Pooling Potentials for Competitiveness Energy:
The Alps as rechargeable battery of Europe?

GREEN SMART SMALL:
Policies and Projects of
Sustainability in Trentino

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OUTLINE

- How to enhance energy efficiency and turn this into a competitive advantage for the Alps?

- How to cope with the need of boosting renewable energy production and protection requirements?

- How to overcome energy supply and energy production being dependent to location factor

- Which decision making processes for questions of exploitation, distribution of loads and benefits?

OUTLINE

- Short presentation of the policies, actions and projects of the Autonomous Province of Trento related to *sustainability*

- Some hints, learned from the experience, to the session's questions.

- Q&A

TRENTINO: GREEN, SMART AND SMALL

Environment as a Key Resource
- 56% forestry surface/territory ratio
- 88% production of energy by hydro

Knowledge asset
- 2,5% of GDP investment in Research
- 2.500 researchers
- 12 public research centers
- University at high top ranking
- Private research centres (i.e. Microsoft, Fiat , Ducati, OECD Leed Trento)

Trentino 2020: green policy

- **Habitech**: private public cluster
- **Green Building Council Italy**
- **Wood Buildings Policy**

- 6207 kmq surface
- 524.875 inhabitants
- 41.000 SMEs

TRENTINO : main policies and actions

- Strong policies:
  - Environment protection
  - Incentives for energy efficiency in building and small scale renewable energy production
  - District heating and cooling.

  - Since 50 years promoting and investing in research

TRENTINO: main policies and actions

- Since 2005 *sustainability* is a priority in governing Trentino
- Sustainability is based on three main key components: environment, community and market.
- The weakest point is market transformation. in Trentino, *and in many alpine regions* this weakness has specific features;

TRENTINO : main policies and actions

- Green procurement based on sustainable certification scheme and green tech innovation

- Adopt a very stringent policy for new public buildings of Province and Municipalities

- Adopt a new policy for the management of the own real estate (Develop a information system and adopt Energy performance contracts)

- Incentives on green building, energy efficiency renewable energy production for citizens and companies

TRENTINO : main policies and actions

- Devote research funds to green techs: for public research institutes, for companies. Use FESR as supporting tool

- Promote and extend cooperation in these fields with Sud Tyrol Province and inside the new GECT Euregio (North Tyrol, Sud Tyrol, Trentino):
    - Share research funds with research institution and companies of different regions
    - Promote with a common brand green building and green tech of the three regions
    - Share policies, projects, etc..

Sustainability as a key success factor

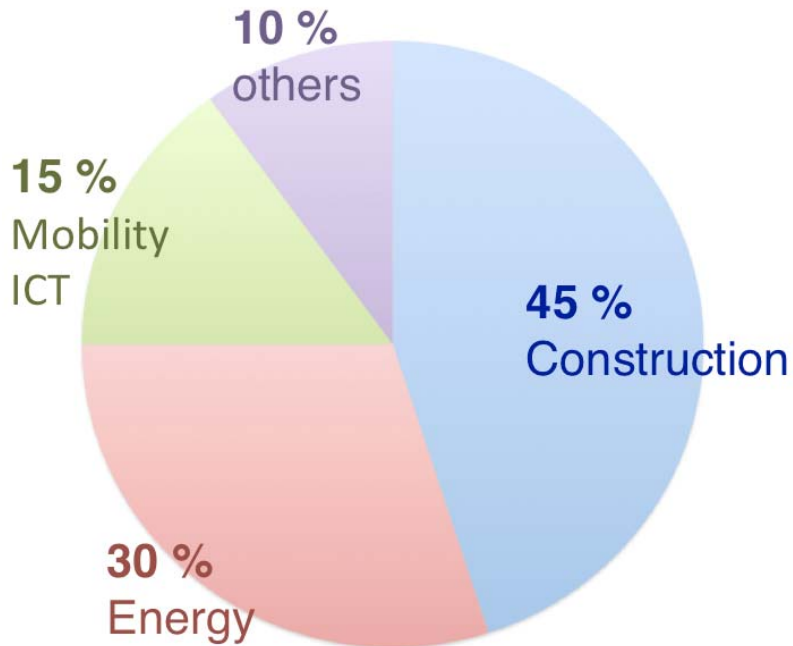# HABITECH is …

> **Cathalizer**
for innovation, entrepreneuriship, business development of local economy.

> **Engine** for green-business

> **System** of 300 companies that consider sustainability as a market and development opportunity

➢ **Hub** in Italy for green-building, energy and alternative mobility

NUMBERS

10 % others

15 % Mobility ICT

45 % Construction

30 % Energy

154

PRIVATE MEMBERS
300 COMPANIES REPRESENTED

16

PUBLIC MEMBERS
UNIVERSITY – RESEARCH CENTRE –
DEVELOPMENT AGENCIES

8.000

EMPLOYEES

1 BILLION €

TURNOVER (2008)

REPRESENT 300 COMPANIES

Habitech: main policies and actions negotiated with the local government

- Introduce a certification scheme of sustainability for **green building** and **green territories** as a scaffold recognized from the market and as a tool for training and education of the building sector chain (from design to construction and maintenance)

- Involve the public in this choice: Province of Trento adopted the certification scheme for the public real estate

- Introduce certification of competence of the building chain

- Introduce product accreditation

Main actions anf projects carried on by Habitech

Involve all the actors of the building chain. Set up of *Green Building Council Italy* (a Italian distributed association with 6 regional chapters)

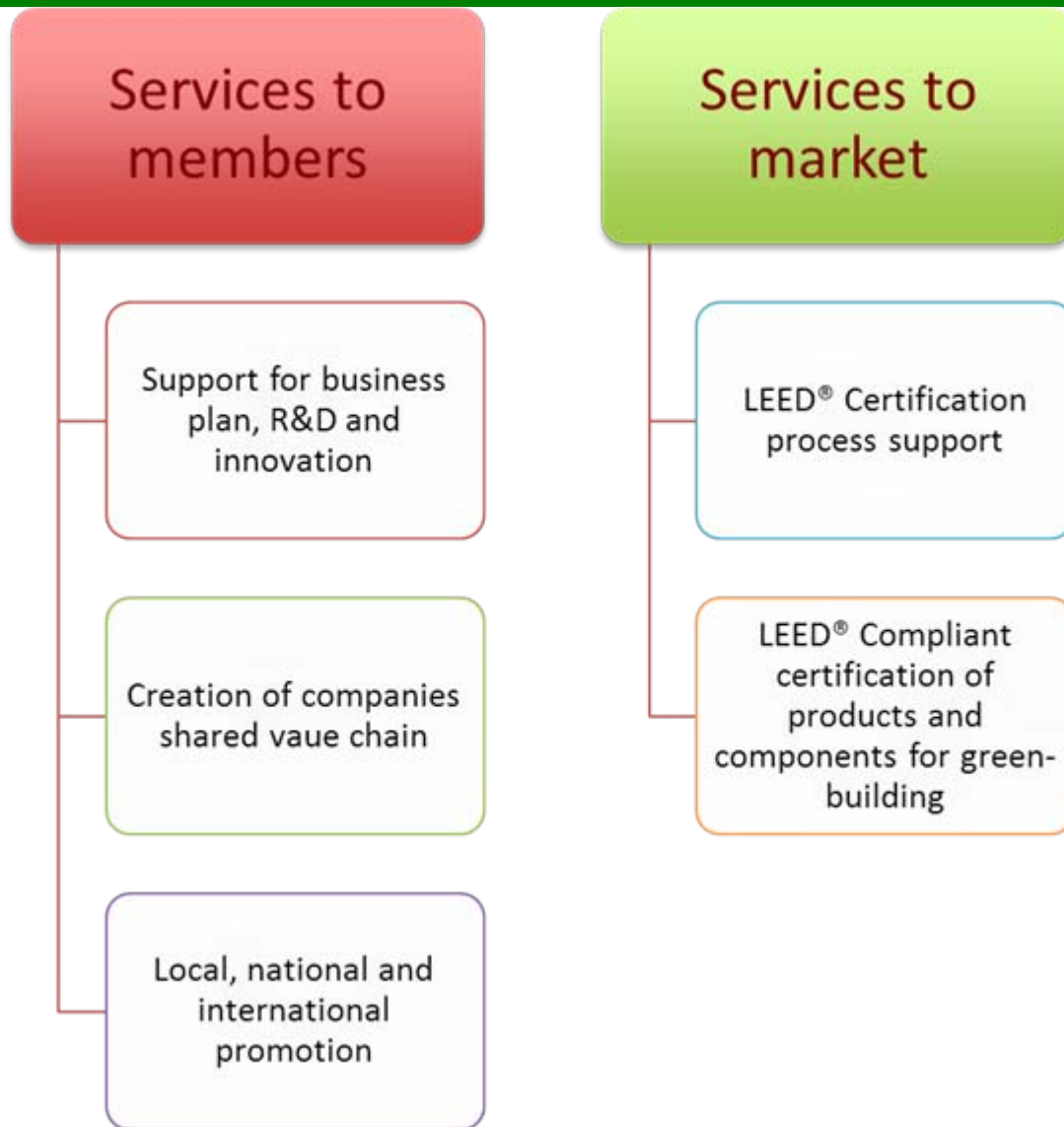Set up of *third party certification* and accreditation institution

Set up of *specialized building chains*: wood buildings, energy requalification,

Set up of *cogeneration and renewable energy* manufacturing chain (fuel cell , dhc)

HABITECH

Services to members

- Support for business plan, R&D and innovation
- Creation of companies shared vaue chain
- Local, national and international promotion

Services to market

- LEED® Certification process support
- LEED® Compliant certification of products and components for green-building

Wood Certification Buildings Project

The project ARCA uses **high levels of quality**

TECHNICAL PERFORMANCE	BUILDING MANAGEMENT	ENVIRONMENTAL SUSTAINABILITY
Earthquake safety	Construction quality	Certified wood
Fire resistance	Maintenance plan	Integrated design program
Energy efficiency	Insurance policy	Low emission of volatile organic compounds
Soundproofing		Local production
Bloower door test		
Comfort ventilation with heat recovery		

Rating system

platinum

gold

silver

green

THE LOW-CARBON GATEWAY TO ITALY AND EUROPE

- Sustainable business and research cluster for green building, renewable energy and environmental technology.

- Transparent carbon measuring

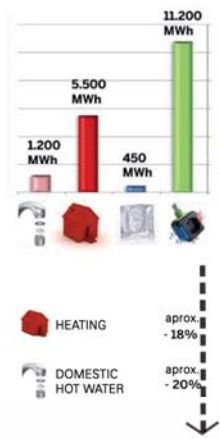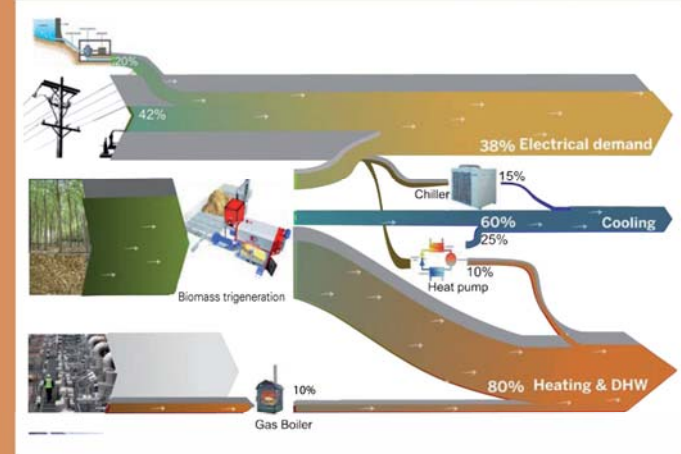- Promote sustainable lifestyles by example

A LOW-CARBON INFRASTRUCTURE

- Cutting CO_2 emissions 85%

- Reducing energy demand by 40%

- Providing sustainable energy mix

- Offering smart sustainable transport

DESIGNED FOR BUSINESS

- Shared services and structures: laboratories, training rooms, exhibition areas, etc.

- Collaborative environment

- Organizational synergy

- Integrated supply chains
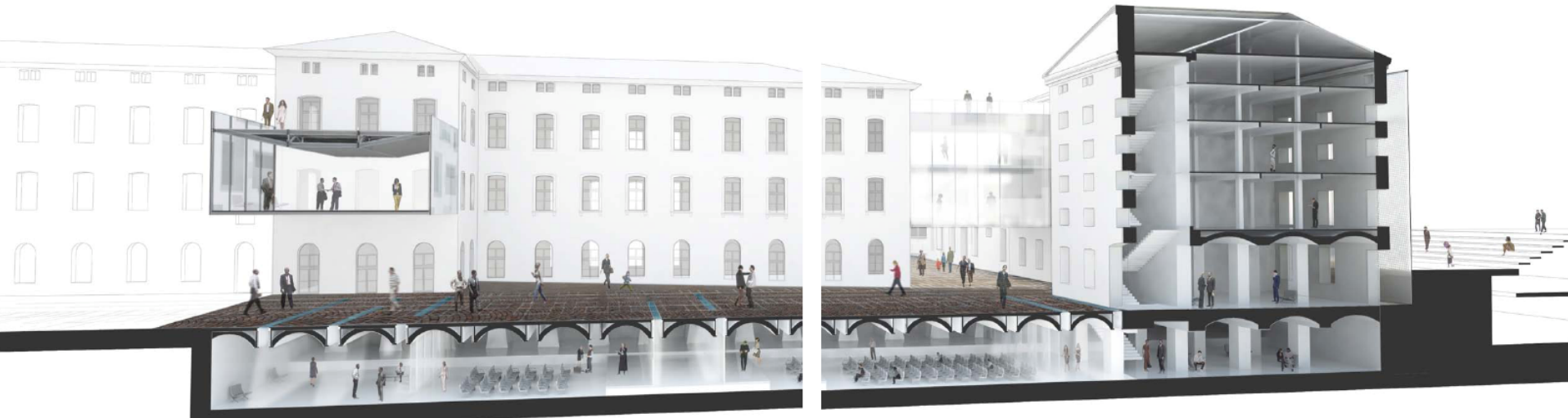
KEY BENEFITS

- Showcase companies, solutions, initiatives

- Competitive conditions for cleantech spaces

- Opportunity for synergic development

- Access to the economic incentives

- Involvement in a managed zone

- Proximity to a local market with growth trend in cleantech

- Well connected to rest of Europe

How to enhance energy efficiency and turn this into a competitive advantage for the Alps?

- – making energy efficiency a local development opportunity (small enterprise, local and "a tourism product" of the community

- – Adopting a sustainable approach: leverage the local asset (product and farms) transform the products and the process in sustainable products/process. This requires a cultural change (from technologies to global performance measures of sustainability)

- – Share experience and " green scaffolds" in order to measure advance with different regions and different countries

How to cope with the need of boosting renewable energy production and protection requirements?

- – Every community (region) needs to know the so called "Biomass" and natural resources available. Then the plan and the actions have to be part of a development program discussed and coordinated with all the stakeholders.

- – Regulations have to be shared among communities in the Alps (ie Trentino has a strong policy on DHC based on wood-biomass, we can not import wood biomass…)

How to overcome energy supply and energy production being dependent to location factor

- Invest in dhc, storage technologies and micro distributed cogeneration

- Make smart grid tuned for alpine regions

- Promote sustainable mobility (select specific area, promote zero e-emission as flag projects using local produced renewable energy.)

Which decision making processes for questions of exploitation, distribution of loads and benefits?

- – Policies defined on community consensus process
- – Public private initiatives for market transformation and for managing initiatives on local produced renewable energy

PROPOSAL :
European Green Mountain Protocol

- Alpine communities need a common set of tools enabling them not only to increase their planning capacity (in terms of green techs and other modern infrastructures), but also to compare and certify the objectives and results achieved (in terms of sustainable development)

- A solution could be the development of a "rating system" (European Green Mountain Protocol), shared by Alpine Space members, providing local communities with guidelines for landscape design and an advanced governance system.

THANK YOU