

Workshop

29 November 2017

Gorizia, Italy

“Financing innovation for a Green Economy in the Alpine region”

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

WORKSHOP DOCUMENTATION



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On 29 November 2017 the University of Trieste hosted the sixth and last workshop for the preparation of the Action Programme for a Green Economy in the Alpine region. The event was coorganised by CIPRA International and by AREA Science Park. Participants from Italy, Slovenia and Germany met in Gorizia to discuss about financial solutions to support the development of a Green Economy.

Welcome

The participants were welcomed by Mr. Fabrizio Rovatti, director of AREA Science Park, who briefly introduced the main activities of AREA and by Ms. Elisa Agosti, who described the activities of CIPRA International and presented the objectives of the workshop. After that Mr. Giorgio Sulligoi, professor at the University of Trieste, greeted the audience stating that innovation can come from different sources and that students have an important role to play when it comes to fresh ideas. Finally, Ms. Chiara Gatta, counsellor at the municipality of Gorizia for university-related topics, thanked the organisers for choosing Gorizia as the hosting city for the meeting and brought greetings from the mayor of Gorizia.

Mr. Rovatti presented the agenda of the meeting before giving the floor to the first keynote speaker.

RSA6 presentation

Ms. Maria Teresa Idone, member of the Italian Delegation to the Alpine Convention, introduced some of the findings of the Sixth Report on the State of the Alps, underlining the fact that most of the Alpine countries are improving their energy consumption rate, but that differences among the regions are still remarkable. She highlighted the social aspects of Green Economy that are related to health, green jobs and sustainable consumer behaviour, and the fact that mapping the Alpine region and collecting relevant data is very important for further improvements. Ms. Idone concluded saying that ecosystems and biodiversity constitute strong assets for the Alpine region and that Green Economy can and should be an engine for regional development.

Keynotes

Five keynote speakers were invited to give a presentation about different topics related to the workshop's main theme.



Figure 1: Mr. Rovatti giving his presentation.

Mr. Fabrizio Rovatti was not only the moderator of the workshop, but was also the first keynote speaker. He started his speech asking the participants how they would define innovation. He received different answers, among which “something new” and “something that is not necessarily new, but done in a new way”. He then gave two definitions of innovation:

1. An invention for commercialisation (business-related definition);
2. The art of creating new value for a user (utilisation-related definition).

He continued explaining how AREA Science Park supports entrepreneurs and researchers to enter the market. In synthesis, the role of AREA is to connect the public and the private sector, analysing how a company works so that it becomes more competitive and brings innovation to the market. Mr. Rovatti told the participants that fulfilling such an objective requires AREA to follow the needs of the moment and the evolutions of the market. AREA can be seen as an "incubator of innovation" that works on a multisectorial level and tries to get in touch with both small and big companies, and supports them by providing open labs, information and expertise.

The second keynote speaker was Mr. Edoardo Croci, professor at the Bocconi University, who introduced himself telling the audience that he has been participating in a Green Economy observatory and that he has been spending quite some time doing research on urban sustainability. His presentation focused on sustainable development at the local level and on the solutions that municipalities can put in place to increase sustainable urban investments.



Figure 2: Mr. Croci during his speech.

According to Mr. Croci advancements linked to sustainable development are already to be seen at international level. He cited the Europe 2020 strategy¹, the SDGs (number 11² in particular - Goal 11: Make cities inclusive, safe, resilient and sustainable) underlining the inspiring dimensions of these programmes also for national agendas. Financial aspects are crucial for the implementation of efficient projects at the local level. First of all, Mr. Croci showed some graphs that gave an idea about the percentage of public expenditure and public revenue at the subnational level in different countries. These graphs showed that countries like Canada and Denmark have a higher level of public expenditure, and that Greece and Ireland have a very low rate. Countries like Austria, Italy and France are in the middle of the line, whereas Germany is a bit further up.

After this first explanation, the attention was brought to the Italian local taxation system. Mr. Croci pointed out that Italian municipalities, like many other municipalities, collect money using two main instruments: on budget and off budget instruments. Inside these two instruments, two categories can be defined, which Mr. Croci arbitrary divided into traditional and innovative ones: Traditional instruments are the most traditional ways through which an public institution ensures its functioning, whereas innovative instruments include green bonds and crowd funding, which have just recently been used at the institutional level.

Mr. Croci analysed the situation of a municipality willing to commit to sustainable development saying that this commitment needs to be financed by funds coming mainly from traditional sources and that, instead, this municipality should think about turning

¹ The Europe 2020 strategy is the EU's agenda for growth and jobs for the current decade. It emphasises smart, sustainable and inclusive growth as a way to overcome the structural weaknesses in Europe's economy, improve its competitiveness and productivity and underpin a sustainable social market economy. https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_en

² <http://www.un.org/sustainabledevelopment/cities/>

towards innovative tools and private investments. He also cited some of the investment fields which he considers particularly interesting. These range from energy production and consumption, mobility and construction to waste management and the management of natural resources. He also warned the audience stating that if a local institution does not want to rely on EU money - which according to him is shrinking right now - it should think about financial instruments that generate revenues on externalities. He continued underlining the fact that nature offers natural resources, cultural landscapes and tourism attractions for free. Ecosystem services can be sustainably managed if the owner preserves the natural resources and if people that benefit from this service pay a certain sum of money. In short, both parties need a contract they must agree on. Moreover, this contract should guarantee that all indexes are taken into consideration. For example, in the case of a forest that was cut down to make space for real estate, we can say that the monetary value of this field might have grown, but that this area will no longer capture CO₂. This aspect must not be forgotten and should be regulated by specific contracts. Mr. Croci also presented some best practices coming from cities that tried to find sustainable solutions. The city of New York signed an agreement in 1990 with forest owners to establish a forest management that guarantees positive effects on water consumption. End users pay surtax on water that allows the city of New York to compensate for this ecosystem service. Another example of sustainable development at the local level is the possibility to adopt a flowerbed, as did the city of Milan in 2005. Through technical collaboration and technical or financial sponsorship different actors can help to maintain green areas in the middle of the city.

Mr. Rajko Leban gave a presentation focusing on the implementation of some pilot projects that follow green public procurements and which were implemented by energy service companies (ESCO). The projects were financed by energy supply contracting (ESC) or energy performance contracting (EPC). The concept of energy contracting is a method and financial mechanism to support building refurbishment. Energy consumption is reduced by new intelligent building systems and the resulting savings pay for the costs of the renewal. In addition to this, the entire project cycle costs are minimized. Renewable energy solutions can also be added to the contracting concept. They guarantee further reductions in primary energy use for a long period and accelerate the return on investment.³ First he introduced GOLEA, a Slovenian regional energy agency founded in 2006 that aims to promote the use of renewable energies. The ESCO good practices he presented ranged from the refurbishment of a school, solar panels that were installed on a Slovenian highway, public street lightning, and the use of forest biomass to heat different buildings as well as the renovation of some municipality buildings. The main idea of all these projects was to promote innovative and alternative financing methods from private or public sources, allowing the deep renovation of public buildings. He also underlined that the biggest barriers encountered happened at the administrative and legislative level. Mr. Leban said that it is important that such projects guarantee energy saving for at least 15 years, to monitor the results and to correct the deviations. He then informed the audience that GOLEA is the first organization in Slovenia that signed a contract with the European Investment Bank in the framework of the Juncker plan⁴.

³ Further information: www.eu-esc.org.

⁴ The Investment Plan for Europe, the so-called Juncker Plan, has three objectives: to remove obstacles to investment; to provide visibility and technical assistance to investment projects; and to make smarter use of financial resources.
https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/investment-plan-europe-juncker-plan_en.

He concluded by saying that common challenges for the Alpine societies include decarbonisation, decentralization, digitalization and democratization, and by asking the participants if they - and the society we live in - are ready to jump into an energy transition process.



Figure 3: Drawing by Mr. Jan Sedmak.

As Mr. Daniele Zivieri was not able to join the workshop, the floor was given to Mr. Paolo Ferrari who presented two projects dealing with logistic strategies for truck drivers. Researchers from the University of Trieste developed an app that helps to optimize the delivery process and that can indicate free parking places to the drivers. The app is linked to cameras installed along the highways and can tell truck drivers which direction they should take and how fast they should drive to reduce carbon emission and load the goods they are transporting on the same train as other trucks.

The last keynote speaker was Mr. Nazzareno Candotti, technician at the municipality of Forni di Sopra, a small village in the north of Friuli-Venezia-Giulia, in the Dolomites region. From the very beginning he stressed the fact that the project he was going to present took place at the lowest level- the municipal level- and that this was the very reason why the project was successful. The presentation focused on the heating biomass plant in Forni di Sopra, which heats some public buildings, the church and three hotels. It was created in order to guarantee energy savings, promote renewable energies and to boost business opportunities in the area. Becoming a green municipality started by identifying the three "treasures" of the village, as Mr. Candotti defined them - the sun, the water and the wood - and by recognizing that life without energy is impossible. This is why he said that mankind needs to rethink and change the way it is devouring energy. The philosophy of the plant is based on a short supply chain, forestry extractions, and the possibility, that people can visit the plant. The use of the biomass plant goes hand in hand with a sustainable management of the forest, because thanks to the short supply chain the forest is monitored in order to define the amount of trees that can be cut and to adapt the cutting mode to ecological requirements. As a consequence forest paths are clean and easy to walk through, which is very much appreciated by the tourists that visit this region. Mr. Candotti summarised the project saying that it was a 9 year work made by a team of passionate people, that measuring and collecting accurate data is the only way to improve, and that a short supply chain can make a biomass plant economically profitable. He also warned the participants highlighting the fact that biomass plants cannot work everywhere, and that their construction must match some basic requirements. He also mentioned the need of a constant number of users throughout the year as one of the biggest challenges.

Working groups

The working group session lasted about one hour. The participants were divided into two groups, one discussing about innovative financing in the public sector, the other discussing the same topic in the private sector.



Figure 4: Working group on the public sector.

The discussion focusing on the public sector started with some considerations from the participants about the situation of tourism. The discussion was actually going towards a topic that was not relevant to the workshop, but showed that tourism and territorial development were at the core of the participants' concerns. When directly asked to give their opinion about innovative finance the participants said that investments in rural and mountain areas should focus on building a reliable broadband internet connection and cycling lanes to promote sustainable tourism. A participant working in a bank confirmed that many financial institutions see the potential of investing in these sectors. Other participants underlined the importance of the workshops and training activities that are already organized in the EUSALP area by different organisations and institutions. However, they also stated that there is a risk to propose too many workshops, losing the focus and concrete targets. A particular comment was made on Mr. Croci's presentation and his taxation model, arguing that not all the actors are able to pay in the same proportion. The implementation of a new fiscal system needs to take the needs of the whole population into consideration. As the discussion went on, more problems were defined, e.g. the problem of not having enough funding (especially municipalities), the issue of long-term contracts that last for 20 years, but are financed only during a period of 5 years, the fact that the members of the municipalities can change after the preparation period and that the new officers need to go through the details of the project once again, and might ask for modifications or rejecting the entire project. Another problem are the difficulties that some municipalities experience when it comes to offering good guarantees. Regarding the solutions to these problems, the participants mentioned the involvement of all relevant stakeholders - including the banks - in the definition of a project and its budget, and the need for specific trainings for the different target groups.

The second group focused its discussion on the private sector. Ms. Palenberg mentioned the fact that in 2001 start-up leaders presented great ideas, but that 99% of them collapsed after a few years. Other participants stated the fact that many projects lack of a passionate group of people that invest time and energy in a common goal. These passionate people need to find a way to have their project financed by the banks. All the participants agreed that passion is a key element in all the projects. Mr. Rovatti summed up this discussion by saying that *"passion makes you work 24h a day to overcome the obstacles"*. A representative of Banca Etica declared that a project should provide an answer to social problems in the local community, and give the local community the possibility to be involved in the process. The community is relevant also for what concerns the financial part of the project: the larger the community, the more resilient it can be. A representative of Elettra shared the opinion that putting forward a new idea means accepting to take a risk. Project leaders need to manage this risk, think about a plan B and find new strategies. When the members of this group were asked about other innovative elements they answered that a successful project does not necessarily need to be global, and that many good ideas can be replicated at the local level in different places. Mr. Rovatti added that the Alpine regions deal with a number of issues that are waiting for entrepreneurs to tackle them. The discussion then focused on the customers' needs and on innovation. The market offers products and services to the customers that are willing to pay for them. The job of every entrepreneur is to provide a better service and better conditions than his/her competitors. The key lies in the benefit that can be offered to the consumers and in the willingness to pay for it. Mr. Fabrizio Morea (AREA Science Park) defined innovation as *"a customer that says thank you"*.



Figure 5: Working group on the private sector.

Regarding new instruments and solutions, the participants from Banca Etica mentioned the case of community cooperatives. These are communities in which citizens, both individually or structured in organizational forms (in particular non-profit organizations), collaborate on various levels with the public administration for the management of public services. "Community cooperatives can be defined as an example of social innovation. Citizens organize themselves through structured forms (cooperatives) to respond to the needs they deem most important, and this also allows for the reconfiguration of the

relationship between public administration and civil society. The strong territorial identity is reflected in the choice of the cooperative form, which allows the participative and mutualistic functions to be strengthened. [...] Being an initial phenomenon, however, there are critical factors, mainly related to the weakness of the managerial culture and entrepreneurial skills that often fail to support the strong motivation of these initiatives. In some cases, the instruments of governance and inclusion should be strengthened, in order to strengthen the participatory mechanisms typical of the cooperative phenomenon. This would also make it possible to improve and enhance relations with the institutions, thus enhancing the process of co-production of the public service.”⁵ This phenomenon has been recently studied by a number of European researchers. The issues tackled by these communities can be very different and range from the depopulation of small towns, the creation of jobs, and the protection of a particular environmental heritage. What all these strategies have in common is the desire to improve and enhance the local communities. Equity crowd funding - characterized by a lower investment risk - are another innovative instruments, together with local crowd funding (put in place by Banca Etica in the field of local products), and the enlargement of the type of investors. Other participants said that many advantages derive from open innovation and from the creation of a network, in which it is possible to pick up innovative models that are already implemented somewhere else.

The last question that was addressed to the group members was: *What can you expect from the private investor? Where is the limit?* The replies were that a company needs an immediate or very short time return on investment, that public investors (public bodies or public entities funded through private agencies and Interreg projects) are the only institutions with a long-term vision. Some declared that public administrations resemble monopolies - e.g. they are those that can collect waste exclusively. Cooperatives have a role to play in carrying out public services: in Friuli there are some cooperatives that distribute energy (Paluzza, Forni di Sopra), co-financing the investments to create a Green Economy business model.

⁵ From the interview with Ms. Francesca Picciaia Researcher in Business Economics, Department of Economics, University of Perugia. <http://www.legacoop.coop/cooperativedicomunita/2016/03/30/cooperative-comunita-utilities-non-profit-rispondere-alla-crisi-del-welfare-state-cura-francesca-picciaiai-luca-bartocci/>, text in Italian



Figure 6: Drawing by Mr. Jan Sedmak.

Conclusion

The participants gave positive feedback to the workshop. Some said that they had feared that the presentations would have been too specific and difficult to follow, but that in the end they appreciated the variety of topics that were presented. However, the discussion in the working group focusing on the public sector showed that finance remains a difficult topic to deal with. Many students from the University of Trieste took part in the first part of the event, but they had to leave before the start of the working groups.

Inputs for the Action Programme

According to the results of the two working groups and according to the inputs given by the participants of the workshop the future Action Programme should take the following aspects into consideration:

1. The implementation of specific trainings and workshops for stakeholders in the financial sector in the Alpine area in order to inform them about the advantages of investing in a Green Economy;
2. A better collaboration between municipalities and banks. Banks should be encouraged to support the implementation of sustainable projects at the local level.
3. The development of specific business models for rural and mountain Alpine areas, in which different stakeholders work together to transform the difficulties of living in the mountains into chances for the economic development of these areas.
4. The establishment of innovative finance instruments that could support new forms of investments such as ESCOs, and new form of active citizen participation such as community cooperatives and equity crowd funding systems.

ANNEX

Agenda
List of participants

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AGENDA

Presentations of the RSA6

The sixth Report on the State of the Alps: Greening the economy in the Alpine region

Maria Teresa Idone, Italian Delegation to the Alpine Convention

Keynote speeches

“Innovation for Green Economy: How to bring innovation to the market and link research to businesses in the field of Green Economy in the Alps” - Stephen Taylor, Director - Innovation and Complex Systems Department - AREA Science Park

“Sustainable development at urban level: how municipalities can find new and additional sources to increase sustainable urban investments. - Italian and European best practices” - Edoardo Croci - IEFE Research Director: Centre for Research on Energy and Environment - Bocconi University

Presentation of good practices

"Intermodal Transportation in the North Adriatic" - Paolo Ferrarri - University of Trieste

“Energy renovation of public buildings and sustainable mobility in Slovenia’: ESCO model as a solution: what are the obstacles and what are the opportunities - for municipalities, companies and banks” - Rajko Leban - GOLEA - GORIŠKA LOCAL ENERGY AGENCY

“Innovative financing in action: biomass district heating in a small Alpine community” - Nazzareno Candotti - Comune di Forni di Sopra

Presentation of the results from group work and plenary discussion.

List of participants

Name	Institution
Agosti Elisa	CIPRA International
Anfosso Lembo Mattia	University of Trieste
Arteni Martina	APE FVG
Banci Elena	AREA Science Park
Benaly Meriem	University of Trieste
Billi Mariachiara	University of Trieste
Borza Francesca	University of Trieste
Boula A.M. Roseline	University of Trieste
Campobasso Corrado	Informest
Candotti Nazzareno	Comune Formi di Sopra
Cietto Eduard	University of Trieste
Cogoi Margherita	University of Trieste
Colusso Michele	Unione Territoriale della Carnia
Croci Edoardo	Bocconi University
Dalla Vecchia Marta	University of Trieste
Dall'Osto Enzo	Regione Friuli Venezia Giulia
De Santa Bernardino	Comune Formi di Sopra
Ferrari Paolo	University of Trieste
Gatta Chiara	Councilor of University at the Municipality of Gorizia
Gjoni Elda	University of Trieste
Gračner Martina	Ministry of Infrastructure Slovenia
Grillo Simone	Banca etica
Idone Maria Teresa	EURAC
Jeleh Igor	University of Trieste
Khan Sadiq	University of Trieste
Knezevic Simona	Tehnološki park Ljubljana
Leban Rajko	GOLEA
Mandalà Claudia	University of Trieste DIC
Masutti Manuela	AREA Science Park
Morea Fabio	AREA Science Park
Palenberg Dorothea	Blue!
Pigat Carol	University of Trieste
Quarantotto Vitori Virginia	University of Trieste
Ribas Matjaz	SID Bank
Ridi Carlotta	University of Trieste
Rihar Miha	Petrol
Rovatti Fabrizio	AREA Science Park
Scrazzolo Camilla	University of Trieste
Sherwood Susan	Comune Formi di Sopra
Sulligoi Giorgio	University of Trieste
Ulčnik Eva	University of Ljubljana
Vaccari Lisa	Elettra Sincrotrone Trieste