

NATIONAL REPORT ON EXISTING STRUCTURES FOR SUPPORT OF ECO- INNOVATION – AUSTRIA



WP3	Strategy for eco-knowledge
ACTIVITY 3.2	Analysing the environment for ecoinnovation in partner countries
DELIVERABLE 3.2.3	National report on existing structures for support of Ecoinnovation

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1. Abstract

Environment and innovation rank quite high among socio economic policy concerns of Austria. Even though many areas of Austrian eco-sectors such as water quality, waste management, organic farming and nature protection meet comparatively high standards, environmental policy challenges regarding climate and air pollution still remain as bottlenecks in an overall policy overhaul in eco-innovation. Austrian companies are some of the leading international entities in several green technology markets. Clean energy technologies such as, heat generation through thermal solar systems and heat pumps, heat storage systems and smart electricity grids, and technologies for use of biomass for energy production are main drivers of eco-innovation in Austria. Ecological building/construction, smart and intermodal mobility in electricity consumption (i.e. provision for consumers to switch between electricity providers) are among most noted eco-friendly policy initiatives that have gathered momentum in Austria recently. Austria also has the highest recycling rate in the EU, which places Austrian recycling industries in an advantageous position to play key role in the future transformation of Austria towards a circular economy.

In eco-innovation area, total score of Austria in Eco-Innovation Scoreboard (Eco-IS) is 108, 8th place in the EU (2015). The Eco-Innovation Observatory (EIO) devised an index composed of 16 indicators for comparing the eco-innovation performance of a country in comparison with the EU average. The Eco-innovation composite index consists of five components: (1) eco-innovation inputs, (2) eco-innovation activities and (3) eco-innovation outputs, (4) resource efficiency outcomes and (5) socio-economic outcomes.¹

The European Innovation Scoreboard ranks the performance of EU Member States' innovation systems using 27 indicators aggregated into a Summary Innovation Index². This Indicators are clustered into 10 components (1) human resources, (2) attractive research systems, (3) innovation – friendly environment, (4) finance and support, (5) firm investments, (6) Innovators, (7) linkages, (8) intellectual assets, (9) employment impacts, (10) sales impacts. Austria's score at 121.5 lies 19.5 points above the EU average. Austria has improved its innovation performance significantly by 8.9 points, since 2010 and is currently clustered into the "strong innovators" group.³

Economic growth in Austria, boosted by growing consumption and investment, has finally gathered momentum in 2016 (1.5%) after 4 years of rather modest expansion. Level of investment in Austria remained stable at around 22% of GDP (only one percentage point less than before the crisis) during the crisis. Since the improvement in economic outlook in 2015, investment-led growth continued. However, structural barriers, still quite significant, are seen as main constraints for investment in creating and expanding businesses.

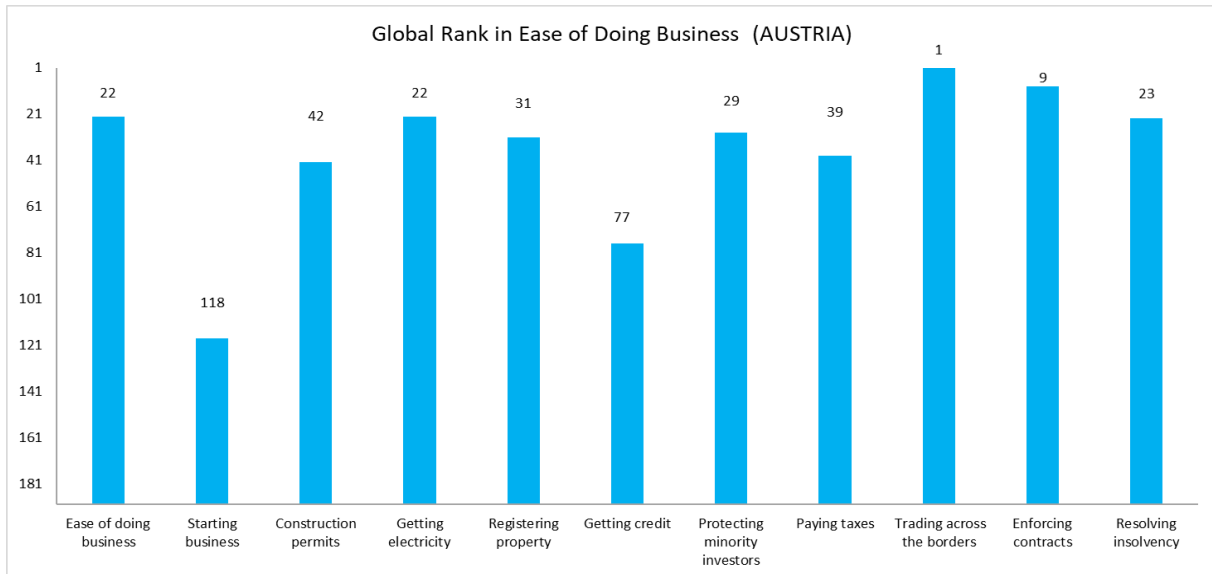
Figure 1 presents the ranking based on the dataset from the World Bank and places Austria at the 22nd position worldwide, ranking it high in the simplicity of doing business.

¹ Eco-Innovation Observatory (Country Profile 2014-2015: Austria, www.eco-innovation.eu)

² <http://ec.europa.eu/docsroom/documents/23910>

³ http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en

Figure 1: Ease of Doing Business (World Bank ranking)



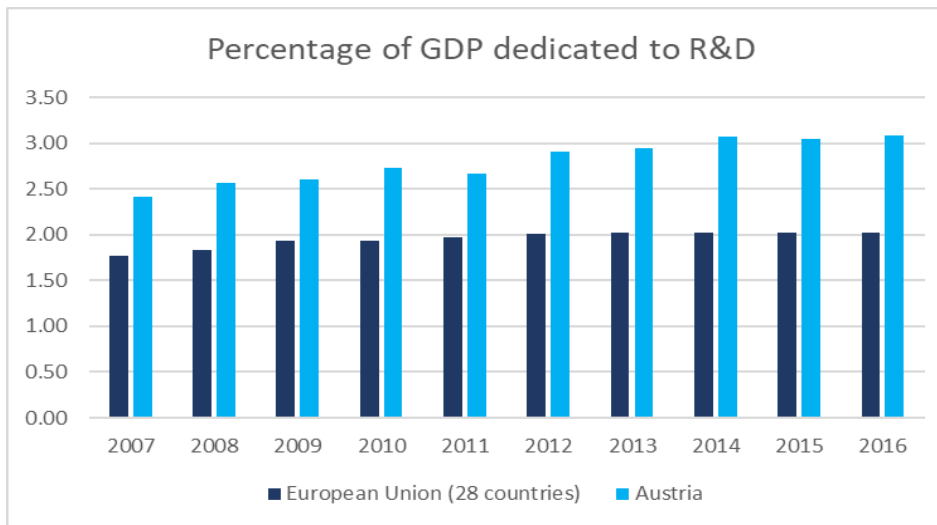
2. Support structures and sources for facilitating eco-innovation

Even though there is no particular policy programme dedicated specifically to eco-innovation or circular economy in Austria to date, a number of measures and initiatives have been introduced by different government bodies in recent years relating to eco-innovation and, to a lesser extent, to circular economy. The main legislative bodies involved include the Ministry of Sustainability and Tourism (BMNT), the Ministry of Transport, Innovation and Technology (BMVIT), and the Ministry of Science, Research and Economy (BMWFW). Furthermore, other organisations, such as the Austrian Chamber of Commerce (WKO), play an important role in supporting eco-innovation-related initiatives. While for BMWFW the key concern is support of basic research, BMVIT focuses on applied research and runs a number of specific programmes related to eco-innovation in support of the sustainability-oriented transformation of the Austrian economy.

Austria's business sector which comprises 99.7% of small and medium scale industries, poses a particular challenge as it prevents high level engagement in eco-innovation and circular economy activities. Eco-innovation inputs comprise investments (financial or human resources) aiming to trigger eco-innovation activities. Concerning the Eco-Innovation Input Index, Austria achieves a score of 87, which is below the EU average, but above the Danube Region average. Austria ranks second in the Danube Region, behind Germany, and twelfth in the EU (2016); a fall from its ninth rank in 2015.

In Austria, R&D expenditure accounted for 3.07 % of GDP in 2015 (Eurostat), recording one of the EU countries with the strongest increase in R&D intensity since 2000. However, the growth in R&D intensity has slowed in recent years. Despite the high overall spending levels, funding of basic research remains low (Figure 2).

Figure 2: Research and Development expenditure as share of GDP



In 2011, a comprehensive national strategy was introduced to boost research and innovation system (*Der Weg zum Innovation Leader*). An updated plan, comprising new guidelines for research, technology and innovation funding came into force in January 2015. In addition, the research premium was increased from 10 % to 12 % in January 2016. In early 2017, Austria announced a further increase to 14 % effective as of January 2018.

The Austrian government also provides financial support for research and development activities in companies. According to Austrian income tax law, companies can claim the Research and Development Tax Credit annually. This scheme amounted to €500 million worth of funding paid to companies in 2013. (Statistics Austria)

- **Accessibility**

Is it easily accessible, for which stakeholder categories more or less? Does applying said support structures require any specific knowledge and experience (steep learning curve) or is there a low entry point?

The environmental technologies industry, composed mostly of small-scale suppliers in Austria often faces barriers with respect to strategic handling of the market. MSMEs also face financial and human resources constraints in terms of resources that can be invested into research and development activities. Another problem associated with this small-scale structure of the Austrian eco-innovation sector is the lack of institutions and instruments necessary to identify and explore synergies at regional and intra-regional levels.

There are several clusters with particular eco-innovation potential in Austria, i.e. the cluster 'Eco World Styria', the 'ecoplus' cluster of the Business Agency of Lower Austria or the 'Environmental Technologies Cluster Upper Austria'. However, limited communication among the existing networks and clusters hinders the creation of shared R&D infrastructures.

Among Austrian business representatives, main barriers emphasised are a disproportionate risk for investments into new, eco-innovative technologies, inadequate access to government aid and tax incentives, missing financial capacities and qualified personnel, and limited incentives provided by current regulatory frameworks (IHS, 2014).

- **Frequency**

Are the support structures carried out on a continuous, periodic or sporadic basis, what is their frequency (frequency of issued tenders, organized events, training programmes)?

The support structures derive from continuous evaluation of the eco-innovation status of Austrian economy. Scholarship and tax credits are made available annually.

- **Stability**

Are the support structures predictable in a sense that they have been and will most likely remain available (experience, tradition)?

Austria has continuously updated its eco-innovation policy framework and the information is readily available to institutions and enterprises qualifying for support. Austria's eco-innovation policies can be described as a mix of first- and second-generation policies, that have a strong focus on traditional environmental technologies, such as pollution management, as well as on innovative technologies in the areas of energy and resource efficiency. The R&D-based tax benefits to industry as well as educational institutions are regularly revised and increased so that incentives to "go eco-innovative" benefit larger sections of the economy.

- **Impact**

Does the support structure achieve the goals for what it was designed for, is it effective?

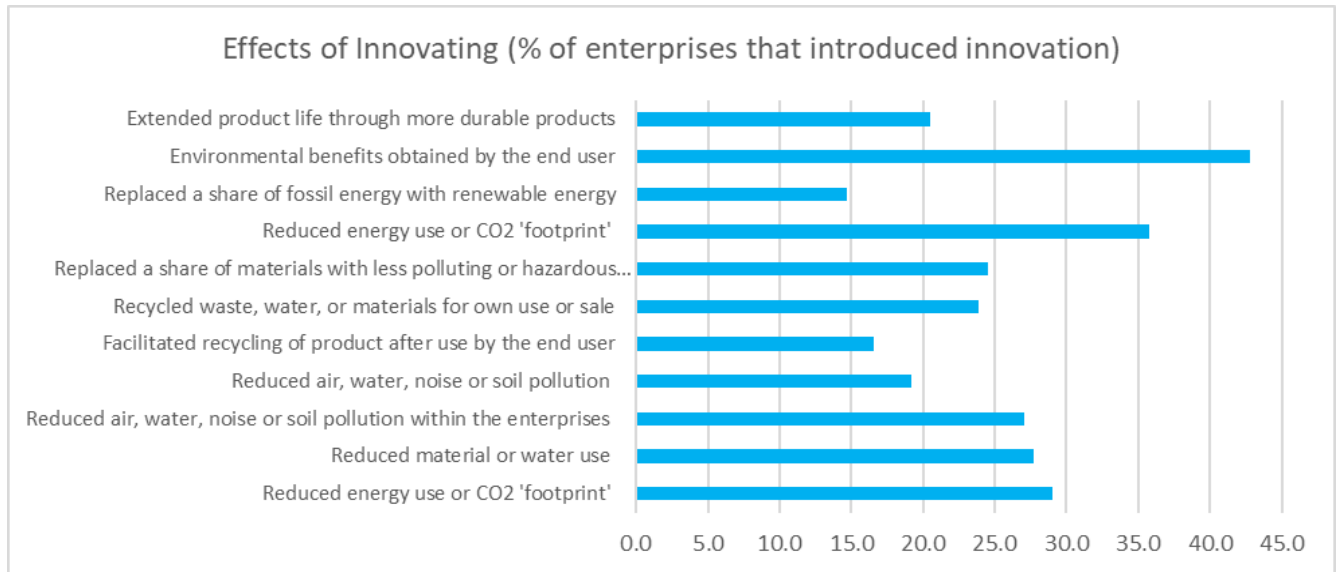
In Austria, employment in knowledge-intensive activities is above the EU and Danube Region average. A share of 14.6 percent of all employees worked in knowledge-intensive activities in 2016, whereas the EU average is slightly lower at 14.1 percent and the Danube Region average at 12.2 percent. The share has increased moderately since 2010 in Austria (2010: 14.0 percent), as well as in the EU and the Danube Region.

Employment in knowledge-intensive activities as a share of total employment in Austria is slightly above the EU average, but Austria needs to try to make these areas more attractive in order to become an innovation leader.

More than half (57.6 percent) of all products exported from Austria involve medium and high technology products. That is slightly above the EU average of 56.2 percent and well above the Danube Region average of 54.2 percent. Four Danube Region countries, i.e. Hungary, Germany, Slovakia and the Czech Republic have a higher share of medium and high technology exports than Austria. The share of medium and high technology product exports has been increasing steadily in Austria since the year 2012. The EU and the Danube Region have also witnessed a strong upward trend.

Around 60 % of the enterprises introduced innovations with environmental benefits within the enterprise and/or by the end user. Environmental benefits arising from innovation are five in the figure below.

Figure 3: Impact of Innovation (based on number of enterprises that have introduced an innovation)



Source: Eurostat

- **Replicability**

Can the support structure be easily adapted and replicated?

Austria's principle of regular revision and increase in tax benefits for eco-innovative enterprises and activities could serve as an example for other countries. Nevertheless, instead of direct replication, prior adaptation to national specifics appears advisable. Consistency and transparency, combined with empirical improvement (i.e. no stagnation of a given structure), appear to constitute most advantageous factors. Why?:

If for SMEs and startups a certain system in funding and funding priorities is recognisable, they can develop their company strategies and focus accordingly. Steady increase in eco-innovation support and increasingly stronger focus on "eco" in the innovation area should occur as a steady and smooth shift. In contrast, strict funding/support stop of non-eco innovation could be fatal to SMEs and thus the entire economy. For funding and support structures, a progressively increasing focus on "eco" would address and benefit a large and diverse group of companies. Regional support structures and institutions are generally performing well in strongly innovative areas and could be expanded to weakly innovative ones. At the same time, cross-communication between those institutions should be stimulated (workshops, seminars etc.); not to unify but to support, recognize and adapt individual strengths.

2.1 Governmental support

Active or passive labour policy

In Austria, the labour policy comprising of active, passive and activating policies is implemented by the Public Employment Service (AMS) at the federal level, and in some instances, in the regional level.

The most important measures of active labour policies include:

- Market transparency: Job matching, careers information and advice;
- Subsidised vocational training to help the labour force to adapt to needs of the market;
- Temporary subsidised employment via recruitment grants.

Passive labour policy measures that are also legal entitlements include:

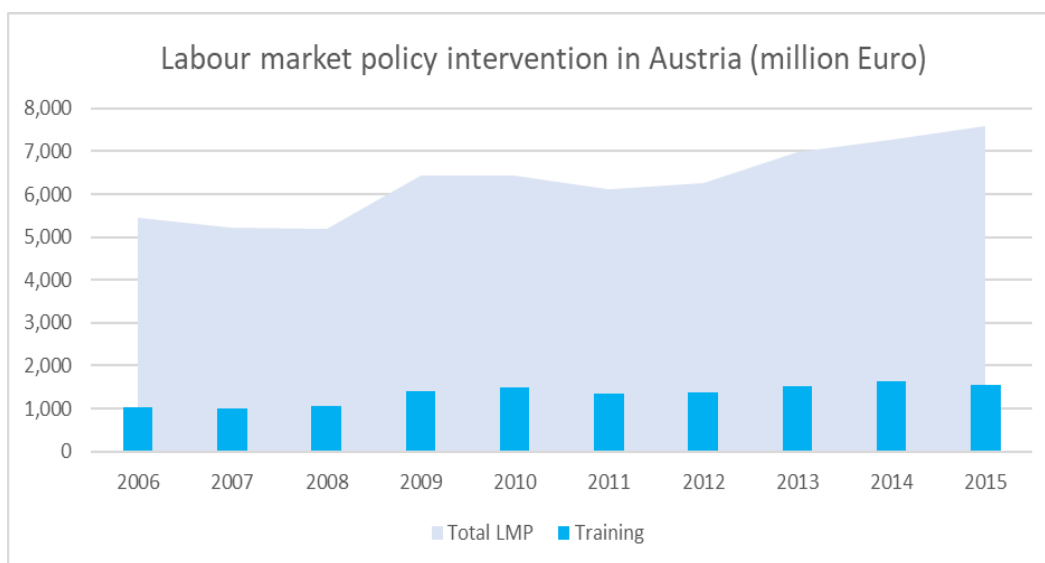
- Unemployment benefit funded by unemployment insurance;
- Means-tested minimum income provided by the provinces;
- Insolvency compensation;
- Advances on a pension that can be availed in case of reduced ability to work or inability to work.

Activating measures are a distinctive feature of Austrian labour market policy. Even though they can qualify as active labour market policy, they are financed by funds earmarked for passive labour market policy. The budget for active and passive labour market policies is projected to reach EUR 8.6 billion in 2017, up from EUR 6.1 billion in 2012. In September 2016, the government took steps to strengthen the labour market policy measures by increasing the staff of the Public Employment Service Austria, and reintroducing skilled workers grants, promoting initial and job-related training, and implementing training guarantee for persons up to the age of 25.

Available tax incentives

In 2016 and 2017, Austria has adopted a number of fiscal measures in the area of finance and regulatory framework, including tax reliefs for R&D intensive activities both in educational institutions and private enterprises. The Foundation Law (Bundes-Stiftungs- und Fondsgesetz 2015) introduces tax incentives for private investors interested in financing non-profit science and research bodies. In 2016, the research tax credit (or research premium) was raised from 10 to 12 percent; this is complemented by direct funding programmes for start-ups and companies in order to foster innovation growth. As a result, in 2017, R&D investments in Austria is expected to increase to EUR 11.3 billion.

Figure 4 A relative representation of training as component of LMP



2.2 Domestic support funds⁴

In Austria, research and development in educational and entrepreneurial sectors is covered by three major funding agencies – the Austrian Science Fund (Fonds zur Förderung der wissenschaftlichen Forschung – FWF), the Austrian Research Promotion Agency (Forschungsförderungsgesellschaft– FFG) and Austria Wirtschaftsservice (aws). They are responsible for achieving the objectives of the Federal Government's research, technology and innovation (RTI) strategy.

HR development funds

The FFG support fund focuses on promoting application-oriented and business-relevant R&D in Austria. The support provided by FFG includes monetary and non-monetary instruments in research and development at firm as well as research institution levels. These measures, aimed at strengthening human resources and optimising the structure of innovation systems, include a wide range of services, such as the job bank for R&D personnel, evaluations for realising tax concessions for research activities, partner search and advisory, facilitating training and networking for research programmes of the EU (Horizon 2020) and the European Space Agency (ESA).

In 2014, the FFG supported 6,105 participants that included business enterprises, research institutions, and universities with total funding worth Euro 617,040; the cash value of the support amounted to Euro 417,170. Support to business enterprises accounted for 48% of the cash value of the funding in 2014. The FFG “Innovationsscheck 10.000”, enables enterprises to largely cover costs for a particular piece of research to be conducted at universities or research institutions that have the requested knowledge and equipment.

Wirtschaftsservice GmbH (aws) provides monetary funding and financing support that includes low-interest loans, guarantees, grants, as well as equity capital financing.

National scholarship funds

The Austrian Science Fund (FWF) is the main institution for promoting basic research in Austria. The FWF supports scientists at different levels (incl. PhD, Postdoc) in all fields of science by financing 3- to 4-year research projects. A detailed overview of (government-provided) budgets and their spendings on the diverse programmes is published in the publically available annual report⁵.

There are special FWF scholarships for female scientist career development. E.g. the Elise-Richter-Programme provides a 4-year-support (finance, advice, workshops) for advanced female researchers up to the level of habilitation, qualifying them to apply for a professorship. However, at Austrian (seriously budget-limited) Universities professor positions, as well as virtually any tenure-track-position, are extremely scarce. As a consequence, top scientist go abroad; meaning that the fruits of National investment (education, scholarships) into Human Resources are harvested outside Austria.

Due to lack of budget, the FWF has to decline a substantial and growing number of research proposals, despite evaluated as “very good / worth supporting” by international reviewers. With approximately 24€ per head of population per year the FWF receives significantly less resources than corresponding

⁴ Austrian Research and Technology Report 2015

⁵ https://www.fwf.ac.at/fileadmin/files/Dokumente/Ueber_den_FWF/Publicationen/FWF-Jahresberichte/fwf-annual-report-2016.pdf (FWF annual report)

institutions of innovation leader countries like Switzerland (97€), Finland (76€) or Germany (37€). Funding of joint projects (duration 3-4 years) has become more and more important, and there are regular calls for specific bilateral partnerships. Many of those consider collaboration with Danube region countries (e.g. AT-CZ, AT-HU, AT-Slo)⁶.

Austrian Agency for International Cooperation in Education and Research (OeAD) provides scholarships in various areas so as to promote Austria as a research hub for young scientists. Support programmes (finance, advice, help with accommodation etc.) exist both for incoming and outgoing scientists.

Local/regional development funds

R&D expenditure in the regional governments level consists mainly of support to the higher education sector and the universities.

2.3 Transnational support funds

Cohesion funds

During the period 2014-2020, Austria expects to receive funding worth EUR 4.9 billion from European Structural and Investment Funds. With its own contribution amounting to EUR 5.7 billion, the total cohesion funds for 4 national programmes for the period is estimated to reach EUR 10.6 billion. The main programmes benefitting from this ESIF are EUR 2.5 billion for environment protection and resource efficiency, EUR 2.5 billion for climate change adaption and risk prevention, EUR 2.2 billion for competitiveness of SMEs, EUR 810 million for research and innovation and EUR 600 million for low carbon economy.

SME instrument

Austria as a high success rate in applications for the SME Instrument grant. In 2017, 13% of all SME applicants were successful in obtaining the grant.

Foreign aid (outside EU)

Though international funding primarily derives from EU budgets, other sources also exist. Examples with thematic relevance to eco-innovations include

- www.klimawandelanpassung.at/ms/klimawandelanpassung/de/kwa_forschung/kwa_forschungsprogramme/
- www.facceipi.com/Strategic-Research-Agenda/FACCE-JPI-European-and-International-Cooperation-Strategy

Above-listed websites link to sub-programmes and more specific information.

A comprehensive overview on what type of grants are available for selected target groups, topics, countries etc. can be found at <https://grants.at/>, an online portal with filtering options.

A similar service, specifically for startups, is available via <https://www.austrianstartups.com/grants/>.

⁶ <https://www.fwf.ac.at/de/forschungsfoerderung/fwf-programme/internationale-programme/joint-projects/>

2.4 Business incubators

National and Local incubators

Global Incubator Network (GIN), implemented in coordination between the Federal Ministry of Science, Research and Economy, is a new platform that was created in Austria to strengthen the financial and economic infrastructure for start-ups, investors and start-up agencies. The GIN provides international expertise and networking to help Austrian start-ups to go global. It also offers support schemes for international start-ups and investors to enter the Austrian and European market. Financial resources available under this measure amounts to EUR 4 000 000;

National incubator network

The Austrian Research Promotion Agency (FFG) and Austria Business Service Company GmbH (AWS) provide support for nascent enterprises. The FFG Startup Funding and High Tech Startup Funding allow long-term repayment periods. The AWS Startup Center provides support from the initial idea to international expansion amounting to EUR 100 million each year.

Co-working initiatives, “fab-labs“

Fab-labs, short for fabrication laboratory, is typically an open high-tech workshop equipped with computer-controlled machines that are necessary to manufacture a wide variety of products. Participants share space and infrastructure to produce inventive products on their own. This concept initiated by Prof. Neil Gershenfeld (MIT, Center for Bits and Atoms) in 2002, is considered to be one of the most innovative ideas that helps technology intensive innovative startups. This idea has taken root in Austria as well; Happylab and Makerspace are among the leading fab-labs in Austria.

2.5 Support by companies (internal and external)

Describe the status on:

Apprenticeship programs

In Austria apprenticeship training takes places at two locations: company-based training of apprentices in the company and it is complemented by compulsory attendance of a part-time vocational [Berufsschule]. About 40 % of all Austrian teenagers join apprenticeship training programmes upon completion of compulsory education. around 40,000 companies train approximately 120,000 apprentices.

Private scholarships/fellowships

There are diverse private scholarships/fellowships, most with a clearly-defined target group and/or research topic. Many universities receive support from private scholarship donators (often these are previous professors), publish an internal call, and subsequently select talented scientists.

Organizations of hackathons

Hackathons have been gaining popularity in Austria, attracting many start-ups and young entrepreneurs. Event announcements can be found at <https://www.austrianstartups.com/events/>

2.6 Crowdfunding

Describe the accessibility and status of:

National crowdfunding platforms

A crowdfunding platform to enhance access to finance was introduced during 2015 and the first quarter of 2016. An independent Crowdfunding Law (*Alternativfinanzierungsgesetz – AltFG*) was created along with specific regulations for crowdfunding. Conditions and requirements for crowdfunding platforms and projects were outlined to enable private investors to invest within the legal framework introduced by the AltFG.

Available international crowdfunding platforms

- <https://circleup.com/>
- <https://www.crowdcube.com/>
- <https://www.entoro.com/>
- <https://www.ourcrowd.com/>

2.7 Events and networking

Local workshops & International seminars: Several workshops and seminars on innovation were undertaken, both at Federal Government and Private sector level in recent years. For example:

On 18th January 2016, the Austrian Federal Ministries BMVIT, BMWFW and Austrian Council (RFTE) together with winnovation hosted Open Innovation Strategy Stakeholder Workshop. 413 participants, representing the several economic sectors in the area of policy, science and civil society, participated in the workshop. The workshop was aimed at gathering feedback and ideas from Austrian society for the development of a new Open Innovation Strategy for Austria (www.openinnovation.gv.at). This was an initiative that is first of its kind globally. As a follow up to this workshop, since fall 2016, an assessment of Austrian innovation system in relation to leading countries in innovation around the world has become an ongoing initiative.

Atos, a leading multinational company providing integrated design and operational solutions in business processes opened its first Competence Centre for Industry 4.0 in Aspern, Vienna in October 2016. (*Industry 4.0 is defined as fundamental change in the economic system, that is associated with a change in the business processes and business models of industrial companies.*) The competence center aims at providing training in most efficient and practicable way to implement Industry 4.0 projects, by organizing workshops and training sessions. The Competence Centre is also open to Austrian businesses as a laboratory for testing innovations and as a exhibition platform for concept productions. Vienna University of Technology (TU Wien), in partnership with Atos, opened Austria's first Industry 4.0 pilot factory in late 2015.

2.8 Promotion and marketing

In Austria, more than 300 trade shows, expos take place annually. Most common types of trade fairs relate to buildings and construction material.

3. Support structures and sources for energy efficiency, renewable energy and environment conservation

Austria, though leading in energy efficiency and environmental indicators, still has a relatively high per-capita consumption of energy as compared to EU and Danube region averages. In order to fulfil the commitments to the energy efficiency Directive 2012/27/EU, on 1 January 2016, the Energy Efficiency Guidelines Regulation (Energieeffizienz-Richtlinienverordnung) entered into force. These regulations specify the duties of the national energy efficiency monitoring body and have outlined over 100 possible methods for documenting, reporting, assessing and classifying energy efficiency measures.

More than 40 Austrian organisations at the federal as well as state or municipal levels offer energy efficiency information services for consumers. The Klimaaktiv, Austrian government's climate change information and grant programme was established in order to support the implementation of Climate Change Strategy. It is overseen by the Ministry of the Environment, and managed by the Austrian Energy Agency. A few policy measures taken under the programme are:

- Tax reform: zero-CO2 passenger cars and company cars are eligible for VAT discounts from 1st January 2016
- Establishment of a housing investment bank (WBIB-G) to support housing construction of energy efficient dwellings, and the Act on non-profit housing, entered into force on 1 January 2016.
- Refurbishing of public buildings to reduce energy consumption
- In order to increase sustainability of energy consumption there are a few key policy instruments that are being implemented nationwide:
- On September 23rd, 2009, the federal parliament passed an extensive amendment to the Austrian Green Electricity Act (Ökostromgesetz) with longer support periods for wind and solar plants, adjusted feed-in tariffs. These changes are aimed at increased capacity building specifically in wind and hydro power and biomass plants.
- National support policy the Environmental Support Act (Umweltförderungsgesetz) promotes use of renewable energy mainly in the form of investment grants. These grants are aimed at addressing support levels for commercial entities, non-profit organizations, public institutions and utilities engaged in renewable energy production. Private households receive investment grants at the provincial level.
- The Resource Efficiency Action Plan (REAP), devised in 2012 promotes information and awareness raising activities on sustainable energy production and use; provides energy advice to private households, public bodies and companies; carries out media campaigns for better understanding among public.
- Green Electricity Act 2012 has ensured an increase in public funding of green electricity production to up to 50 million euros. This is designed to increase the share of electricity consumption generated by renewable energy sources to 85% by the year 2020.
- With the above measures and additional policy framework. Austria aims to achieve it 2020 goals and be a global leader in sustainable and secure energy supply while ensuring economic growth.
- Present an overview of support structures that are in your opinion essential to facilitating eco-innovation in your country.

4. Summary

Given the structure of the Austrian business sector, where more than 99 % of the enterprises are small and medium scale enterprises, support structures aimed at supporting MSME and start-ups in implementing innovative business ideas are most conducive to fostering innovation growth. Most of the measures described in the present report are aimed at supporting MSMEs financially as well as structurally. Following measures are a few of the new initiatives that have taken off in recent years and can be expected to impact eco-innovation in Austria.

- The Foundation Law (Bundes-Stiftungs- und Fondsgesetz 2015) introducing tax incentives for private investors interested in financing non-profit science and research bodies.
- Crowdfunding platform created to enhance access to finance was introduced during 2015 and the first quarter of 2016. (Alternativfinanzierungsgesetz – AltFG)
- The AWS Startup Center aimed at providing support from the initial idea to international expansion amounting to EUR 100 million each year.
- Global Incubator Network (GIN), implemented in coordination between the Federal Ministry of Science, Research and Economy, is a new platform that was created in Austria to strengthen the financial and economic infrastructure for start-ups, investors and start-up agencies.

The above measures as well as revamping of tax laws to support research and development in private as well as academic institutions have very high potential to drive eco-innovation in Austria.

Focusing on areas, where there is need for improvement according to the Eco-Innovation Index, the following aspects require reflection:

Eco-innovation inputs comprise investments (financial or human resources) aiming to trigger eco-innovation activities. Considering the substantial eco-innovation inputs, Austria surprisingly does not perform adequately well. Public funding in terms of the government’s environmental and energy R&D appropriations and outlays is (slightly) below the EU average, while green early-stage investments is very low in comparison to the other EU28 member-states. With respect to eco-innovation output, Austria does well regarding patents and publications, but lies below the EU average concerning eco-innovation related media coverage. The relatively low media coverage on eco-innovations may illustrate the need for creating more awareness for this subject. Looking at resource efficiency outcomes, Austria scores well on energy productivity, but lies far below the EU average regarding material productivity and GHG emissions intensity. Regarding the Socio-Economic Outcomes, Austria performs well with respect to the exports of products from eco-industries but lies below the EU average concerning employment in eco-industries and circular economy and revenue in eco-industries and the circular economy.

Austria performs well in the three performance groups addressing the framework conditions (i.e. human resources, attractive research systems and innovation-friendly environment), in the three performance groups focusing on innovation activities (i.e. innovators, linkages and intellectual assets) and in the performance group “firm investments”. Weaknesses are present with respect to the two performance groups directed at impacts (employment impacts and economic effects), in particular with respect to employment in fast-growing firms in innovative sectors and exports from knowledge-intensive services. Another weakness can be found in the performance group “finance and support” concerning “venture capital investment”, in which Austria is a true laggard.