energy production

FORESEA

Funding Ocean Renewable Energy through Strategic European Action

Challenge

The cost of pre-commercial testing and demonstration for ocean energy is high and investors are reluctant to invest until the technology has been proven in the sea at scale

Objectives

Bring ocean technologies to the market by providing access to a network of test centers for SMEs

Results

- Ocean energy (OE) providing competitive low carbon energy into Europe's energy market
- Move OE technology from TRL 5 to TRL 7
- Identification of new OE technologies and products

UK | NL | IE | FR | BE

Picture EMEC website

Projects examples (priority 2)
Output - result - baseline

Project	Output	Result	Baseline
FORESEA	26 ocean energy technologies tested by SMEs in real-life conditions	For 15 technologies: increase of TRL to level 7. Increase of ocean energy capacity to 1 million MWh (in 10 years)	Ocean energy products have TRL5; in 2016: only 40MW of tidal energy capacity is being deployed.
ACE-retrofitting	A NWE transferable ICT tool to accelerate the energy retrofitting of private condominiums	% annual renovation rate for private condos: 1.5 | Annual number of private condominiums renovated: 1,000	% annual renovation rate for private condominiums: below 0.5 | number of private condominiums: 100,000
Chips	A prototype of a cycle highway 2.0 providing insight on how to improve readability and attractiveness of cycle highways	Increase the number of cyclists on demonstrator cycle highways by a factor of 1,5 to 3. 9.683 t less CO2-emissions per year in demonstration areas because of modal shift.	Bicycle share in commuting now varies from less than 5% (Belfast) to 25% (Gelderland).

Watch out for these pitfalls in priority 2

Start from a baseline, your starting point

Go beyond research

Avoid technical jargon

Transport projects → GHG reduction? + focus?

Look at wider context

Q&A

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