



Information day

4 April 2008

The technical aspects

Alexandros Kotronaros

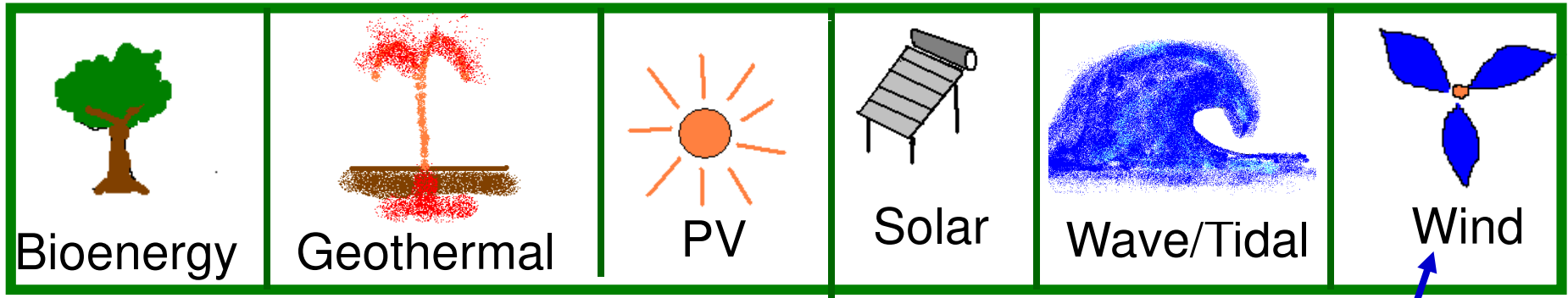
European Commission

Directorate General for Energy and Transport

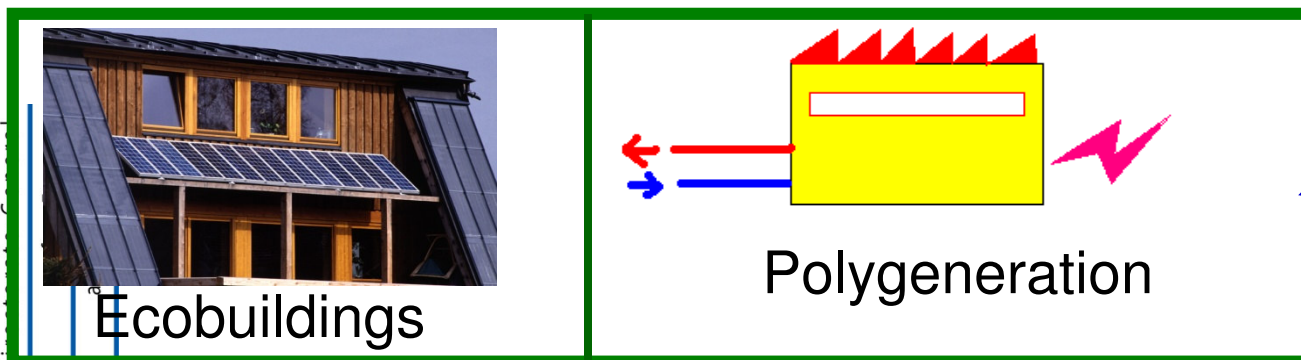
Innovation and technological development in energy unit

Traditional sectorial approach

Renewable energy Sources



Energy Efficiency



Grid issues



CONCERTO

**Moves from individual technology projects,
to
initiatives in local communities**

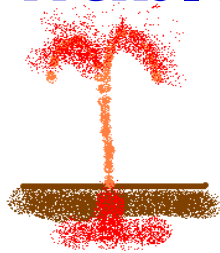


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Renewable energy Sources



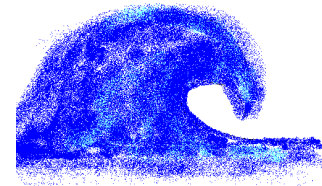
Bioenergy



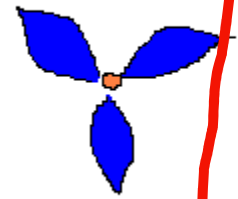
Geothermal



Solar



Wave/Tidal



Wind

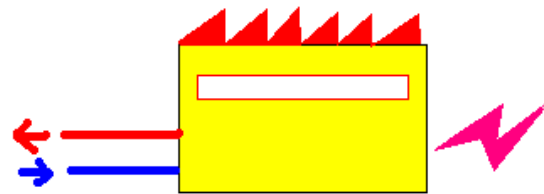
System

INTEGRATION

Energy Efficiency



Ecobuildings



Polygeneration



Grid issues

Directorate-General
for Energy





Specific Programme COOPERATION
CONCERTO activity Energy 2.8, 4.4, 8.4
Tool: Collaborative projects



- Demonstration
- Research
- Monitoring
- Dissemination
- Training
- Management

INTERNATIONAL COOPERATION
Is compulsory



Typical characteristics of a CONCERTO Community

A typical CONCERTO community should:

- already have plans for sustainable development
- enjoy a strong political commitment
- work towards ambitious goals
- produce visible and recognisable impacts

Types of CONCERTO Communities

- Urban
- Isolated
- New
- Under refurbishment, or development
- Part of a city, small town, group of villages

Must be clearly defined geographical areas/zones

Example of rural community and its boundaries



Include area maps in proposals

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Community Data Sheet (CDS)

To be completed for each community project
Provides :

1. information on the Community
2. its energy targets
3. Overview of the project components
4. Their total, eligible cost and support

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**Included in the Guidance note
for CONCERTO proposers**



Number and size of the CONCERTO Communities

Single-community & multi-community projects acceptable

Projects which could make an impact at EU level, not due to their size but to their research / innovation excellence and visible results

The 3 Compulsory Components of a **CONCERTO** community

1

Demand



2

Supply



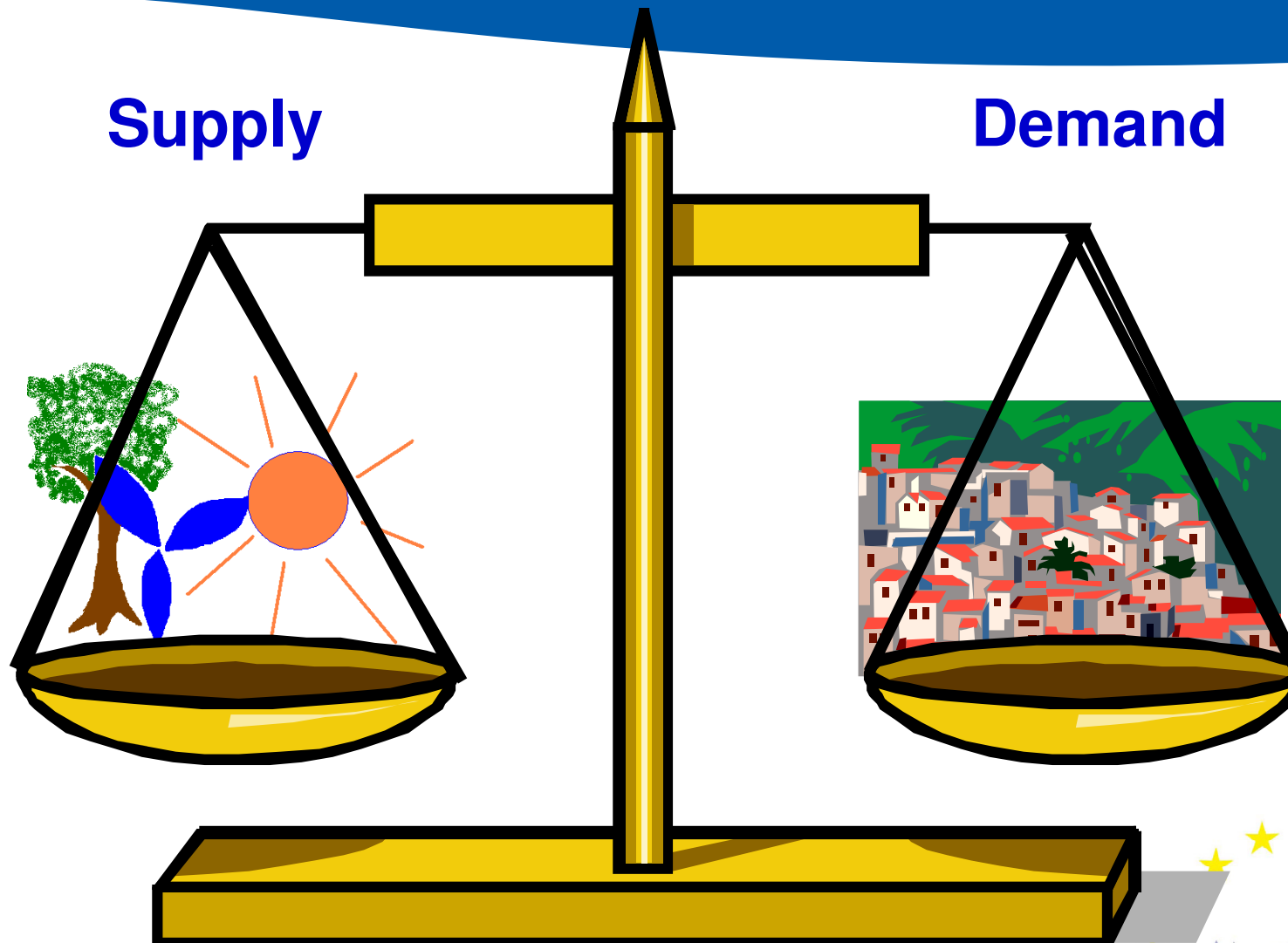
3

system

Integration

Polygeneration is Optional

Balance in supply and demand



1st component

Eco-buildings



Larger scale than
single eco-building
projects

Holistic design
approach

Priority to refurbished /
retrofitted buildings



1st component

Eco-buildings

Energy consumption of CONCERTO ecobuildings :

refurbished /retrofitted buildings < National regulations for new buildings

New buildings at least 30% lower than National regulations for new buildings



2

nd component

Renewable Energy Sources

Eligible Renewable energy sources are:

renewable non-fossil
sources, such as:

To be managed in an
optimized way to fit in the local
energy demand

- wind energy
- solar energy
- hydroelectric power
- biomass energy
- landfill gas energy
- biogas and sewage treatment gas energy
- geothermal energy
- wave energy
- tidal energy

NEW installations –substantial increase in the share of RES

3

rd component

Integration

Technologies - Components - Systems

1. Conceptual integration

- RES and EE are combined in order to optimize the system's performance
- Green energy should not just replace conventional sources. This should be done in more EE systems.

2. Physical / Technical integration

Production connected to consumption through a network and controlling mechanisms



Monitoring activities 1

Projects are expected to produce field experience of energy flows (supply and demand patterns) together with detailed information on the Performance and reliability of the innovative energy supply and end use involved

Monitoring activities 2

Important lack of real data in the EU on :

Proven and reliable technical solutions
Achieved / measured energy performance
Actual investment costs

Minimum requirements for CONCERTO projects

1. Technical monitoring
2. Non technical monitoring

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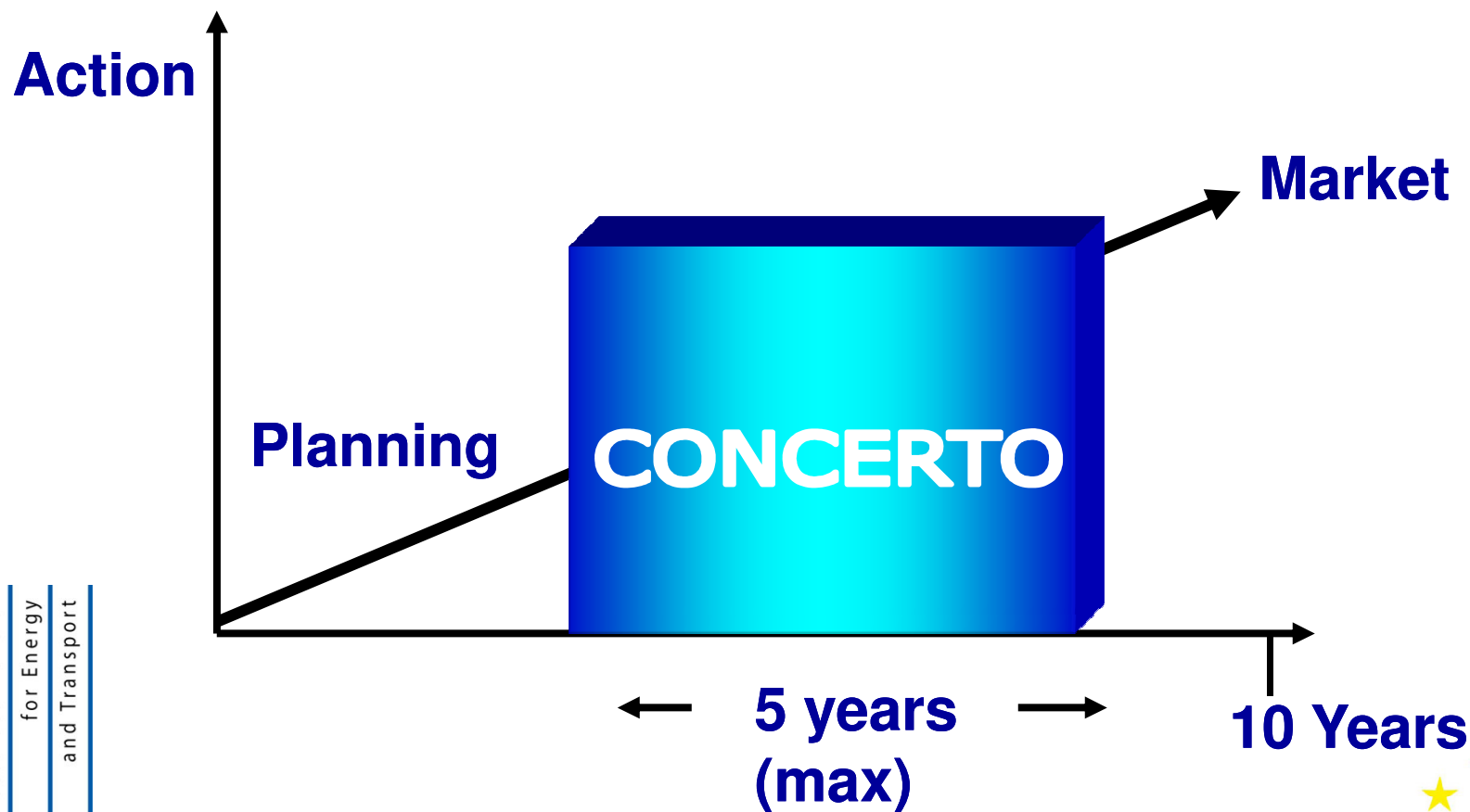
Focus on Research Excellence and Innovation

CONCERTO

projects should demonstrate
innovation leading to
highly improved cost effectiveness via:

- Improvements In the individual technologies
and/or
- Innovative integration of the different technologies, components or systems

Sustainable development process



CONCERTO III *vs* CONCERTO II

- Same principle
- More emphasis to the Research and technological excellence and innovation levels
- Scale of unit cost is introduced for the eligible costs of the projects.
- Minimum requirements for the monitoring of the projects are provided.
- Revised forms (BEST and CDS)

What costs are eligible for

CONCERTO

As a principle :

- Eligible costs are limited to the innovative parts / additional effort
- “normal homework” is not eligible
(e.g. Buildings meeting current regulations)

Flat rate financing in the form of scale of unit costs

For CONCERTO

Eligible cost for buildings [EUR/m² built or refurbished]	100
For installed capacity of renewable energy sources and polygeneration systems (with the exception of photovoltaic systems and solar collectors) [EUR/kW installed]	1200
For photovoltaic systems [EUR/kW installed]	5500
For solar collectors [EUR/m² installed]	500

Budget allocation

CONCERTO I & II

Typical EC support / community project **3-4 M€**

CONCERTO III

No specific budget allocation
Depending on quality of proposals

Estimation: **10** community projects to be supported

Composition of consortia

Evidence of strong commitment from :

- Local authorities , local market actors, decision makers

Consortia also typically include:

- Utilities - ESCOs
- Energy technology/service providers
- Socio-economists
- Research organizations
- Energy users

Associated Communities in CONCERTO

- Participate in the project
- Do not receive EC support for demonstration actions
- have a clear role in the project
- Are committed to develop their own local energy policies and plans



Is it a CONCERTO **project**



Frequent weaknesses of proposals (technical)

- Absence of one of the compulsory components (usually integration)
- Large imbalance between supply - demand
- Scattered sub-projects
- Conditional project parts
- Not beyond commercial practices
- No monitoring of energy flows – impacts
- No ambitious targets /no substantial impact



Frequent weaknesses of proposals (non-technical)

- Over enthusiasm for the project (trying to impress rather than convince)
- Unclear / imprecise /unstructured/ incomplete information
- Too large documents, difficult to read

Considering to apply for

CONCERTO



Suggested first steps

- Become familiar with FP7 rules
- Read call text carefully
- Read Guidance note for CONCERTO proposers
- Find partners
- Complete draft CDS and BEST tables
- Discuss principle with NCP's or EC officers



Today, 46 CONCERTO communities in 18 projects

act2

Hannover
Nantes

cRRescendo

Ajaccio
Almere
Milton Keynes
Vildecans

ECO-City

Helsingborg
Helsingør
Trondheim
Tudela

EGOSTILER

Amsterdam
London
Måbjerg

energy in minds!

Falkenberg
Neckarsulm
Weiz Gleisdorf
Zlin

POLYCITY

Cerdanyola del Vallès
Östfildern
Torino

RENAISSANCE

Lyon
Zaragoza

SESAC

Grenoble
Delft
Vaxjö

TetraEner

Geneva
San Sebastian



Green Solar Cities

Kuben
Salzburg

SORGER

Hillerød
Apeldoorn
SEMS
Weilerbach
Tulln

Redange

Slubice

HOLISTIC

Dundalk
Mödling
Neuchatel

Class 1

Stenløse
Concerto AL Piano
Alessandria

SERVE

Serve Region

STACCATO

Amsterdam
Budapest
Sofia

REMINING-LOWEX

Heerlen
Zagorje

What is Concerto plus?

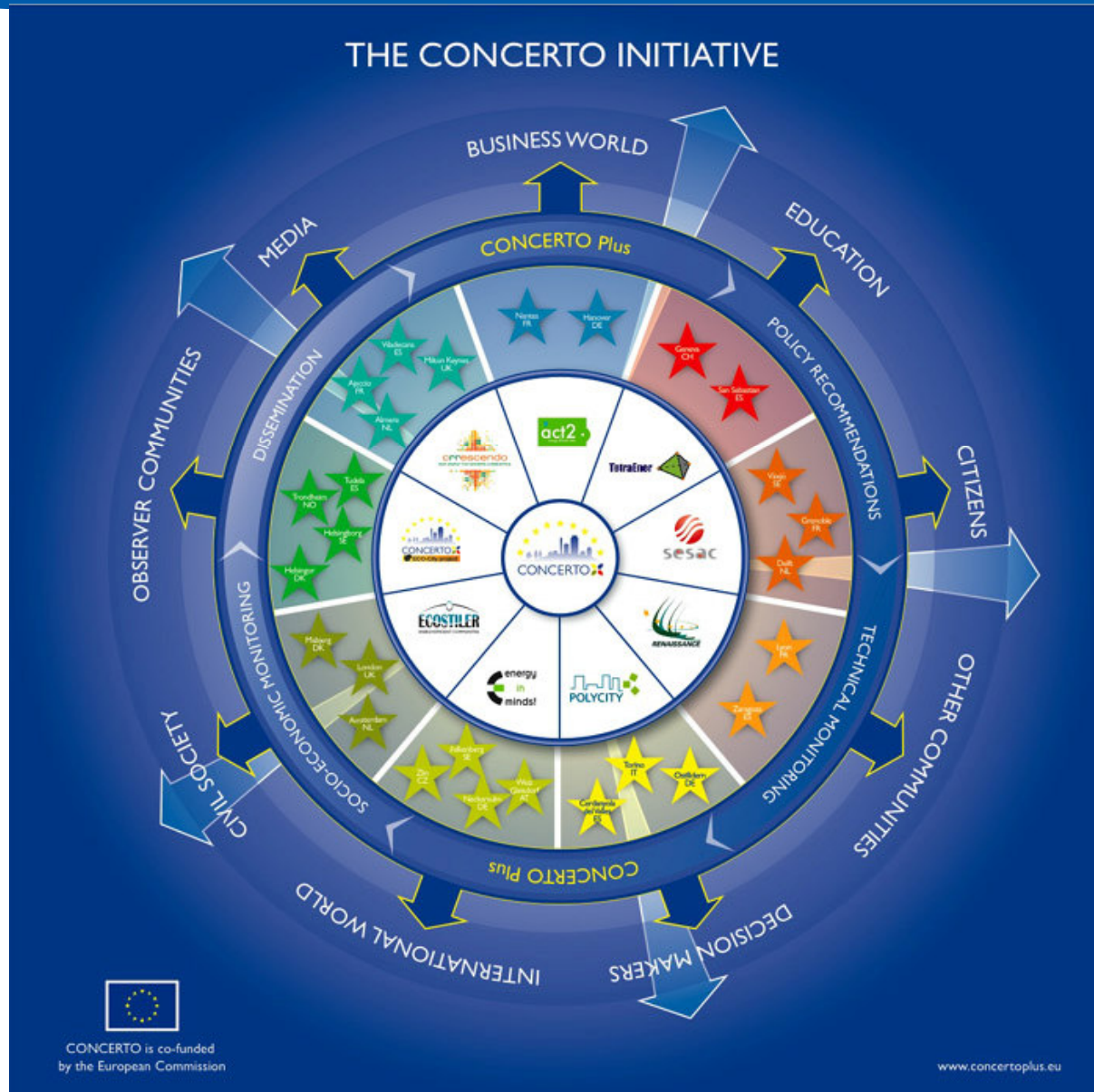
- Service contract - awarded to a group of companies with complementary competences.
- Supports the European Commission and contributes on scientific, technical and policy levels.

CONCERTO Plus includes:

- coordinated analysis,
- Collection of monitoring and dissemination of the results
- strengthening of networking between the participants
- facilitating the transfer of best practices across the EU



CONCERTO Plus adds value to the CONCERTO projects



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CONCERTO is co-funded
by the European Commission

www.concertoplus.eu





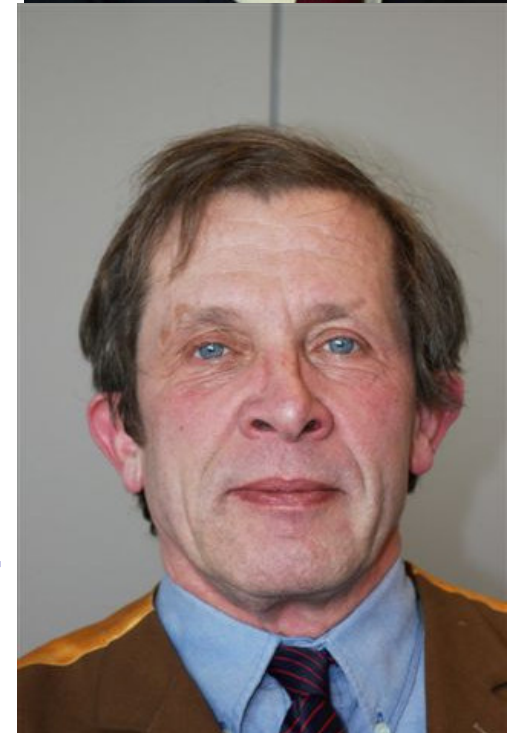
Jean-Marie
Bemtgen



Jean-Marie
Bemtgen



Sylvain
de Royer





Mario
Dionisio

Jean-Marie
Bemtgen



Sylvain
de Royer



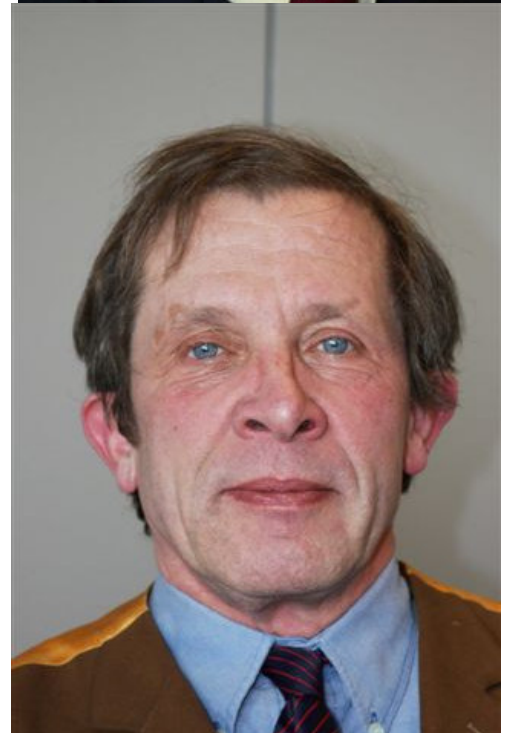
Mario
Dionisio

Jean-Marie
Bemtgen



Alexandros
Kotronaros

Sylvain
de Royer



More information



Homepage DG Energy and Transport Guidance note for CONCERTO proposers

http://ec.europa.eu/dgs/energy_transport/rtd/7/index_en.htm

WEB SITES

FP7 Cordis homepage: www.cordis.europa.eu

Concerto Plus : <http://concertoplus.eu>

ManagEnergy : www.managenergy.net

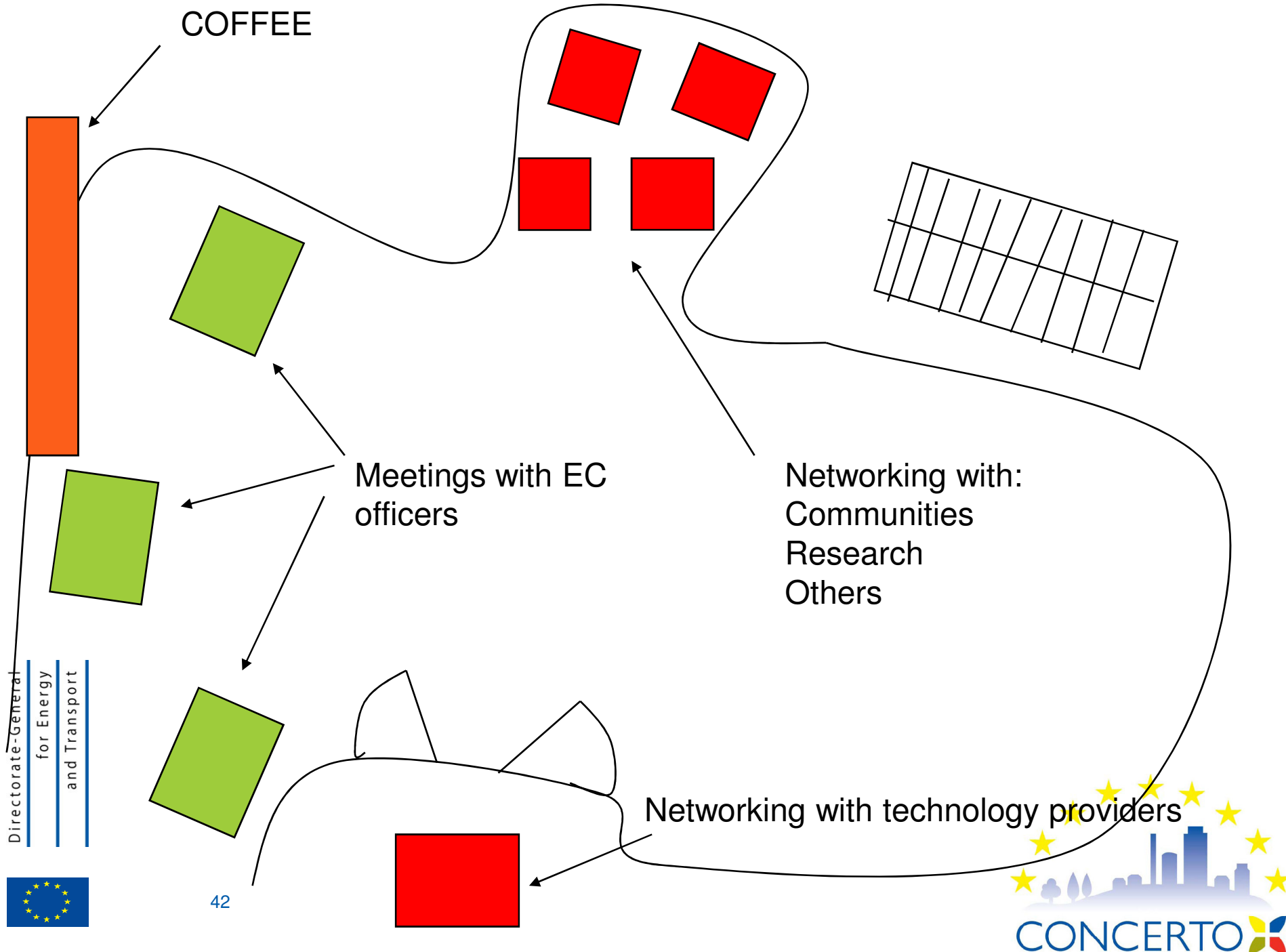
CONCERTO mail box

tren-concerto@ec.europa.eu



Logistics

- 10:30 - 11:00 Coffee break
- 11:00 - 11:30 RTD instruments and contractual aspects
- 11:30 – 12:30 Bilateral meetings with EC officials & informal networking around thematic tables
- 12:30 – 14:00 Lunch and bilateral meetings with EC officers
- 14:00- 17:00 Informal networking sessions (cont.)



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