

## Greening the Economy in the Alpine Region

Alpine-wide Conference 11 May 2017, OVB Medienhaus, Rosenheim, Germany



Conference documentation

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# 1 Keynotes

**Rita Schwarzelühr-Sutter, Parliamentary State Secretary, German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety**



**Figure 1-1: Parliamentary State Secretary Rita Schwarzelühr-Sutter during her keynote speech.**



**Figure 1-2: Parliamentary State Secretary Rita Schwarzelühr-Sutter giving an interview for the regional TV channel.**

Our common vision “The Alps - a pioneer region for sustainable living in the centre of Europe” led us to the international conference in Rosenheim. A vision that we – the Alpine states – agreed on at the XIV<sup>th</sup> Alpine Conference on 13 October last year.

The particular vulnerability of the Alpine region and the global challenges which climate change poses make it essential to achieve a Green Economy. Such a transformation also provides many opportunities. The Alpine states actively take up this challenge and aim to develop the Alpine region towards a model region for climate-friendly and resource-efficient economy.

A starting point is the sixth Report on the State of the Alps “Greening the economy in the Alpine region”, which was drafted by an international expert group led by the German Environment Agency in close cooperation with the Permanent Secretariat of the Alpine Convention. The report provides us with recommendations on how to use Green Economy as an engine for regional development and how climate and energy challenges can trigger eco-innovation. I think the Alpine region could ideally reach the long-term goal of overall climate neutrality.

Based on the sixth Report on the State of the Alps, the XIV<sup>th</sup> Alpine Conference approved the “Declaration on strengthening of sustainable economy in the Alps” and adopted the Green Economy as a priority in the multi-annual work programme of the Alpine Conference 2017-2022.

I would like to call on all stakeholders in the region to share their ideas for the implementation of a Green Economy by active involvement. After all, who knows better than the inhabitants about the needs and future potentials and possibilities of the Alpine region?

With the support of all relevant players, we will successfully develop the recommendations of the sixth Report on the State of the Alps further and draft an ambitious Action Programme for a future Green Economy in the Alpine region.

### **Markus Reiterer, Secretary General, Permanent Secretariat of the Alpine Convention**



**Figure 1-3: Markus Reiterer presents the sixth Report on the State of the Alps to the participants of the conference.**

The history of the sixth Report on the State of the Alps begins with a meeting of the Permanent Committee in Cortina d'Ampezzo in June 2013. The Italian Presidency of the Alpine Convention organised at the time a Q&A session to give young people the possibility to ask questions to the delegations of the Alpine states. The question to the German delegation was: "How do you assess the chances and challenges of a Green Economy in the Alps?"

Christian Lindemann, head of the German delegation, was a little bit surprised by this question, but (as expected) he gave a very serious – albeit somehow generic – answer, at the end of which he stated that he would have had to confer with his colleagues in Berlin for a more detailed answer, promising the young participants that he would get back to them with a written response.

Following this, the relevant department in Berlin was consulted. It replied with a multiple-page document accompanied by the decision to dedicate the sixth Report on the State of the Alps to the topic of a Green Economy. Therefore, this report is an answer to a question raised by the young people of the Alps.

With this report, we now have methodically solid intellectual foundations, which give us an excellent starting point for further activities. The XIV<sup>th</sup> Alpine Conference in Grassau, held under the German Presidency in October 2016, further emphasised the significance of the Green Economy in a political declaration.

A closer look into the Declaration of Grassau is quite useful.

The Alpine Conference acknowledges first of all the sensitivity of the Alps as a living space for more than 14 million people, rich in culture and traditions, with outstanding natural and cultural landscapes. It also recognises the Alps as a biodiversity hotspot of European and global significance and particularly vulnerable to climate change, as an area at the crossroads of Europe, and a region with limited availability of resources, land and soil in particular.

Alongside the sensitivity – or rather the vulnerability – of the Alps as a living space, the Declaration stresses the role played by the people in the Alps: their diversity, their knowledge and their potential for innovation, defining the progressive shift towards a Green Economy as a goal for the Alpine region. This Green Economy should be one that respects the ecological limits of the region, tackles challenges like climate and demographic change and the reduction of natural resources, as well as contributing to the health and the high quality life of the resident population.

In other words, from the specific Alpine sensitivity comes our responsibility for this special living space. This responsibility defines the role of people vis-à-vis the ecological boundaries of our territory. Our answer can therefore only be a steady, constant effort to achieve a green and sustainable economy.

The Declaration conveys five core messages which I shall address in greater detail.

1) A sustainable Alpine economy serves the needs of the people

The first step should be that of creating a Green Economy that does not disregard or compromise the needs of the people. This means securing a certain standard of living, but also ensuring clean air to breathe, pure water to drink and an environment in which a healthy life is possible. Green Economy also means that the skills, the talents, the existing knowledge and cultural resources of the Alpine region are used. And, of course, Green Economy means ensuring sustainable jobs for the resident population too.

2) A sustainable Alpine economy helps to handle climate and energy challenges

Climate change affects the Alps in a particularly strong way: the average rise in temperature is nearly twice as high in the Alpine area as it is in the northern hemisphere. Here, Green Economy means to bring the economic activities in line with the climate – and with our environment – and not against them.

3) Nature and landscape are assets for a sustainable Alpine economy

The Alpine Conference underlines this issue in two ways. On the one hand, by claiming that nature and landscape are goods in an economic sense and therefore external costs should be internalised more and more. Nature and landscape are by all means finite resources. On the other hand, the Alpine Conference stresses also that their value goes beyond the economic sphere: they have an intrinsic value and cannot be seen only from an economic perspective.

4) A resource-efficient economy is key to a sustainable future

Resources are limited. I believe this statement applies to all resources. In the Alpine region, this may be more apparent than elsewhere. Only 20% of terrain in the Alpine area is usable for human settlement, so it is essential that this space is used prudently.

5) A sustainable Alpine economy requires continuous efforts

It is not enough to simply declare the creation of a Green Economy – it needs to be lived. The process is ongoing. The sixth Report on the State of the Alps provides the solid foundations; the Grassau Declaration conveys the political ambition. In order to take the next steps in this direction, the Alpine Conference commissioned the development of a concrete Action Programme for Green Economy to be finished by the next Alpine Conference in 2018. This work is now progressing under the presidency of Mr Hans-Joachim Hermann. In addition to this, the Green Economy in the Alpine region was also defined as a core area of action by the Multiannual Work Programme of the Alpine Conference.

I think we are all aware of the fact that Green Economy is the economy of the future. In order to achieve this, however, everyone must contribute. All of us – governments, businesses, organisations, civil society and individuals – are actors in a Green Economy. It is up to us to practically implement the theoretical concept that we consider politically right. As the Bavarians say: Pack 'mas an!

## 2 Introduction

In recent years the Green Economy has been increasingly acknowledged as a powerful implementation strategy to achieve sustainable development. Given the specific vulnerability of high mountain ranges to environmental impacts, and in particular to climate change, the concept of Green Economy is highly relevant for such sensitive living environments as the Alps.

Following a proposal put forward in 2014 by the German Minister for the Environment, Barbara Hendricks, the Alpine countries decided to dedicate the sixth Report on the State of the Alps (RSA6) to Green Economy in the Alps. An ad hoc expert group for the preparation of the RSA6 was set up at the XIII<sup>th</sup> Alpine Conference in Torino in November 2014. The report “*Greening the Economy in the Alpine Region*” was jointly produced by this expert group under the German Presidency 2015-2016 and adopted by the XIV<sup>th</sup> Alpine Conference 2016 in Grassau.

The aim of the report was to gain an overview of the status and the development of the Green Economy in the Alpine region and to identify future strategies to further support the implementation of the concept.



**Figure 2-1: Participants at the international conference on Green Economy in the Alps.**

To present the outcomes of the RSA6 and in particular its conclusions and recommendations to a wide range of experts, an international conference was organised in Rosenheim on 11 May 2016. Further aims of the conference were to build a network of relevant actors from the Alpine region, to define the most important steps for the implementation of a Green Economy in the Alps, and to inform about and discuss the planned Action Programme for a Green Economy. The conference brought together stakeholders from business, public administrations, local authorities, regional business development agencies, associations, research, civil society and financing institutions from all Alpine countries.

The conference presented the RSA6 recommendations, selected results and pioneering good practice examples for a greening of the economy in the Alps. On this basis, participants discussed how specific Green Economy approaches can be implemented.

After a general presentation of the RSA6 (see also chapter 3), four parallel panels took a closer look at the various aspects of a Green Economy. The panels were organised around the following topics:

- green regional economic development (looking at development programmes and initiatives valuing the region’s natural and cultural heritage as well as production and consumption cycles);
- innovation for more sustainability (looking at financing instruments for innovation, support programmes for start-ups and at the innovative management of natural resources);
- climate-neutral Alpine municipalities (looking at sustainable energy management, climate-neutral tourism and at innovative programmes for energy-efficient lifestyles);
- well-being and sustainable lifestyles (looking at sustainable production and consumption of food, Alpine-wide challenges for sustainable lifestyles and regional currencies).

In each panel, three different good practice examples from the Alpine region were presented and their relevance for an implementation of a Green Economy in the Alpine region was discussed. During the subsequent closing plenary, perspectives for a further development of a Green Economy were then drawn by the moderators of the parallel panels (for more details about the content and discussions please refer to chapter 4 presenting selected contributions from each panel).

These perspectives will now be taken up by the planned Action Programme for a Green Economy in the Alpine region that will be developed over the next two years as a follow-up to the RSA6 (for more information about the Action Programme please refer to chapter 6).

This publication summarises the content and the outcomes of the discussion that took place during the conference. The information included in this conference documentation, and in particular the summary of the RSA6, can show only a small excerpt of the various aspects of a Green Economy in the Alps. More detailed information is included in the report itself, respectively in its Executive Summary. Furthermore, a collection of good practice examples is in preparation. The reports are available at: <http://www.alpconv.org/en/publications/alpine/default.html>.

### 3 Summary of the sixth Report on the State of the Alps

What is a Green Economy? In order to start working on the state of the art of a Green Economy in the Alps, the expert group first had to answer this question.



**Figure 3-1: Presentation of the results of the RSA6 by Stefan Marzelli, Vivien Führ and Aureliano Piva.**

Even though the term Green Economy is still not consistently defined, most organisations now have a shared understanding of the concept. For the purpose of the RSA6, the ad hoc expert group agreed to use the UNEP definition of a Green Economy as the most widely used and authoritative one. UNEP defines a Green Economy

'[...] as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a Green Economy can be thought of as one which is low-carbon, resource-efficient and socially inclusive.

Practically speaking, a Green Economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.'

The Alpine area is characterised by different features which have to be taken in account when analysing the status and options for a greening of the economy. Some important factors are:

- population density, which is very heterogeneously distributed according to living conditions due to climate, altitude and slope;
- different, overlapping entities such as administrative areas from country to local level, languages and cultures;
- multitude of landscape amenities, which are an important natural resource for tourism;
- traditional skills, such as Alpine pasturing, cheese production, timber crafts, which have developed under the Alpine living conditions and resources;
- vulnerabilities of the Alpine economies, caused by different climate zones, harsh climate, thin soil layers, limitation of the usable area for agriculture and forestry and urban settlements.



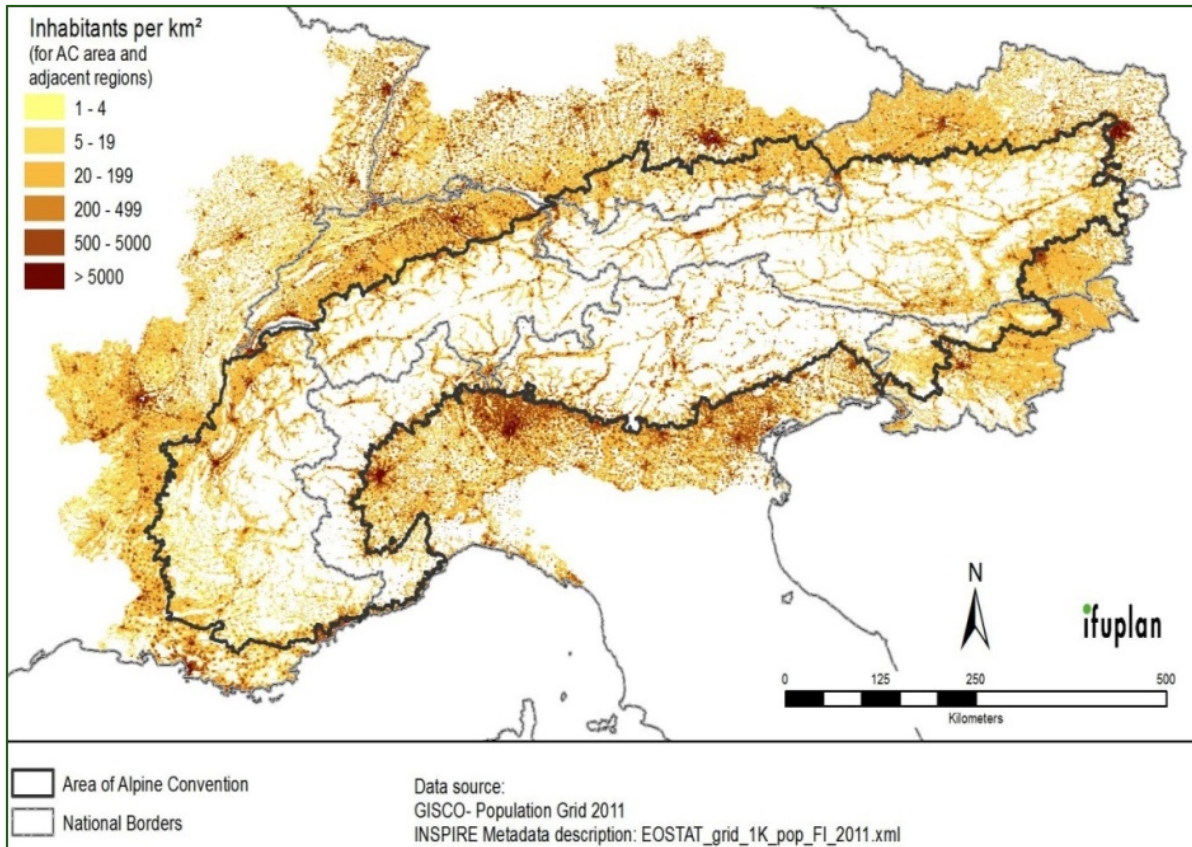


Figure 3-2: Inhabitants per km<sup>2</sup> in the Alpine Convention area and adjacent regions.

## Topics of the sixth Report on the State of the Alps

Facing these Alpine characteristics and based on the definition of a Green Economy mentioned above, the RSA6 is structured along four key sectors including several subtopics:

### An energy-efficient and low-carbon economy

- Carbon emissions
- Renewable energy sources
- Efficient use of energy

### A resource-efficient economy

- Efficient use of non-energy resources
- Land use changes
- Circular economy, recycling and waste management

### Ecosystem services and a natural capital-based economy

- Natural capital and ecosystem services
- Biodiversity
- Valuation of ecosystem services

### Economy supporting quality of life and well-being

- Employment & education
- Economic well-being and social inclusion
- Sustainable consumer behaviour
- Health and harmful emissions

The report also checked the references of the main Alpine Convention documents regarding the topic Green Economy. Even though the Alpine Convention does not explicitly mention Green Economy in its documents, many of the topics of a Green Economy are dealt with in the protocols of the Convention. Some examples are the role of the Alpine area for contributions to renewable energy production ([Energy protocol](#)), the efficient and prudent use of land ([Spatial planning and sustainable development protocol](#)), wood as a renewable resource ([Mountain forests protocol](#)) and the relevance of agricultural quality products for the well-being of consumers and for the economy ([Mountain farming protocol](#)). Finally – the XIV<sup>th</sup> Alpine Conference adopted a [declaration on fostering a sustainable economy in the Alps](#).

## Main conclusions of the Report on the State of the Alps

The assessment of the state of the art of the various topics of a Green Economy in the Alps has led to a number of conclusions for a greening of the economy. These are:

- regional economic development,
- innovation as an economic trigger and a key to more sustainability,
- cost effective & efficient economy,
- competitiveness of a Green Economy,
- positive employment effects through green jobs,
- cooperation for an Alpine Green Economy,
- well-being of residents,
- data & monitoring of Alpine economy,
- long-term goals and strategies for a Green Alpine Economy.

Selected conclusions and underlying observations are described in more detail below, demonstrating the different facets of a Green Economy.

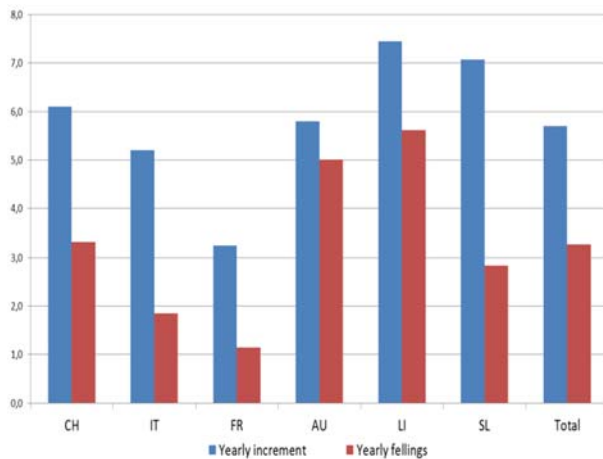
### Regional economic development – based on natural capital

How can a sustainable regional economy be fostered? There are different approaches. For the Alps, an important field of action is the production and marketing of regional products, which keeps the added value in the region and has the potential to create and secure jobs in the region. The development of a regional economy could be further supported by the introduction of regional currencies.

A good practical example of such a development is the “Ökomodell Achental” developed by the Achental biomass farm. This is a regional platform run by municipalities and private actors which creates regional economic cycles by processing and supplying bioenergy. Energy is used in small-scale district heating networks and reduces CO<sub>2</sub> emissions.



**Figure 3-3: Large bogs – such as Murnauer Moos in Bavaria – also represent natural capital.**



**Figure 3-4: Yearly increment and felling in m³/ha in the Alpine Convention area of Alpine countries (data by WG Mountain forest).**

A sustainable regional economy carefully manages and takes advantage of its endogenous natural capital. Natural capital is defined as “the world’s stocks of natural assets which include geology, soil, air, water and all living things”<sup>1</sup>. It forms the basis for our economic activities and thus for human well-being, is a key input for a wide range of economic sectors. A degradation, overexploitation and destruction of natural capital and ecosystem services could lead to an ecological ‘bankruptcy’. Natural capital in the Alps consists inter alia of wood, pastures and grasslands or landscape amenities.

The RSA6 has investigated the natural capital using wood as an indicator (cf. Figure 3-4). A comparison of the yearly increment and fellings in the forests in the Alpine Convention show that in all countries the increment exceeds the felling, meaning there is less timber extracted from forests than the annual regrowth.

## Innovation is an economic trigger and a key to more sustainability

Why is innovation such an important factor for a Green Economy? The different pressures on the Alpine area – such as climate change, demographic change, energy shift and economic competition – require economic innovation to produce forward-looking and sustainable answers. For instance, reduction of GHG emissions will trigger innovation in the:

- technical field (such as efficiency in power generation, use of renewable energies, smart grid development, energy storage),
- social field (behaviour / governance changes, energy and resource saving, sharing initiatives, microloans and fair trade), and
- business field (e.g. refitting of hydropower plants, decentralised energy grids).

<sup>1</sup> <http://naturalcapitalforum.com/about>

Such innovations contribute to the competitiveness and the sustainability of regions and enterprises.

Examples of such innovation include the Toggenburg energy valley in Switzerland. Here, 12 municipalities cooperate to achieve regional energy self-sufficiency. The goals are self-sufficiency by 2034 through production of energy from local and renewable resources, and by 2059 the realisation of a 2000 Watts society. This 2000 Watts society means a per capita consumption of not more than 2000 Watts of primary energy.

### Development of a cost-effective and efficient economy

Cost effectiveness and efficiency means streamlining costs in the economy for the right things, and the right way of doing those things. Avoided costs are a benefit for enterprises and the economy in general. Society will save costs if environmental damage is prevented such as negative effects on health through air pollution, damage by natural hazards or loss of productive soils through land take.

The RSA6 has analysed cost effectiveness and efficiency regarding land (land surface and productive soils), resources (material input, waste production, use of regional natural resources) and energy (efficient-energy production and consumption). The use of land as a resource has been analysed in terms of land conversion in the different Alpine countries, based on data provided by the members of the expert group for the RSA6. In Figure 3-5 the development of land conversion in the German Alpine Convention area clearly shows the increase of settlement and infrastructure area and a decline of agricultural area while the population is increasing at a much slower pace. This is a trend which can be observed in all Alpine countries.

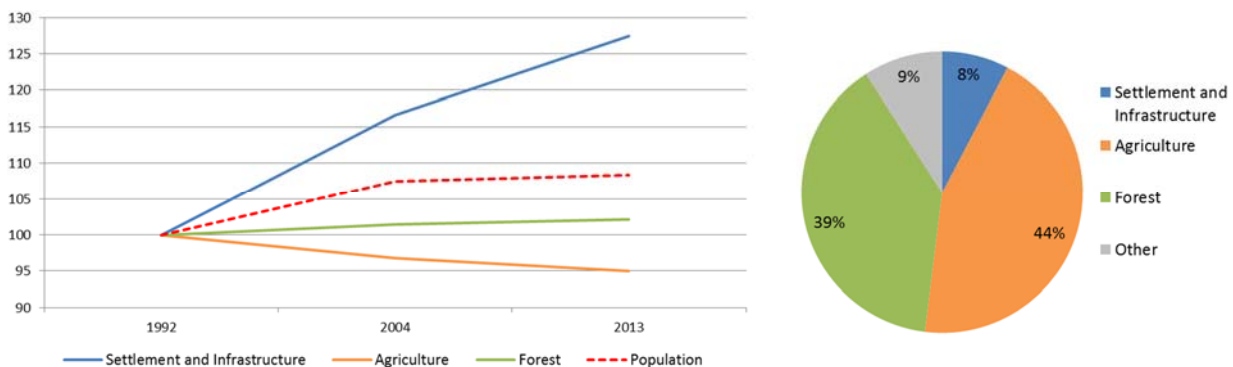


Figure 3-5: Land use changes in German Alpine Convention area 1992 – 2013.

Lower resource input – such as less material, less energy or less area to be developed – also means lower costs and a higher competitiveness of enterprises, municipalities and regions. Therefore, a truly cost-effective economy should include external and hidden costs, stimulate economic activities with positive externalities such as payments for ecosystem services, phase out environmentally harmful subsidies and could use revenue from reduction of such harmful subsidies to foster green investments and cushion social impacts.

### Green job development

A Green Economy has positive effects on the labour market and can contribute to the development of new jobs or the reshaping of existing jobs. This is evident in the Austrian employment analysis (cf. Figure 3-6). Potential for such jobs exists particularly in the sectors for building, energy, transport, tourism, agriculture, forestry and industry. They include tasks such as planning and designing new buildings, power stations, energy grids, renovation of heating systems and the repowering of existing facilities. Jobs related to landscape and nature have also been created, such as management and services for recreation areas, nature protected sites or protected species.

If regional resources are used as a basis for these jobs (such as regional raw materials, but also services dedicated to regional resources such as landscape management), jobs are generated in the region and

strengthen the regional economy. In some cases further training of employees may be necessary. This shift in the labour market needs a just and socially acceptable transition for those who now hold jobs in carbon-intensive and polluting industries.

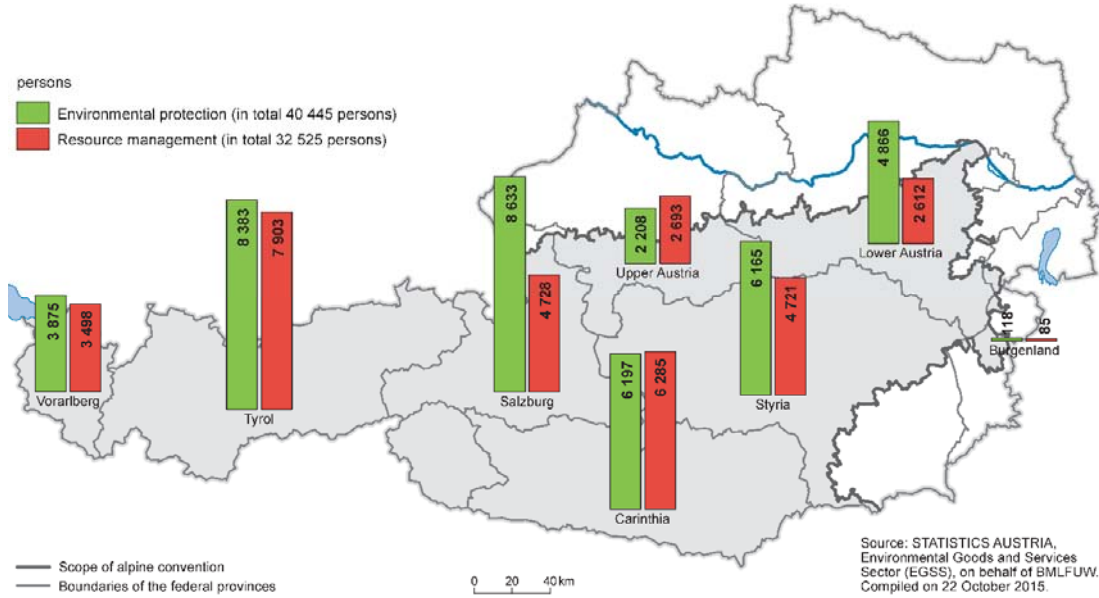


Figure 3-6: Employed persons in the environmental goods and services sector in the Austrian Alpine Convention area 2013.

### Long-term goals and strategies

What is the future of Green Economy in the Alps? The RSA6 creates an overall vision: the Alpine Convention area could develop as a model region for a Green Economy. For this process different steps are needed, as presented in Figure 3-7. This process needs to define long-term and clear objectives which can be used as benchmarks for progress, has to consider different branches and sectors of the economy, should apply new concepts of economic understanding (such as natural capital), needs to develop concrete strategies for economic transition at a regional level and – most importantly – take appropriate and immediate action.

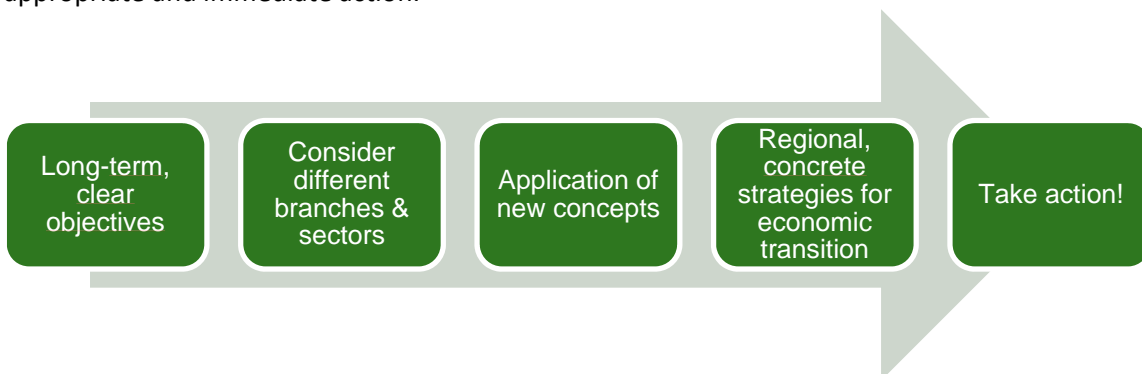


Figure 3-7: Process of developing a Green Economy model region.

## 4 Summary of the conference panels

The following provides an overview on the four panels that took place during the conference. For each panel there is a small introduction to the topic and its importance for a Green Economy in the Alps. This is followed by a description of the panel contributions and a summary of the discussions. One contribution from each panel is presented in more detail.

### Panel 1: Regional economic development

Regional economic cycles are an important part of a Green Economy. A sustainable regional economy reduces environmental risks and natural resource scarcity and improves the quality of life of residents. Regional material cycles as well as the production, marketing and consumption of sustainable regional products have been successfully implemented throughout Europe in recent decades.

In the Alpine area the production and consumption of regional goods is particularly relevant, since the residents of the Alps strongly identify with their region and regional products are highly appreciated by consumers. The sustainable production of regional products can take advantage of endogenous natural capital, such as wood from mountain forests, dairy products from alpine pastures, recreation sites of natural beauty and landscape amenities. Furthermore, existing traditional working skills provide a precious resource for local goods and services and, at the same time, are valued and supported by a strong regional economy. Regional green economies should thus recognise and use their natural and cultural capital.

Regional strategies should include sustainable development concepts particularly for agriculture, forestry, tourism, transport, circular economy or energy. Promotion and support for eco-innovation and green start-ups at regional level would be another contribution to developing a Green Economy.

Lower transport costs, innovation and the use of endogenous potential increase the economic competitiveness of regional economies. Green Economy can be used as an engine for regional development – both concepts are mutually reinforcing.



**Figure 4-1: Panel 1 participants discussing success factors for green regional economic development (from left to right: Stefan Marzelli, Marzio Demartini, Wolfgang Wimmer, Andreas Roß).**

In this panel, three different approaches to a green regional economic development were presented.

As the first speaker, Andreas Roß presented the sustainability declaration of the Oberland Economic Forum (Wirtschaftsforum Oberland). This declaration was adopted by the members of the Economic Forum (made up of local authorities, companies and organisations) committing themselves to preserve and strengthen the natural basis of existence in the region and to further develop the welfare of the people living there. Fields of activities include securing energy supply by using renewable regional energy sources, enhancing the regional recycling economy, strengthening the competences and responsibility of residents, and supporting competitiveness of businesses by organising events and awarding prizes.

The second contribution came from Switzerland and gave an overview of the regional development programme in Brontallo. The President of the “Associazione Pro Brontallo”, Marzio Demartini, presented their pilot project for regional development and the promotion of regional and indigenous products. From 2004 until 2008, the region undertook wide-ranging work in various fields to protect the original landscape, valorise regional products and local traditions, create jobs and ensure the survival of agriculture in the region. The project included concepts for chestnut cultivation, viticulture, dairy, transport and hiking trails, water provision and agrotourism.

The last contribution outlined the German Achenal Ecological Project (see detailed presentation further down).

In the discussion with panel participants and the plenary after the presentations, success factors for a green regional economy were debated and identified.

To guarantee a successful implementation of regional development processes, the importance was highlighted of taking the first steps visible to residents and decision-makers. Marketing and visibility in the region are thus an important part to secure support for the project. Furthermore, there is a strong need for charismatic entrepreneurs to start the process (even against constraints), develop networks and to convince people and decision-makers to take part.

Regional economic structures should not become too big, as this would lead to inefficiencies of production, exceed regional resources and might result in less identification within the region. In general, regional development should be balanced and happen in small steps. Regional economic cycles need networks that have to be built up; related well-established economic structures will then grow automatically. A relevant tool for steering the development process in a region is urban and land use planning. Furthermore, the influence of big economic centres (neighbouring metropolises) should be taken into consideration for development strategies.

Prior to the general discussions, three concrete questions were asked to the three presenters of the session. The answers are summarised in the following:

*What are important preconditions and supporting measures to make a regional development project a success?*

Projects should aim for both fast and visible effects as well as long-term commitment and follow an inclusive approach that is beneficial for all members of society. Over-ambitious objectives which cannot be fulfilled can be counterproductive.

Measures taken should be horizontal and touch on as many aspects as possible. The Achenal Ecological Project and the regional development programme in Brontallo are excellent examples, as they deal with various topics.

To gain and secure support during the whole project, the potential positive outcomes of the initiative should be highlighted throughout the whole process: e.g. cost benefits for local enterprises or increased employee satisfaction.

*What is missing in present regional development to foster a Green Economy?*

Stable and secure framework conditions are essential for long-term projects. Currently, changing political priorities and thus changing support schemes present a big challenge for initiatives that need more than one legislative term.

There is a lack of awareness among local businesses that they have to anticipate future developments. Awareness-raising among business leaders is needed to achieve an indispensable “strategic capability for future”.

*Which sectors in the Alpine area are particularly suitable for the implementation of a Green Economy at regional level?*

Regional economic cycles have the potential to ensure a region's competitive advantage. This can be the case in the tourism sector, for example by fulfilling a demand for local products and experiences ("Herbs and experience region").

Tasks for municipalities are continually increasing. One possible solution to deal with this and to lower the burden for individual municipalities is inter-municipal cooperation. Green regional economy has the potential to increase and intensify cooperation between municipalities in order to achieve a more balanced sharing of future responsibilities. Furthermore, successful green businesses and organisations can support or take on tasks from municipal administration. One example is the Achental Ecological Project as an implementation platform (see next page).



## Protect – Explore – Enjoy: The “Achtal Ecological Project” – Wolfgang Wimmer

The Achtal valley between Lake Chiemsee in Bavaria and the Tyrolean Kaisergebirge Mountains is a designated area of outstanding natural beauty. Lakes and rivers, mountains and alpine pastures, woodland and open country, moorland and litter meadows – all vie with each other in the confines of the valley. The air is clean, and rare animals have found a home in the numerous protected areas.



Figure 4-2: Four pillars of the Achtal Ecological Project.



Figure 4-3: Landscape of the Achtal valley. Photo: Ökomodell Achtal.

To preserve the diversity and beauty of this precious natural and cultural landscape, the Achtal communities Bergen, Grabenstätt, Grassau, Marquartstein, Reit im Winkl, Schleching, Staudach-Egerndach, Übersee and Unterwössen launched the “Ökomodell Achtal e.V.” in May 1999. With this non-profit registered association they laid the foundations for the environmentally compatible and sustainable development of the region.

The marketing of local products, together with preservation of local rural heritage with its small family farm structure and rich biodiversity, are key objectives of the Achtal Ecological Project. In order to safeguard this “natural” quality of life, farming and forestry, local businesses, catering, tourism and the supply of energy have all been integrated.

Four priorities for a sustainable future are:

- safeguarding farming: the farmer is custodian of the cultural landscape,
- increased use of renewable energies from the region for the region,
- promotion and development of environmentally compatible tourism and business,
- preservation of the natural and cultural landscape.

The development of these four priorities should be mutually supportive. Cooperation and networking will lead to the creation of new value chains and regional cycles of activity.

### Success Factors

**The Strategy:** A combination of bottom-up and top-down approaches, distinctly bottom-up in its widespread citizen involvement and openness on the part of decision-makers in the communities for the ideas and know-how of the citizens. It is, however, the mayors and decision-makers who pursue, promote and direct the concept of the Achtal Ecological Project and integrate it even more into the overall development of their communities.

**The Structure:** A clear binding structure was established from the very beginning, enabling the long-lasting cooperation and coordination of full-time and voluntary staff, citizens, interest groups and communities. An organisation was founded with the mayors and community representatives on its board. The administrative office and its full-time staff are funded by the communities.

**The Means:** Modern methods of development and communication are used. Ideas are generated in workshops and round-table discussions and duly put into effect, using the knowledge and commitment of individual participants to good advantage. New venues are created in the implementation of these new ideas, e.g. the foundation of a public limited company, and participation in public partnership schemes.

## Panel 2: Innovation for more sustainability

Current challenges such as climate change, the transition to renewable energy sources, demographic change and growing mobility needs put pressure on the future economic development of the Alps. At the same time, these challenges can also be opportunities for change and innovation.

There is a clear need for absolute decoupling of environmental pressures and economic growth. Paths towards such a decoupling include decarbonisation, the use of renewable energies, power storage and grid systems development, as well as an increase in energy and resource efficiency – they all require innovation.

The Alpine region offers important innovation potential, in particular in the field of renewable energies. Innovations, however, often come from SMEs and science, which have limited resources and restricted access to financing. Consequently, many innovations do not reach the market. There seems to be a need for financial support and a platform where SMEs, universities and research institutions, clients (especially from local authorities) and investors can meet.



**Figure 4-2: Participants in panel 2 listening to the presentation by Sandra Fausch, ideenkanal.**

This panel looked at innovation from several perspectives, including financial, political and managerial aspects.

Gabriele Grea from Urbano Creativo in Italy presented the initiative “Jam Bite – joint advanced meetings in the Alps”. Jam Bite is an innovative event format bringing together innovative SMEs, municipalities, decision-makers, investors and customers to support and stimulate innovations.

Sandra Fausch introduced the ideenkanal (channel for ideas), an initiative from Liechtenstein to support innovative ideas with mentoring and crowdfunding (see detailed presentation further down).

As the last speaker, Andrea Sgarbossa from the City of Trento gave an insight into the innovative management of protected areas in Trento, where new forms of cooperation between existing protected areas and different levels of government allow for a better valuation of natural capital.

A discussion on political and financial framework conditions supporting eco-innovations and challenges for bringing innovations to market followed the presentations.

In order to trigger innovation, a new innovation culture is needed. On the one hand, communication has to be improved to open minds and increase the acceptance of new ideas among the general public, an important prerequisite for the successful implementation of innovations. On the other hand, innovators and supporters have to accept the possibility of failures as a normal part of an innovation process.

Innovations often need more sustainable and long-term support. Numerous good ideas are no longer viable when the funding runs out. This is also connected to the lack of acceptance of new approaches, as mentioned above. The improvement of communication has to go hand in hand with more sustainable support schemes so that scaling effects can be reached.

Discussions then concentrated on the following questions:

*Where do you see specific chances for green innovations in the Alps? What are the main triggers and success factors for innovation in the sense of a Green Economy?*

A success factor is to link people with green thinking. The positive résumé is that such “green thinking networks” are growing and can spread innovations in society. It would be helpful to evaluate the outcomes of green projects for society in order to demonstrate the benefits which can be achieved. Such evaluation tools should also consider social impacts initiated by innovation projects.

“Hotspots” for innovation should be developed and are possible in almost every community as a starting point for a Green Economy in the Alps. Additionally, bringing together community and politics and enhancing their communication can trigger a Green Economy. The review of the past, considering the interaction of landscape and man in the Alps, was also raised as a useful exercise in the discussion. These traditional land uses may be a source for developing innovative and sustainable economic approaches. The tourism sector in particular could benefit from these traditional sources.

For local energy production, an increase in efficiency and the development of an integrated strategy for the community to link up with other sectors is important.

*What are innovative financing models for innovations?*

In general such models are needed. The current practice frequently follows the same scheme: innovative approaches are funded by EU projects, but funding is terminated when the projects have reached the end of their lifetime. Hence, the collected ideas are not supported or promoted anymore, remain undeveloped and are not implemented in practice.

## ideenkanal: A platform to support innovative ideas of people with creative power – Sandra Fausch

The ideenkanal (channel for ideas) is a tried and tested idea-promoting process for people who want to develop, test and scale up meaningful project ideas in or from Liechtenstein. It was founded in 2010 by the two young entrepreneurs Christof Brockhoff and Stephan Schweiger, who experienced first-hand that it is extremely difficult to find support for ideas that are not yet mature. They decided to develop an idea-promotion process in which, instead of experience, the motivation and the passion of the idea-makers form the basis for taking decisions on support.



With the aid of modern online tools and innovative event formats, the ideenkanal identifies and promotes particularly motivated idea-makers in a two-year cycle. They receive assistance from a high profile mentor team. The channel also supports them in financing resulting projects with crowdfunding by startnext (a crowdfunding platform for projects and start-ups in Germany, Austria and Switzerland) and makes them internationally known.

The focus is on projects that are at an early stage of development and contribute positively to the common good. Thematic areas are environment, mobility, technology, social affairs, education, health, and art and culture. Corresponding initiatives may well have a commercial background in order to be successful as a social enterprise.

Since 2010, the ideenkanal has produced more than 500 ideas, of which around 50 have received long-term support from over 200 mentors and were partially co-financed by the public.



Figure 4-3: Finalists of the idea camp 2017.

The legal framework of the ideenkanal is constituted by a foundation of the same name (ideenkanal Stiftung), based in Vaduz, Liechtenstein. The purpose of the foundation is to disseminate and continuously develop the idea promotion process and to sustainably support and accompany all related activities and projects in the interest of all stakeholders.

The foundation pursues solely non-profit objectives and finances its activities through public funding, contributions from other foundations, sponsors and income from consultations and events.

It is under the auspices of the Liechtenstein Financial Market Authority and is an associate partner of the Association of Liechtenstein Charitable Foundations e.V. (Vereinigung Liechtensteinischer gemeinnütziger Stiftungen e.V.).

More information available here (in German only): [www.ideenkanal.com](http://www.ideenkanal.com).

### Panel 3: Climate-neutral Alpine municipalities

An increasing number of municipalities in the Alps are taking action for climate protection and aim to achieve climate neutrality. By improving energy efficiency and making efforts to meet as far as possible their own demand with renewable energy from the region, they also aim to stimulate the regional economy and wish to become independent of fossil fuel imports.

At the same time, sustainable energy initiatives go beyond the energy sector, involving also lifestyles. Related topics – in particular housing, mobility, construction, tourism, agriculture and spatial planning – must be incorporated. Action is needed in different sectors. The overall approach, however, should be a holistic one and calls for the integration of sectoral activities.



Figure 4-4: Participants in panel 3.



Figure 4-5: Jerney Sever from the town of Idrija presenting his gamification approach.

This panel looked at climate neutrality from three different angles: energy management, tourism and sustainable lifestyles.

The first contribution came from the municipality of Sattel in Switzerland that aims for climate-neutral tourism. Pirmin Moser presented the municipal model (including transport, accommodation and energy concepts) and underlined the importance of consistency and credibility for pursuing common objectives.

This was followed by a presentation of the energy management system in the city of Annecy, France given by the vice mayor Thierry Billet (see detailed presentation further below).

As the last speaker, Jerney Sever introduced an initiative running in the town of Idrija, Slovenia, on sustainable lifestyles. Through gamification, a local initiative has succeeded in achieving behaviour change in children and adults.

Various options and strategies for local authorities to achieve climate neutrality as well as the chances and challenges that are connected to this were subsequently discussed on the basis of the following questions:

*How can municipalities contribute to changing lifestyles and consumption patterns of citizens towards more sustainability?*

Local authorities act as models for their citizens and have the possibility to influence their behaviour. Many Alpine towns already use this influence to change the lifestyles of their inhabitants and convince individuals and companies to live and work in an increasingly sustainable way.

Experiences from the attendant Alpine towns show that citizens are often not aware of the possibility they have to contribute to a more sustainable society and environment through their own lifestyle. Even though they do perceive e.g. air pollution as a big problem, many people do not realise that they contribute to the problem and that they have the potential to improve the (local) situation by adopting

more sustainable behaviour (for example by using public transport instead of the car). Setting an example and raising awareness is thus important to trigger the potential that lies within sustainable lifestyles.

Efforts toward climate neutrality are more successful if backed up by a political decision and a general concept. Many small steps are needed to achieve the envisaged results and an overall concept helps to stay on track even if key people are changing.

Another crucial factor for success is credibility. Promises made must be kept to secure support and acceptance from all parties.

*What are promising strategies and measures to save energy and use energy more efficiently?*

Financial incentives are a good way to convince people to contribute to energy-saving measures on a voluntary basis. Top-down approaches can work, but to build a smart city and achieve significant results local authorities need to adapt a bottom-up approach.

Furthermore, the ownership of citizens of e.g. renewable energy installations proved to be a successful strategy for advancing projects in this field.

Even though there are already many successful lighthouse projects, a broad implementation of such solutions is not yet taking place. Voluntary schemes alone are not sufficient to achieve significant results in terms of energy saving and efficiency – there is a certain need for rules and even bans.

## TEPOS: Territorial initiative for positive energy in Annecy – Thierry Billet

The city of Annecy presented “TEPOS” (Territoire à Energy Positive pour la Croissance Verte), a regional initiative which aims to achieve a balance between energy consumption and the generation of renewable energies by 2050. The initiative covers the agglomerations of Annecy, Chambéry and the regional natural park Massif des Bauges. This region is currently more than 75% dependent on fossil fuels. The main challenge for the region is to carry out the transition towards a self-sustaining energy region while keeping the benefits of energy sales in the region, producing energy locally and reducing energy costs.

The initiative follows three strategic axes:

- Reduction of energy consumption with the targets of energetic renovation of buildings, supporting business in energy demand control and speeding up the modal shift from private cars to public transport, car sharing and other soft mobility solutions.
- The increase of renewable energy production with the targets of network development for district heating, spreading of solar energy on roofs and abandoned places, transition of car fleets towards e-mobility and/or gas-mobility, development and awareness-raising for energy transition and its effects for the region and labour market.
- The support of regional innovation with the targets of a coherent regional organisation and support of energy transition, the support of demonstration projects and technical and financial innovation and support for enterprises such as photovoltaic power plants, methanation, hydrogen, recovery of purified water, water loop systems and others.

Some selected measures within TEPOS include:

- analysis of the potential for local energy production,
- studies on the potential of heating networks to identify priority areas,
- development of a solar cadastre and green roofs,
- application for smartphones for all transport modes in the region,
- development of a strategy for a coherent and convergent policy of public and urban lighting.

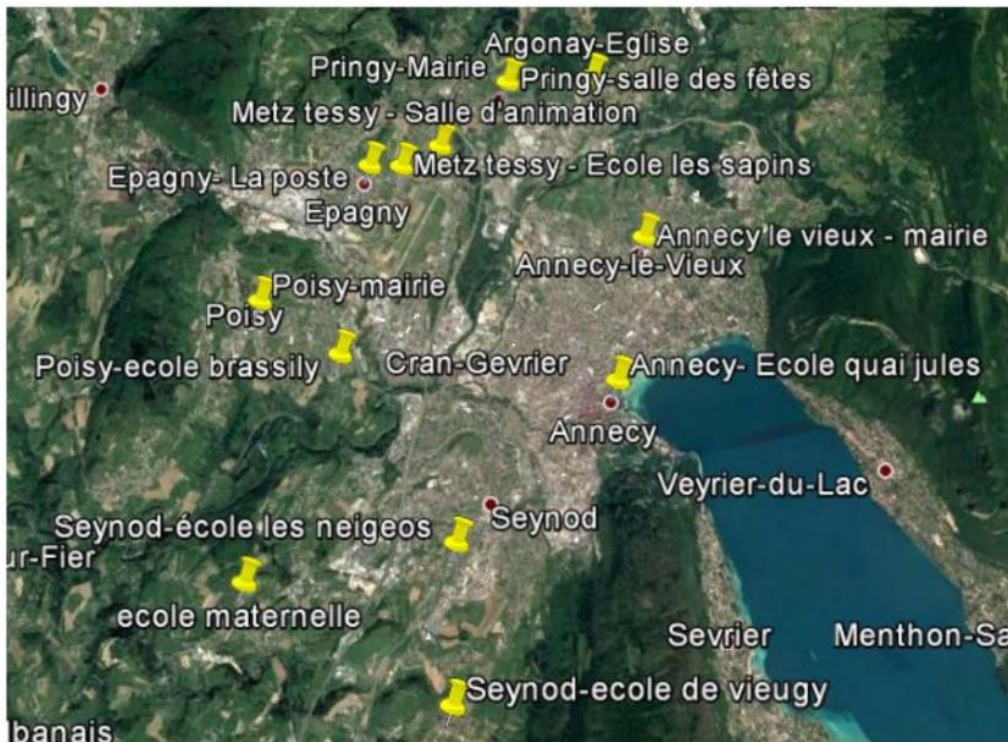


Figure 4-6: Feasibility study for photovoltaic installations on roofs in the Annecy region.



## Panel 4: Well-being and sustainable lifestyles

A Green Economy contributes to the well-being of residents in various ways. This includes economic benefits through energy and resource savings. Furthermore, cleaner production methods improve the health and physical well-being of residents.

Sustainable production patterns also mean economic stability, as green jobs can offer new employment possibilities. Additionally, green jobs in the Alps can build on traditional skills existing in many Alpine regions.

While a Green Economy contributes to the well-being of residents, residents can contribute to a Green Economy by adopting sustainable lifestyles. Within an economic system it is important to look at the economy as a whole, i.e. also considering the consumption side. Through conscious consumer behaviour, citizens can improve their quality of life and contribute to resource efficiency. Making “real prices” visible through the internalisation of external costs can trigger and support behaviour changes of consumers. The consumption and support of traditional and regional products is of particular importance for the Alpine region.



Figure 4-7: Panel 4 discussion on the terrace of the conference venue.

This panel looked at food waste, household programmes for a more sustainable lifestyle and regional currencies as a way to contribute to a greener economy and the well-being of residents.

The first contribution came from Austria, where an association makes use of unused food products (see detailed presentation further below).

After that, the Alpine-wide challenge “100 max – the Alpine initiative for climate protection” was introduced. Jakob Dietachmair from CIPRA International presented how households in all Alpine countries vie to reduce their energy and resource consumption, document their experiences and achievements on an online platform and learn that the best things in life do not cause emissions.

Finally, Cristian Gelleri from the association Chiemgauer e.V. described the introduction of the regional currency “Chiemgauer” in the eponymous region. The example illustrated how regional currencies can contribute to regional cycles, reduced transport, the support of regional production and regional purchasing power while at the same time raising awareness about more sustainable living.

After the presentation, participants looked at how well-being and sustainable lifestyles can go hand in hand to contribute to greening the economy. Discussions centred on the following questions:

*Sustainability is often portrayed as meaning restrictions and modest lifestyles. How could we frame and promote a positive and encouraging lifestyle that contributes to quality of life and human well-being in the Alps?*

Despite an increasing number of people being interested in sustainable lifestyles, the overall number of citizens actively involved in alternative projects such as regional currencies, food-sharing initiatives, etc. is still relatively small. The recruitment of new target groups presents a particular challenge. In general, those people participating in new initiatives are already open-minded towards sustainability issues and engaged in one way or the other.

Consumers have not been “educated” to consume sustainably in the past. On the contrary, standards for fruits and vegetables, for example, have made consumers accustomed to perfect products. People have been encouraged to consume as much as possible to ensure growth and wealth for all. The challenge is now to change this paradigm, reveal the negative sides of unlimited consumption and to “wean” consumers off unreasonable expectations, while at the same time demonstrating that a sustainable lifestyle does not lead to a restricted quality of life.

There are an increasing number of initiatives dedicated to this objective. These are almost exclusively initiated by the civil society and are non-political. However, as already stated, most initiatives only reach a small section of the population.

Cooperation with actors from business and administration can help to improve this situation and set stronger incentives for citizens and employees. An employer paying Christmas bonuses in regional currencies raises awareness among his employees and motivates them to consume differently. Since they can only spend the money in local shops which are part of the regional currency system, they will experience different (regional and sustainable) products and may eventually change their consumption habits.

The same holds true for (financial) incentives to go to work by bike (e.g. in the form of bonuses or reduced health insurance contributions), as already practiced by many businesses and health insurance companies. Such incentives can lead to long-term changes in behaviour but require cooperation between different actors in an economic system. Legal uncertainties that might arise concerning e.g. tax-related aspects of financial incentives need to be clarified.

As long as the purchasing prices of products do not reflect real (external) costs, it will continue to be difficult to convince people to adopt a more sustainable lifestyle. It works best where incentives are set and a win-win situation can be created. There is a need for cooperation among civil society, business and policy decision-makers to set the right framework for action.

*Economic restructuring can mean the decline of jobs in one sector. Where do you see chances for new and even more jobs in green sectors in the Alps?*

Social innovations can be relatively successful if they come at the right time and are in line with the spirit of the time. Offers for sustainably produced food, actions against food waste, urban gardening and sharing initiatives meet a certain demand and have thus the potential to create jobs. Indeed, the current interest in these topics has already created many jobs and will probably continue to do so in the future as these concepts are gaining in popularity.

Regional currencies have the additional advantage that they keep the added value in the region and secure and create jobs.

## feld: the association for use of the unused – Claudia Sacher and Luzia Dieringer

The members of the feld – association for use of the unused – find, collect and transform unused resources, both tangible and intangible. A variety of new possibilities arise: unique products tell their stories and thereby make consumers aware of the value of goods.

There are unused resources in a lot of areas – food, knowledge, etc. Unfortunately, due to different reasons (practicability, ignorance, profitableness, and so forth), new goods are produced instead of taking advantage of those already available. Already existing resources are too precious to be declared as waste and disposed of.



We are aware of the abilities and individual possibilities of each person. This variety of knowledge and talent is a treasure that needs to be considered and is shaping our projects. We understand the difficulty of this throwaway society and its handling of resources. The use of already produced resources requires commitment and creativity and represents the appealing aspects of our work.

The association's activities pick up on issues such as appreciation, creativity and design of one's own living space and way of living, bringing them closer to a lot of people. Therefore, it is possible that by supporting our idea, more and more people can integrate those aspects into their daily life.



**Figure 4-8: Non standardised carrots – a typical example of saved vegetables.**

Project 1.0: The project 1.0 with its focus on “food” is shaping the association's aim more precisely. It focuses on the appreciation of already available food produced, regardless of its suitability for the market, as well as the production of good food and the maintaining knowledge about food preservation. Unused fruits and vegetables are collected at farms, (super-)markets, public green spaces and community gardens, transformed and forwarded following the pay-as-you-wish system (“What is it worth to you?”).

Workshops: There have been workshops for food preservation since the association was first founded. Together we try new recipes and techniques, depending on the fruits and vegetables available. These activities have been expanded to include workshops to systematically spread the collected knowledge. Individual workshops or a series of workshops convey recipes according to the seasonal cycle, techniques to process and preserve food, as well as background information on cultivation and use of herbs, fruits and vegetables.

IGGIT – “Innsbruck's saved vegetables in the pot”: Since the beginning of 2016 we have been processing collected vegetables that without the association's help would have never made it onto a plate. Offices in the urban space of Innsbruck can order soups/stews (optionally with bread from the previous day) twice a week. We deliver the food in a pot using a bike with a trailer or our cargo bicycle. IGGIT gives a special touch to events and shows the multiple culinary possibilities of unused vegetables as well as the large amount of unused vegetables available.

School project: In 2017 we started developing a school project in order to integrate our topics into an educational setting. Projects and excursions show the vegetables' journey from the agricultural fields to the cooking pots. The food's path, the possibilities of acquiring food, the consequences of purchase behaviour and the valuation of food are all taught in hands-on training sessions. With financial support of the environmental initiative "Mutter Erde", the association develops materials which are distributed to all schools and educational institutions that are interested.

Everything started in Innsbruck in 2014, when Luzia Dieringer and Claudia Sacher had the initial idea to start the association feld. In December 2014 feld became a registered association, being supported by many volunteers and members. Feld is open to everyone who wants to participate, get involved and exchange experiences or learn from each other.

More information available here (in German only): <http://feld-verein.at>.

## 5 Conference results

Based on the contributions and discussions in the four panels, the conference's results may be summed up by the following statements of panel moderators and the representative of the Alpine Convention's Permanent Secretariat.



Figure 5-1: Plenary panel summarising the panel discussions (from left to right: Dr Christian Baumgartner, Hans-Joachim Hermann, Andreas Pichler, Ingrid Fischer, Stefan Marzelli).

### Quick steps to realistic goals and long-term process

The implementation of a Green Economy needs quick, visible steps and results to convince decision-makers and society that this is a forward-looking and successful approach. Often, over-ambitious goals create unfulfillable expectations and lead to disappointments.

At the same time, a successful transition towards a Green Economy will certainly require a patient and long-term approach with stable and secure framework conditions. It is with no doubt helpful to look for the “low hanging fruits”, meaning to start with easily implementable objectives.

### Balanced development and regional structures

At the regional level, a balanced development is needed which creates and maintains decentral structures. These structures or institutions (e.g. energy generation, tourism marketing, regional currencies) should not become too large, as growing in size might make them inflexible and no longer manageable by their region. An experience from the Achenal eco-model region is that such successful structures can develop towards multi-use platforms for regional economic actors, taking on even further activities (such as regional consultancy in their field of action).

### **Strategic competitiveness for the future**

The main objective of a greening of regional economies is to create strategic competitiveness for the future in terms of adapting to changing conditions with regard to environment, economy and society. Reality laboratories as experimental spaces can pave the way towards a more sustainable and competitive future.

### **Creativity for generating solutions**

Innovation means to create space for creativity. It will be a hard job to measure innovation. But even failing of creative attempts should be understood as part of this development and a learning process in a region. The analysis of failings may lead to even better solutions second time round. Additionally, there is a need to create new legal framework conditions for social innovations.

### **Voluntary approaches and limitations by regulations**

Besides awareness raising, financial incentives – but also regulative measures – will be needed to implement measures for sustainable development on a large scale. Voluntary contributions by those who are ready and able to act more sustainably alone will not be sufficient. Undesirable effects should be limited by clear regulations.

### **Action Programme for a Green Economy**

The next step for a development of a Green Economy in the Alpine area will be the design of an Action Programme. Residents of the Alpine area are called on to contribute to this programme. Many promising approaches for Green Economy projects and structures already exist, as the good practice examples collected during the drafting process of sixth Report on the State of the Alps demonstrate. Therefore, one task will be the up scaling of these niche products and initiatives to the main markets to generate broader effects and to transfer them to other regions and maybe to other task settings. However, it is still unclear how this can be achieved.

### **Publicity and creating ownership**

Greening the economy needs more publicity as it is not yet broadly recognised by people. Existing initiatives need support. It will be important to achieve publicity and public recognition and to support awareness-raising with participatory design and easily understandable wording.

A path towards implementation would be first to commit to certain topics and solutions and then involve residents and stakeholders in a participation process to create ownership of these solutions. The objective is to develop an action programme not for the Alpine Convention but with and for the residents of the Alpine area. Their involvement will make it easier for them to understand, commit themselves and implement the measures required.

### **Put the pieces together and motivate people**

Topics, tasks and actors of a Green Economy are multi-laterally intertwined. The strategic challenge will be to link these different parts intelligently like in a puzzle, even if individual pieces may be only indirectly linked with the Green Economy. The objective will be to identify together with regional actors the relevant topics, suitable measures and stakeholders and to use and capitalise the manifold good practice examples.

Finally, many soft skills are needed for achieving a Green Economy. It is necessary to motivate people to join in this transition process towards a Green Economy. This also means overcoming old habits and taking new paths.

## 6 Outlook – An Action Programme for a Green Economy in the Alpine region

As recommended in the RSA6, the XIV<sup>th</sup> Alpine Conference in Grassau approved the elaboration of an ambitious and comprehensive Action Programme for a Green Economy in the Alpine region by 2018. The purpose of the Action Programme is to further develop and specify the recommendations given in the RSA6 and to identify concrete fields of action and relevant actors for the implementation. It is crucial to involve all relevant stakeholders in the Alpine region in the development process with a specific focus on the business sector, municipalities and towns, NGOs and the civil society. The operational and practice-oriented character of the document must be emphasised. The main aim of the Action Programme is to deliver a stakeholder-driven, realisable and broadly supported programme that builds on existing achievements, responds to business needs and pushes innovative initiatives towards a truly transnational, common approach.

The more ambitious and specific the objectives are, the greater the need for an overarching approach that comprises and addresses different levels. Such a multilevel change needs to be ignited, pushed and demonstrated. Convincing good practice examples need to function as blueprints. Thresholds for further roll-out and application of green economic ideas need to be lowered through close-to-practice work. As a priority, business-related questions with regard to market potential, financing and green skills development on the ground need to be answered in the territorial context of the specific rural, urban and mountain community. Only in this way will it be possible to arouse broad interest, develop ownership of the Action Programme and, consequently, prepare and initiate the implementation process.

A series of stakeholder dialogues across the Alpine region are envisaged in order to initiate suitable actions and to achieve broad-based participation in the process of drafting the Action Programme. The international conference in Rosenheim proved to be a successful opening event for this purpose. The outcome of the stakeholder dialogues shall then be used to draft and finalise the Action Programme.

Through further involvement of key stakeholders in six workshops on different topics and by launching an online participation platform, their expertise and knowledge shall be used for the process of defining action fields and preparing the implementation of more specific actions. It is quite clear that, as a transformation tool, the development process of the Action Programme will have to focus on the identification of options for action and the activation of key stakeholders. However, it will also be necessary to develop starting points for the monitoring process, which will be an important part of its implementation process.

## 7 Annex

### Conference Programme

*Moderation: Christian Baumgartner (response & ability)*

**9:30 Registration**

**10:30 Welcome and key note speeches**

Gabriele Bauer (Lord Mayor, City of Rosenheim)

Rita Schwarzelühr-Sutter (Parliamentary State Secretary, German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety)

Markus Reiterer (Secretary General, Permanent Secretariat of the Alpine Convention)

Hans-Joachim Hermann (German Environment Agency, Presidency of the ad hoc expert group for the preparation of the sixth Report on the State of the Alps)

**11:30 Key findings of the sixth Report on the State of the Alps and current activities of the Alpine Convention**

Stefan Marzelli (ifuplan), Vivien Führ (agado), Aureliano Piva (Permanent Secretariat of the Alpine Convention)

*Presentation of the key findings of RSA 6 and related activities of the PSAC in form of a triologue.*

**12:30 Lunch break**

**14:00 Parallel panel discussions**

**Panel 1: Green regional economic development**

Moderation: Stefan Marzelli (*ifuplan*)

Contributions by:

- **Andreas Roß** (*Wirtschaftsforum Oberland, Germany*): “The Sustainability Declaration Benediktbeuren as a basis for Green Economy in the Oberland”
- **Marzio Demartini** (*Associazione Pro Brontallo, Switzerland*): “Development programme Brontallo”
- **Wolfgang Wimmer** (*Ökomodell Achantal, Germany*): “100% from the region for the region – sustainable energy supply in Achantal”



## Panel 2: Innovation for more sustainability

Moderation: Hans-Joachim Hermann (*German Environment Agency*)

Contributions by:

- **Gabriele Grea** (*Urbano Creativo, Italy*): "Financing innovation: Jam Bite - joint advanced meetings in the Alps"
- **Christian Zeyer** (*swisscleantech, Switzerland*): "Setting the right framework conditions for green innovations"
- **Andrea Sgarbossa** (*City of Trento, Italy*): "Innovative management of natural reserves in the Alpine Town Trento"

## Panel 3: Climate neutral Alpine municipalities

Moderation: Andreas Pichler (*CIPRA International*)

Contributions by:

- **Thierry Billet** (*Vice Mayor of Annecy, France*): "Energy management in Annecy"
- **Pirmin Moser** (*Municipality of Sattel, Switzerland*): "Climate neutral tourism"
- **Jerney Sever** (*City of Idrija, Slovenia*): "Joining forces for sustainable lifestyles"

## Panel 4: Well-being and sustainable lifestyles

Moderation: Ingrid Fischer (*Third Mayor of Sonthofen*)

- **Claudia Sacher** (*feld association, Austria*): "Using the unused – best practice from Austria!"
- **Jakob Dietachmair** (*CIPRA International, Liechtenstein*): "100 max – the Alpine initiative for climate protection"
- **Christian Gelleri** (*Chiemgauer e.V., Germany*): "Chiemgauer - a regional currency"

**15:30 Coffee break**

**16:00 Summary of the panel discussions and perspectives for a Green Economy in the Alps**

Christian Baumgartner (response & ability) and the moderators of panels summarise and discuss panel outcomes.

## Recommendations of the sixth Report on State of the Alps

**In a nutshell, the long-term goal for the Alpine Convention area is a shift towards a Green Economy, which considers and respects the environmental limits of the Alpine area, takes into account global challenges like climate change and limited natural resources, and supports the quality of life and well-being of its residents. This Green Economy needs to be specified by objectives on greenhouse gas reduction. It requires the adoption of an integrated approach that tackles the mitigation of and adaptation to climate change, ensures energy and resource efficiency and preserves and continuously improves natural capital, ecosystem services and biodiversity. These objectives need to be transferred into long-term economic strategies to establish a framework for a Green Economy.**

**The following recommendations are based on the conclusions of the report on an Alpine Green Economy:**

1. *Use Green Economy as an engine for regional development.*
  - The Alpine Convention area is rich in natural and cultural resources and energy sources. They offer the economic basis for regional economic development. For a sustainable management of these resources, the region's natural and cultural capital has to be assessed and taken into account.
  - Green innovative businesses and start-ups need to be promoted on a regional level to facilitate eco-innovation for technological and non-technological solutions.
  - The Green Economy approach should be integrated into regional strategies, e.g. by developing concepts for sustainable agriculture, forestry, energy, tourism or transport.
  
2. *Use climate and energy challenges to trigger eco-innovation.*
  - Increasing efforts of the Alpine countries for GHG mitigation measures and a decoupling of GHG emission and production are needed. Energy saving, the development of low emission production, transport and energy are core components of a Green Economy. The Alpine region should aim towards an ideal goal of overall climate neutrality.
  - The expansion of renewable energy production capacities, especially – where appropriate – the sustainable and environmentally friendly use of biomass and hydropower and high-potential technologies such as solar and wind energy should be encouraged in accordance with nature conservation concerns and sustainable land use. Encouragement and innovation is needed also for the development of energy storage and smart power grids.
  - Consistent implementation of innovative, low-carbon and energy-efficient technologies, in particular in the sectors of transport, energy generation, construction industry, tourism and agriculture, is needed.
  
3. *Consider ecosystems and biodiversity as an economic asset in the Alpine area.*
  - Policies and programmes should respect and incorporate the value of landscapes, natural capital, ecosystem services and biodiversity, also in an economic sense. This is of particular importance as the Alpine area is a European hotspot for habitat and species diversity.
  - The benefits of innovative concepts such as natural and cultural capital and ecosystem services need to be introduced and explained to decision-makers. Research must be supported and a common approach on how to assess, monitor and value Alpine ecosystem services must be developed.

- External costs need to be incorporated into the market prices using innovative concepts and instruments. Examples are green accounting on a national, regional and local level or schemes for payments for ecosystem services (PES). The latter could for example include services produced by agriculture and forestry businesses for society as a whole.
4. *Take steps to turn the Alpine area into a resource-efficient, circular and cost-effective economy.*
- Resource efficiency needs to be improved, particularly in terms of water use, energy, material, land take and loss of productive soils. Moreover, possible measures and instruments in these fields should be promoted. These include smart energy-efficiency networks, consulting programmes and voluntary schemes for enterprises. Policies and programmes on resource efficiency should stress that efforts in this field lead to cost savings and thus create economic benefits.
  - In terms of efficiency, the use of regionally available, renewable resources such as wood should be considered to substitute non-renewable resources.
  - Land take decisions should be based upon an integrated consideration of land use objectives and the protection of environmental and cultural heritage steered by existing and innovative spatial planning and land management instruments. Spatial planning and urban planning should reduce land take and loss of soils by applying efficient land management focusing on inner urban development, reusing brownfields, performing cost benefit and environmental impact assessments and reassuring that there is an actual demand before developing the land. The regional responsibility and co-operation across the boundaries of local communities for resource-conserving land management is to be strengthened.
5. *Use Green Economy to support the competitiveness of the Alpine Convention area.*
- Anticipating future challenges and developing a Green Economy represents an economic opportunity for enterprises and regions.
  - Enterprises should be encouraged to use a comprehensive environmental management instrument that includes all environmental aspects, such as EMAS and ISO 14001. Energy efficiency aspects may also be addressed by applying energy management systems like ISO 50001. In addition, the use of instruments such as credible sustainability labels should be encouraged. Furthermore, consolidated methodologies such as Life Cycle Assessment (LCA) should be promoted by taking into consideration the on-going efforts on an EU level (Product Environmental Footprint (PEF)).
6. *Use opportunities for the creation of green jobs.*
- The transition to a Green Economy offers a wide range of opportunities for positive employment effects in the Alpine area by creating new green jobs and strengthening regional development. This should be supported by appropriate policies.
  - Such policies should include the support of innovation in small and medium-sized businesses, the creation of networking structures among all stakeholders of a Green Economy, the promotion of sustainable investments and the setting of incentives to stimulate the demand for environmentally friendly products, technologies and services at the private and public level.

- Appropriate training and education measures for the present and future workforce should be implemented to develop the green skills that are needed for future jobs and to satisfy the needs of a Green Economy in terms of job qualifications.
  - Potentials for green jobs and employment lie in particular in the construction, energy, transport, tourism, industrial and service sectors. Therefore, sector-specific strategies should be developed to tap into these potentials.
7. *Improve the quality of life and well-being of Alpine residents through a Green Economy.*
- Through innovation and efficiency gains in agriculture, transport, energy and industry, harmful emissions should be further reduced and the health and well-being of residents improved. Subsequently, the negative economic impacts of emissions can be reduced.
  - Progress in energy and resource efficiency should also result in cost benefits for residents.
  - The evolution of the job market towards green jobs should offer new opportunities of economic well-being and trigger a more socially inclusive development.
  - The promotion of regional sustainable products should be fostered. Their consumption can contribute to the well-being of residents while supporting regional producers and economies.
8. *Improve data availability and monitoring.*
- The data and good practice examples collected in the framework of the RSA will be accessible to interested stakeholders.
  - Relevant and comparable data and indicators for measuring Green Economy will have to be made increasingly available and regularly updated at a regional level in synergy with the System of Information and Observation on the Alps and existing international indicators. In particular, this is needed to evaluate achievements in terms of carbon reduction, installed capacity of renewable energy, improvements of energy and resource efficiency, regional green jobs as well as new indicators beyond GDP.
  - A knowledge pool for a Green Economy in the Alpine area should be created and maintained, as this is an essential step for the promotion of this concept. In this respect, the Permanent Secretariat of the Alpine Convention plays a key role.
9. *Prepare a comprehensive and ambitious Action Programme for a Green Economy in the Alpine Area by 2018.*
- This Action Programme should further elaborate the above recommendations and identify specific fields of actions and the relevant actors.
  - The development of such an Action Programme should involve all relevant stakeholders in the Alpine Convention area, particularly businesses, municipalities and towns, NGOs and the civil society.

The Federal Republic of Germany represented by the German Environment Agency, and the Permanent Secretariat of the Alpine Convention hosted the Alpine-wide conference “Greening the Economy in the Alpine Region” in Rosenheim.

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