

Workshop

14 November 2017

Grenoble, France

“Climate Change, Energy and Construction”

Workshop for the preparation of the Action Programme for a Green Economy in the Alpine region

WORKSHOP DOCUMENTATION



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On 14 November 2017 the Grenoble Chamber of Commerce and Industry hosted the fifth workshop for the preparation of the Action Programme for a Green Economy in the Alpine region. Participants from France and Germany met in Grenoble to discuss about innovative buildings in mountain regions and about key elements that could promote the transformation towards a Green Economy.

Welcome

The participants were welcomed by Mr. Francis Fiesinger, who works at the Grenoble Chamber of Commerce and Industry (CCI) and who is responsible for mountain tourism strategies, as well as by Mr. Hugues De Villard, board member of the Grenoble CCI. They both underlined the role of their institution as a networking centre where local actors can find economic opportunities, and the importance of a Green Economy business model that could increase the employment rate and support the development of the territories. Mr. Alain Bourgoigne, vice president of CIPRA France, highlighted the fact that the Alpine Convention has dedicated a protocol to the issue of energy, and that CIPRA has contributed to the protection of natural resources since the beginning of its activities, more than 50 years ago. Ms. Nathalie Morelle introduced the activities of the Alpine Convention and the content of the Sixth Report on the State of the Alps (RSA6). Ms. Elisa Agosti presented CIPRA International and the framework in which the workshop was organised as well as the objectives of the workshop series.

Keynotes

Four keynote speakers were invited to present their experience in the field of Green Economy. The first presentation was given by Mr. **Frédéric Desautel**.



Figure 1: Mr. Desautel giving his speech



Figure 2: Handle shower head.

Mr. Desautel had worked as an engineer for a number of years before he moved towards a new business framework. He now runs a vacation centre in Saint Bernard du Touvet/F, about 40 km from Grenoble. Mr. Desautel presented some solutions that are showcased in his demonstration building. These solutions aim to reduce the water and energy consumption of his centre, but can be easily transferred to other buildings. The site was built by using local architectural techniques, and the used wood came from nearby forests. Mr. Desautel shared the following good practices with the audience: photovoltaic panels, handle shower head (Figure 2), flush water in the toilet coming from rainwater, three different insulating materials and an individual meter that allows the client to monitor the energy savings.

The idea of his centre is to educate tourists with regards to a more sustainable lifestyle, showing them that reducing their consumption does not reduce their quality of life.

Mr. **Christian Schaeffer** is the director of INES, the French National Institute for Solar Energy. INES is the main research centre on solar energy in France. Main fields of activity are research, innovation processes and training. Mr. Schaeffer presented the ENERB'Alpes programme, which was launched within the inter-regional convention of the Massif des Alpes (2015-2020). ENERB'Alpes aims to enhance the skills of professional profiles working in mountain shelters, to monitor the real performance of buildings and solar installation and to promote innovative technologies by communicating the results in order to increase territorial development dynamics.



Figure 3: The INES logo.



Figure 4: Mr. Schaeffer giving his speech

Mr. **Alexandre Mignotte** (project manager of mountain politics and relations with the regional natural park of the Grenoble Métropole) and Mr. **Emmanuel Jeanjean** (project manager in the field of energy, climate and mobility at the Vercors regional nature park) gave a presentation about the positive energy territories (TEPOs, *Territoires à énergie positive*). A TEPO aims to reduce its energy needs as much as possible by reaching a high level of energy efficiency, and to cover the remaining energy needs by local renewable sources. The objective of a TEPO is to shape new energy landscapes and to include the civil society into the process. These programmes are financed by the region (TEPOS-CV, on the contrary, are financed by the territories themselves: CV means “*croissance verte*”, green growth). In the case presented to the workshop participants, the Auvergne-Rhône-Alpes region allocated 100,000 € that were used to carry out research work and to support the organisation. This amount has been fairly divided between the two partners: 50% went to the Grenoble municipalities, 50% went to the Vercors Park. The money has been invested in actions related to one of the following 5 thematic areas: renewable energies, environment and biodiversity, building renovation, forest and wood supply chain as well as sustainable mobility.

Both speakers underlined the importance of political willingness to implement projects that take place at the local level and involve the territories. Both speakers pointed out that the exchange of opinions and information is a crucial point. Mr. Mignotte concluded saying that he has already noticed some improvements in the Vercors Park TEPO. Change is happening, but there is still a lot to be done.

After the joint presentation, Mr. Jeanjean introduced some actions of the Vercors Park that deal with adaptation to climate change in mountain areas. The temperature in the Vercors area has experienced an increase of 1.5 degrees in the last 60 years. In addition, a 25% decrease of snow accumulation has been registered in the park. As a consequence, economic actors working in this part of France will have to diversify their touristic offers, which cannot rely on natural snow anymore. Forest and water management plans will also have to be adapted to the current and future situation.

Some concrete steps have already been implemented: the territorial system has been reshaped, the impacts of the actions put in place have been monitored, and a thematic platform is now available for the stakeholders that are looking for information. Mr. Jeanjean presented some actions that are taking place in the region. Among these, “Via Vercors” is the first mountain green path linking 7 villages and offering solutions to avoid individual car traffic. In addition, “Via Vercors” helps to diversify the touristic offer and to ensure that the area is visited throughout the whole year. In order to do that, different services have been associated: a visit to a farm, meals in a restaurant, bike rental services, and products from local craftsmen as well as accommodation facilities.



Figure 5: Mr. Mignotte and Mr. Jeanjean during their common presentation.

Working groups

The second part of the morning was dedicated to interactive group work. The participants were divided into 4 groups and accompanied by two moderators. The participants were asked to present a good practice example they know, its leverages and obstacles. The group discussion lasted for about one hour. The following groups were formed:

- Group 1 ECO-CONSTRUCTION
- Group 2 BUILDING RENOVATION IN MOUNTAIN REGIONS
- Group 3 ENERGY MANAGEMENT
- Group 4 ENERGY TRANSITION OF MOUNTAIN REGIONS

1. Discussion group ECO-CONSTRUCTION:

The group presented the following good practices:



Figure 6: Working group 1.

- The restoration of a factory in St. Laurent en Royans/F will be transformed into a training centre for eco-responsible citizens;
- The prototypes developed by the R&D department of the [IT FCBA](#) allow the rehabilitation of accommodations in mountain regions;
- The reduction in water and energy consumption thanks to minor technical changes (rainwater recovery, shower handle).

The main leverages mentioned:

- The power of having good examples that worked well and that can be used to convince other people to follow the same path;
- In the case of the vacation centre, addressing tourists during their vacation, showing them that they can change habits regarding their energy consumption in their everyday life;
- The crucial role of training and education;
- The importance of accompanying the entire process, offering technical support and giving professional advice;
- Stress the fact that buying local products has positive impacts on the local market, can reduce unemployment and increase the competences of local workforce;
- Stress the fact that buying cheap products hides a variety of social and environmental problems and costs;
- Exchange among different stakeholders, exchange of information, communication;
- The need of strengthening the link between research and practice;
- Local wood supply vs long-distance wood import and the importance of a better forest management;
- In the case of construction, using the most appropriate material to build the different parts of a building;
- The unexploited potential of the French forests.
-

The main obstacles mentioned:

- General unwillingness and reluctancy to change habits;
- Common property in mountain regions;
- The power of low-price offers by mainstream competitors vs higher prices offered by sustainable and innovative companies;
- Difficulty to get financial support for a project;
- Some buildings have a historical value and their renovation requires much time and money;
- The length of the process: it can take many years to achieve an economic outcome;
- In the case of the wood companies, the power of the cement lobby;
- French laws that are sometimes different from EU laws and regulations, together with a lack of knowledge about changes in legislation;
- The need to train architects, so that they become familiar with innovation in building techniques and materials. If an architect is not informed about the

innovations on the market, he/she will not propose an alternative to standard building techniques;

- Some bad examples that have gained a lot of attention and are now used to discourage people from trying something out of the box.

One of the obstacles mentioned was the power of the lobbies, in particular the cement lobby. Also the fierce competition among suppliers of fossil fuel-related materials was highlighted. These aspects cannot be solved at the business level but require legislative interventions and courageous governmental decisions.

The participants of this group came mainly from the wood industry. They underlined the importance of adapting to the customers' needs and to invest in modular product designs as they allow a product or the parts of a building to be broken down in a number of pieces and to be re-assembled. This means that these products are flexible enough to respond to the requests of the clients. The group stated that an extensive thinking process is needed in order to develop efficient prototypes and efficient solutions. The group members agreed additionally that an analysis of the effects of climate change on forests should be carried out.

2. Discussion group BUILDING RENOVATION IN MOUNTAIN REGIONS

Keywords and topics discussed in this group were:

- Promotion of renovation process vs the construction of new buildings;
- Anticipation of the customers' needs and new trends on the market;
- The need to rethink about how wood is used for new constructions today, bearing in mind the fact that these buildings might be dismantled in 20 years;
- The importance of raising the awareness on the topic and of addressing the owners of the buildings, trade unions and the general public;
- A heritage plan;
- Cross-sector innovation;
- Territorial platforms;
- The need of a coordination entity that links the initiatives and supports the stakeholders.



Figure 7: Working group 2.

The main leverages mentioned:

- Spread the awareness that non-renovation can become very expensive in the long-term. Owners of mountain buildings should be aware that avoiding investments helps to save money on the short term, but will require high investments in the

future. Step-by-step renovation (ideally supported by national funding) has been mentioned as a possible solution to this problem;

- Development of a national plan on the renovation of buildings;
- The role of craftsmen and SMEs;
- The power of communicating good practices;
- A resolution that is being discussed by an inter-ministerial committee focusing on the problem of unoccupied beds in touristic mountain areas. In a next step, a national plan should be worked out on this topic. Moreover, with this resolution the French government could encourage building owners or investors to sign binding agreements which would force them to renovate the building instead of abandoning it.

The main obstacles mentioned:

- Legislative and financial blockade;
- Lack of willingness of building owners who want to avoid long-term investments;
- The fact that the same building is owned by more than one person (common property);

3. Discussion group ENERGY MANAGEMENT

The group presented the following good practices:

- CETUP, personal clean vehicles;
- Enerb'alpes and the identification of different energy profiles in order to offer tailored solutions;
- Solar pole installed at 3.200 meters above sea level;
- H3C, energy performance contract;
- Group of municipalities that can realise price reductions if they organise joint orders for construction and renovation materials;



Figure 8: Working group 3.

The main leverages mentioned:

- Local partnerships and partnerships between citizens and communities;
- Find solutions (such as the solar pole) that can solve mountain-specific problems;

- Awareness about the different characteristics and needs of the territories in order to define the most suitable measures;
- A step-by-step intervention process;
- Modular product designs and a long-term approach;
- Monitoring of the performance of the installations in order to get the most accurate perception of the impact that the installation was able to reach;
- Accompanying the stakeholders and offering them support during the process phases.

The main obstacles mentioned:

- The costs of innovation;
- The fact that mountain areas are far from production sites and more difficult to reach (low accessibility);
- The scattered settlement structures in mountain areas make it more difficult to implement effective solutions.

4. Discussion group ENERGY TRANSITION OF MOUNTAIN REGIONS

The group presented the following good practices:

- Cable cars, a non-polluting transportation means;
- Photovoltaic plans in rural areas, which work quite well for communities of about 2,500 inhabitants. Unfortunately, it was also mentioned that big companies do not take into account the needs of the people living in the area of the plant.
- Mobilisation of the inhabitants of the Arve valley (France), conferences to inform about the air quality in the area;
- Companies working together in the Arve valley to develop a car sharing model;
- A comparison with Germany, where 50% of the new (renewable) energy production models was reached thanks to citizens' initiatives.



Figure 9:
Example of a cable car, connecting the mountain areas with the lower part of the valley.



Figure 10: Working group 4.

The main leverages mentioned were:

- Trust among the stakeholders;
- Groups that have already been formed through the civil mobilisation and keep working together. These groups need platforms where they can communicate;

- Territorial poles of economic cooperation work well in France and constitute a good practice to follow;
- The positive role that the natural parks can play.

The main obstacles mentioned were:

- How to fund the project and the difficulties caused by the tax system;
- The involvement of many stakeholders and the multi-layer structure;
- The stakeholders often lack the operational and technical knowledge that is needed to master an energy transition process.

Results of the keynote speeches and working groups

The presentations given by the keynote speakers in Grenoble show that innovation is possible. The practical examples were characterised by different aspects and were developed through different paths:

Creativity and new trends (the case of the vacation centre): The awareness about a more sustainable way of life and of sustainable tourism is increasing and Mr. Desautel has been able to build his business on this new trend. He said that his centre is rarely found by chance. Tourists, families and different groups are looking for alternative offers and wish to spend their holidays in a natural and sustainable environment.

Research and empiric evidence (the case of the French institute INES, which connects theory and practice, shaping a positive circle): 1) The analysis of data helps INES to develop new technologies in the field of solar energy; 2) Buildings are constructed or renovated using this technology; 3) Monitoring of the performances of these buildings provides new data that again can be analysed.

Compromises and collaboration: The forced marriage between the municipality of Grenoble and the Vercors Park could have ended very soon. The real story shows that many positive aspects are to be found in this relationship. Started because of budget reductions, this collaboration has proven to be successful. Both partners would not divorce and, on the contrary, advocate for more political engagement to disseminate and promote this kind of collaboration.

The topics discussed in the working groups ranged from a better management of the French forests, a better exchange of existing information, and the need to form key professional profiles in the construction sector, such as architects and craftsmen. These professional profiles are the link between the R&D departments of many institutions and the final consumers. An architect who is not aware of the last trends and potentials of a material will not inform his or her clients about the possibility of using an alternative material or technique, and thus to build in a different way. When it comes to building a house, it is necessary to consider the personal taste of the buyers as well as the personal preferences of the architects. These are factors which are difficult to influence. However, what can be influenced is the prejudice that many people have when they think about certain materials. To give an example: It has been mentioned that wood is considered the most vulnerable material in a fire by many people. However, this is not true. Wood can burn (as other material also do) but does react in a way that allows firemen to reduce the damages.

Inputs for the Action Programme

According to the information collected during the workshop, following inputs can be taken into consideration for the drafting of the Action Plan:

A better management of the forest: This measure goes hand in hand with the reduction of the amount of wood that France imports from abroad. Consequently, this would reduce the emissions caused by the long-distance transportation of wood. Wood is a renewable construction material that can be used for constructions that can be easily disaggregated, compared to cement and other materials. In this sense, wood could provide an answer for the fast changing trends of the customers.

The need to train the professional profiles working in the construction field and to inform them about the importance of sharing the information available with the final client. The final client should then be able to make the final choice about the material or the technique to be used;

Mobilise the civil society: During this workshop the key roles of the civil society and of trade unions have been highlighted several times. Building on the increased awareness that is spreading among the civil society (as it has been confirmed by Mr. Mignotte and Ms. Morelle during their speeches) is crucial to support people to accept innovation and change in the way they build or renovate a building and in the source of energy they choose. Active promotion of renewable energy citizens' initiatives can have a great impact on the transformation of the energy sector.

Conclusions

The moderators were satisfied with the workshop results and had the chance to attend fruitful and targeted discussions. Having less time than for the other workshops did not affect the effectiveness of the day and pushed the discussion towards more targeted objectives. The participants were mixed, coming from different French regions and from different backgrounds. They had the chance to enlarge their network and present their activities. The best practices were well chosen, diverse and inspiring. The CCI has expressed the willingness to stay in touch with CIPRA and the project team and to organise other joint events in the future.

ANNEX

**Agenda
List of participants**

CONTACT

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Agenda:

09.00 - 09.15 Opening with greetings

Francis Fiesinger, Hugues Devillard, Grenoble Chamber of Commerce and Industry

Alain Boulogne, Vice-President of CIPRA France

Nathalie Morelle, Alpine Convention

Elisa Agosti, CIPRA International

09.15 - 10.30 Key notes presentations

Frédéric Desautel, manager of the ecotourism centre “Balcons de Chartreuse”: examples of demonstrative and educational buildings, as well as energy solutions.

Christian Schaeffer, director of INES: presentation about the Enerb Alp project.

Alexandre Mignotte project manager at Grenoble Métropole: territories and stakeholders engaged in the field of energy transition and green economy.

Emmanuel Jeanjean Vercors regional nature park, parc du Vercors: presentation about good practices that are taking place between the Grenoble Métropole and the Vercors TEPOs.

10.30 - 10.45 Coffee break

10.45 - 12.15 Work group and synthesis of work group results

12.15 - 12.20 **Nadine Mordant**

Commissioner for the French Alpine region

Actions in favour of the energy transition in mountain regions at the national level

12.20 - 12.30 Conclusion

Francis Fiesinger, Grenoble Chamber of Commerce and Industry

List of participants

NAME	INSTITUTION
Agosti Elisa	CIPRA International
Badura Marianne	Blue !
Baron Nicolas	ENEOS PRO
Beraldi Carmela	AFFINISKI
Berlandis Maryse	CETUP
Boulogne Alain	CIPRA France
Chaumaz Didier	ASDEP
Chelle Laurent	CDA
Desautel Frédéric	Evasion au naturel
Devillard Hugues	CCI Grenoble
Fiesinger Francis	Club euro alpin
Gaucherand Damien	Innovales
Gillet Olivier	Ademe
Grimaud Laurent	EOLYA
Hassid Marc-Jérôme	CIPRA France
Herin Frédéric	H3C Energies
Hirigoyen Jean	Chainon manquant
Jean Jean Emmanuel	Parc du vercors
Jocteur Montrozier Bénédicte	CCIGrenoble
Lavagne Franck	Tracols
Lemaignan Benoit	OSER
Malterre Florent	comcom oisans
Martinez Marie	Tracols
Martinod Alexis	Pole excellence bois
Mignotte Alexandre	Grenoble Métropole
Mordant Nadine	CGET
Morelle Nathalie	Convention Alpine
Myard Marie Cecile	MCM
Pain Alexandre	ENGIE

Patte Antoine	AURA communes forestières
Portier Florent	Bois des Alpes
Requejo Agnes	EDF territoires
Roue Magali	INES
Schaeffer Christian	INES
Segalen Delphine	CIPRA France
Sienicki Jacques	AMS
Simon Claire	Conseils
Simon Catherine	Préfecture Isère
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