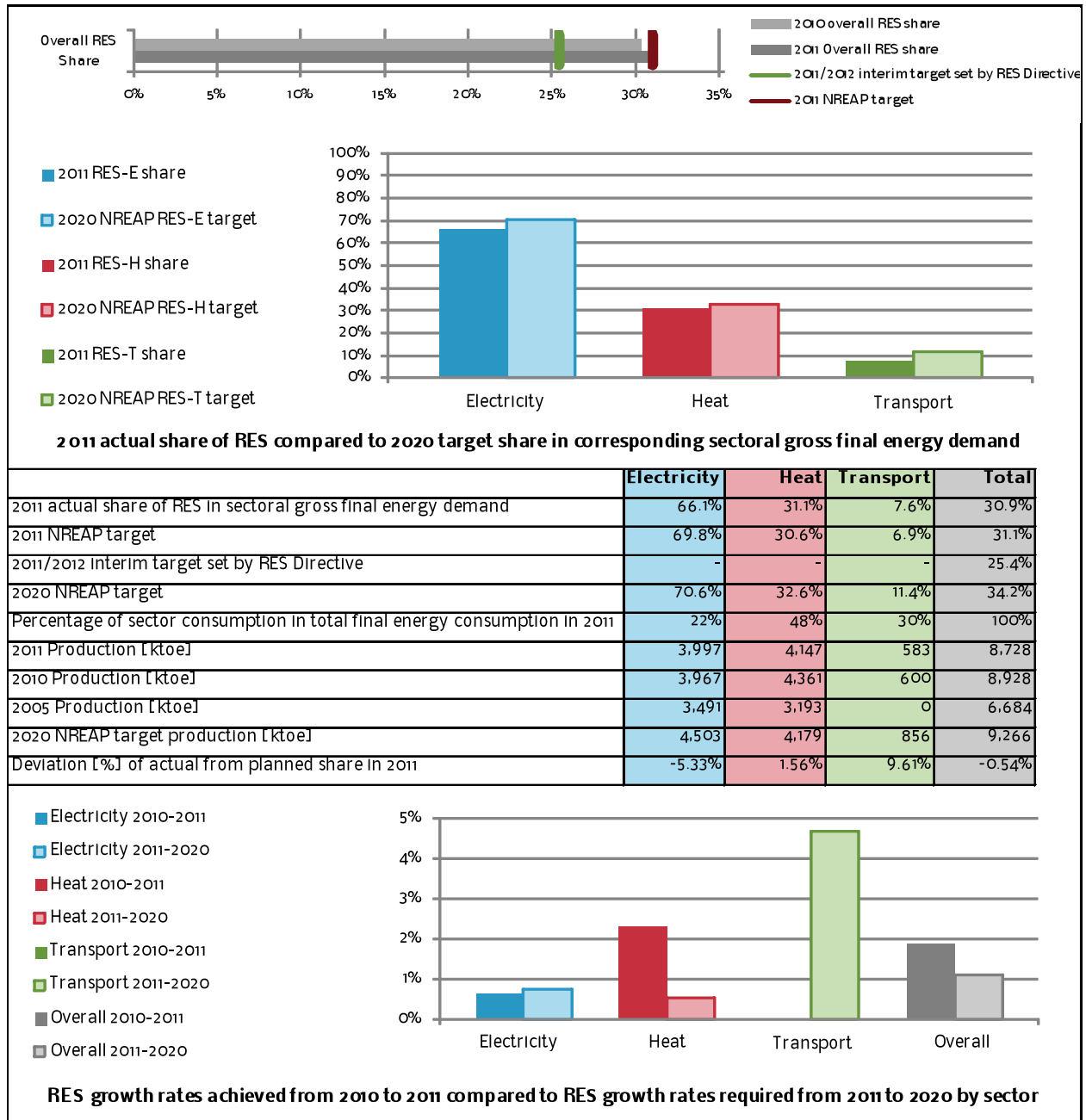




A. AUSTRIA

1. NATIONAL DEVIATIONS REPORT



- Austria has achieved the interim target 2011/2012, but is slightly behind in the NREAP 2011 target due to a negative deviation in the electricity sector share.
- Compared to the prior 6-year average, growth was slower between 2010 and 2011. The transport sector even experienced negative growth.
- Growth rates are sufficient to achieve the 2020 target for RES overall and in the heat sector. In the electricity and transport sectors, growth needs to accelerate in order to achieve the target.



2. NATIONAL BARRIERS REPORT

The Austrian RES-E Sector

Due to its favourable natural conditions, Austria's electricity generation mix is historically dominated by hydro power. Therefore, Austria started with a very high share of RES-E, which was 62% in 2005 and reached 69% in 2010, according to the National Renewable Energy Action Plan¹⁷, of which 58.5 % was generated by hydro power plants. Hence, Austria can be considered as the European leader on RES contribution to gross electricity consumption.

With the adoption of the first Green Electricity Act in 2003, the Austrian Government intended to bring new renewable energy technologies such as wind, solar or biomass closer to the market. The lucrative feed-in tariff attracted many investors and led to a swift development of these technologies in Austria (Schneider, Umweltbundesamt).

In 2006 however, the Government reacted on the rapid increase of installed renewable capacities and revised the Green Electricity Act. Additionally, the feed-in tariffs were considerably lowered, which led to a sharp decrease of new installations.

In 2011, an amendment of the Green Electricity Act was passed which introduced a revised feed-in tariff system. A central element of the new legislation was the increase of the annual support cap, i.e. support is being granted only as long as funds are still available. After the new law was adopted, the tailback of renewable energy projects could subsequently be reduced and new projects financially supported. Currently, the tariffs are high enough to enable a sustainable development of the RES-E sector.

Regarding the different technologies, there is still potential for wind and PV. The use of biogenic material has less promising prospects (e.g., due to competition between energetic and material use of biomass), and the further development of hydro is notably hampered by the Water Framework Directive (Schneider, Umweltbundesamt).

Support scheme

In Austria, electricity from renewable sources is supported mainly through a feed-in tariff, which is set out in the Green Electricity Act¹⁸ and the regulations related thereto. The operators of renewable energy plants are entitled against the government purchasing agency, the Clearing and Settlement Agency¹⁹, to the conclusion of a contract on the purchase of the electricity they produce as long as funds are available (RES LEGAL Europe database).

The feed-in tariffs for the different renewable technologies are stipulated annually through a resolution of the Federal Minister of Economy, Family and Youth²⁰. The tariffs are granted for 13 or 15 years, depending on technology. After the feed-in tariff has expired, most installations can sell their electricity under a purchase obligation at market prices minus balancing costs for another 12 years (RES Integration - Country Report Austria).

Barriers to RES-E

Stop-and-go support policy

While the applied feed-in tariffs and other incentives for renewable energy projects can be generally considered as favourable for the development of PV, wind and other renewable energy technologies, the unclear funding situation due to the annual support cap can lead to considerable latencies. This stop & go support policy could therefore scare off possible investors (Schneider, Umweltbundesamt).

The new subsidy-structure for PV (a mixture of invest-subsidy and feed in tariff) is expected to cause unnecessary bureaucracy. For a positive administration decision too many public authorities have to be contacted, whereas projects cannot be started until the disbursement of subsidies is granted. Therefore, the implementation of PV projects could be delayed.

¹⁷ http://ec.europa.eu/energy/renewables/transparency_platform/doc/dir_2009_0028_action_plan_austria.zip

¹⁸ Ökostromgesetz (ÖSG)

¹⁹ OeMAG - Abwicklungsstelle für Ökostrom AG (www.oem-ag.at)

²⁰ Bundesminister für Wirtschaft, Familie und Jugend (www.bmwfi.gv.at)



Annual support limits for electricity from renewable energy sources may compromise the trust of RES investors. Since demand exceeds supply, representatives of the PV association argued that the development of the market had been slowed down by this regulation (Liebl, PV Austria).

Grid loss fees discriminate large domestic RE producers

In Austria, operators of plants with capacities exceeding 5 MW have to pay a so called grid loss fee²¹, which before was distributed amongst all consumers. The payment of this fee means a significant burden mainly for producers of renewable electricity with the production capacities already up and running, as the profitability of electricity production is strongly dependent on the feed-in tariffs and has been calculated without taking those additional fees into account (RES Integration - Country Report Austria, 2011). According to the Federal Environment Agency, this applies especially to large wind power plants (Schneider, Umweltbundesamt).

The grid loss fees were introduced to transfer net grid costs to the plant operators. Since these costs were not foreseen during the implementation of the projects, they can lead to considerable financing issues and clearly constitute a discrimination of large domestic renewable energy producers on the Austrian energy trading market. In 2013, the grid loss fee rose by 52 % compared to 2012 and even by 84 % compared to 2011. The reallocation of these charges from consumers to plant operators contravenes the Austrian federal constitution (Moidl, IG Windkraft).

Presumably, this barrier could soon be mitigated as the passage of a new regulation for 2013 is on the way which could lower the grid costs for RE producers. At this point however, it is still too early to make an assessment on how this conflict will be managed (Moidl, IG Windkraft).

Problems with the implementation of Water Framework Directive

The implementation of the EU-water framework is causing some difficulties for the development of hydropower in Austria and especially for the revitalisation of existing power plants and hydro-power potentials. These difficulties are caused by the conflict between renewable energy and environmental protection which lead to high investment costs for the technical expertise in the approval process as well as highly bureaucratic requirements to fulfil the demanded environmental standards. Consequently, this results in a reduced trust of the investors in the approval processes and to project delays due to the changing framework conditions (Prechtl, Kleinwasserkraft Österreich).

²¹ Netzverlustentgelt



The Austrian RES-H Sector

Regarding the use of renewable energy in the heating sector, Austria has a favourable starting position. The Austrian heat supply is composed of four comparable fractions which each have shares of about 20-25 %; namely these are oil, gas (mostly used in urban regions), biomass (rural regions) and district heating (a mix of industrial waste heat, CHP, waste incineration and agricultural biomass plants) (Schneider, Umweltbundesamt).

In Austria, district heating networks are managed at local level by the individual heat supply companies. In contrast to other countries with a considerable share of district heating, there is no federal regulation providing a legal framework for the connection of RES-H plants to the heating grid (RES LEGAL Europe database).

The long-term strategy of Austria is to constantly reduce its heat demand. This is mainly being realised in the housing sector. With regard to newly constructed buildings, this strategy has produced quite positive results due to the strict criteria for housing construction. However, the main problem lies in the poorly constructed housing stock, especially multi-family houses from the postwar years and single family houses. These houses reach only very low thermal energy efficiency rates. Therefore, it is the principal task to gradually increase the thermal refurbishment quota (Schneider, Umweltbundesamt).

With regard to the different technologies, there is still a huge potential for the use of solar thermal installations for hot water supply. As the need for hot water supply is high even during the summer season, solar thermal installations could be used to a much larger extent. Until now, conventional energy sources still have a large share, even though they are inefficient and more expensive than building-integrated solar thermal installations. Therefore, a harmonised commitment of all federal states of Austria could be achieved to promote the larger use of solar thermal energy systems (Karner, EEÖ).

Support scheme

The most substantial form of promoting small-scale RES heating and cooling is applied on the level of the individual federal states ("Länder"). There are special investment incentives for solar thermal installations, heat pumps, geothermics and biomass heating plants. The funding guidelines are published separately for each federal state; however, they do not differ in eligibility criteria and respective amounts (RES LEGAL Europe database).

In principle, the investment grants for measures supporting the use of energy from renewable sources in the heating and cooling sector differ according to technology. Usually, a flat rate of de minimis support is calculated. "De minimis" allows for aid up to € 200,000 to be provided from public funds over a period of three years. Another option for support is the 'standard reimbursement rate' which mostly amounts to 25 % of the environment-related investment costs and can be increased through awards (sustainability and gas-cleaning awards, etc.) to a maximum of 30 %. In some cases, the application must be made before the beginning of the project and the environment-related investment costs must amount to a certain minimum sum (€ 10,000) (RES LEGAL Europe database).

Barriers to RES-H

Lack of incentives leads to low quota of energy-efficient refurbishments

The low energetic and thermal refurbishment quotas and the fact that the installation of renewable energy technologies is not obligatory to receive housing subsidies are responsible for the slow development of the use of renewable energy in the housing sector. This applies to all technologies but especially to bioenergy and solar thermal energy which are the most important renewable energy sources in households. These low quotas can be explained by the lacking financial incentives for building refurbishments (Karner, EEÖ).

Currently, the financial support of energy-efficient refurbishments is linked to the thermal refurbishment of buildings for which an annual budget of € 100 million is provided. The lack of a separate budget for energy-efficient refurbishments and the lacking financial incentives for the switch of heating systems in households makes it therefore impossible to reach the intended annual refurbishment quota of 3 % (Karner, EEÖ).



In general, the refurbishment of existing buildings should be promoted more effectively. At the time being, the focus is mainly on newly constructed buildings, which also seems to be connected with lobbying (Schneider, Umweltbundesamt).

Lack of efficiency criteria for existing heating systems

In Austria, there is a big stock of outdated heating systems which would require a reconstruction including the switch to renewable energy sources. However, at the time being there are no efficiency criteria for the reconstruction of existing heating systems. Therefore, the introduction of minimum efficiency criteria for renewable energy installations in households is needed (Karner, EEÖ). Currently, such criteria are being discussed in connection with the amendment of the climate protection act as well as the new energy efficiency act²² (Schneider, Umweltbundesamt).

EPCs are not connected with further measures to implement RE solutions

In pursuance of the European Directive on the energy performance of buildings, every Austrian building needs an Energy Performance Certificate (EPC). This certification however does not obligate building owners to conduct any further measures in order to improve the energy efficiency or the thermal parameters of the building. There is no technical regulation for the construction of buildings which would harmonise the different provisions of each federal state of Austria. Consequently, there is no motivation to invest in renewable energy installations even if the EPC states a high energy demand of a certain kind of building (Karner, EEÖ). According to the Federal Environment Agency, the harmonisation of the different technical regulation is being envisaged (Schneider, Umweltbundesamt).

No more funds available for agricultural biomass plants

There are no more funds available for the support of agricultural biomass heating plants. According to the Austrian biomass association, the installation of such plants cannot be promoted before 2014. This issue is related to the federal political system of Austria: If the Austrian federal states do not agree on co-financing the incentives, also the support from federal funds will not be granted. Therefore, the construction of new biomass plants in agricultural enterprises until 2014 is highly unlikely (Paleczek, ÖBV).

²² Bundes-Energieeffizienzgesetz



The Austrian RES-T Sector

The European Biofuels Directive has been implemented into Austrian law within the scope of the 2004 Fuel Order Amendment. As the share of renewable energy sources in the Austrian transport sector is relatively high, Austria has fulfilled the EU target for biofuels for 2010 (5.75 %) with ease (Schneider, Umweltbundesamt).

In September 2012, the Austrian Government suspended the introduction of E10 biofuel and declared to postpone its introduction until the situation will be clarified on a European level. Previously, the European Commission announced to limit the production of fuels made from food crops to 5 % until 2020 (EUBusiness: "Austria says to postpone introduction of E10 biofuel")

Austria will implement the sustainability certificate for biofuels envisaged in the EU Directive into its national legislation by 1 January 2013. Currently, a sustainability system for biofuels based on this legislation is being developed by the Austrian Government (Schneider, Umweltbundesamt).

Furthermore, Austria can also be considered as forerunner with regard to the use of renewable energy in the rail sector. Currently, 97 % of the electricity used by the Austrian railway company ÖBB is generated by renewable energy sources, predominantly from hydro power plants. Additionally, ÖBB also intends to increase the share of electricity from PV through feeding it directly into the rail network (oekonews: "E-Mobilität in Kombination mit der Eisenbahn").

Support scheme

In Austria, petrol and diesel from a minimum content of 4.6 % resp. 6.6 % of biogenic material are subject to a lower mineral oil tax. Mineral oil solely from biogenic material and E85 are exempt from this tax (RES LEGAL Europe database).

To ensure that biofuels make up a defined percentage of the annual fuel sales, there is a substitution obligation in force since 2005. From 2009, the substitution target amounts to 5.75 %, measured by the total fossil petrol or diesel introduced or used in the federal territory (RES LEGAL Europe database).

Barriers to the transport sector

No action plan for e-mobility

Currently, there is no binding national action plan for the implementation of e-mobility in Austria. Representatives of the BPA stressed that switching to e-mobility and setting clear targets for 2020 would lead to a higher use of renewable energy in the transport sector. Stakeholders claimed that the main reason for this was the lacking knowledge about the advantages of e-mobility. Additionally, the high investment costs discouraged many possible investors (Breinesberger, BPA).

According to the Federal Environment Agency however, there is a roadmap elaborated by three Austrian federal ministries for the promotion of e-mobility. In addition, the Austrian Energy Strategy foresees up to 250,000 electric vehicles until 2020 (a goal which seems quite exaggerated bearing in mind that Austria has about 8.4 m inhabitants); the implementation of concrete measures to foster e-mobility is pending (Schneider, Umweltbundesamt).

Surcharges because of ILUC coefficients

Currently, it is being discussed on the level of the European Commission to introduce a so-called ILUC coefficient representing a surcharge for biofuel crops. ILUC relates to the unintended consequence of releasing more carbon emissions due to land-use changes induced by the expansion of croplands for ethanol or biodiesel. The Commission intends to quantify these ancillary carbon emissions and introduce a surcharge for biofuel crops

The BPA argues that in consequence of this surcharge, biodiesel and vegetable oil would not meet the target values for the reduction of carbon emissions. Provided that this draft proposal will actually be introduced, these fuels could not be counted anymore as biofuel and therefore would not be able to contribute to the biofuel quota (Breinesberger, BPA).



No long term tax concessions for vegetable oil - strict and costly storage rules

A representative of the Vegetable Oil Association argued that, because of the higher costs for necessary conversions of regular diesel engines for the use of vegetable oil, it was necessary to create financial incentives allowing an equal competitive position to diesel. At the moment, investors are still discouraged by the possibility that the exemption from mineral oil tax respectively the application of a lower VAT could be abolished in the upcoming year. The price difference between vegetable oil and diesel is not sufficient to enable an economically sustainable advantage. Additionally, the high quality requirements for the purification of vegetable oil allegedly lead to rising costs which are further exacerbated by the double fuel storage costs (vegetable oil plus diesel). The storage rules for vegetable oil in Austria are the same as for diesel, since experts always consider that also diesel could be stored in the tanks (Breinesberger, BPA).

In reaction to this, a representative of the Federal Environment Authority stated that vegetable oil represented only a minor option for the generation of renewable energy for transportation purposes having limited potential for future development (Schneider, Umweltbundesamt)



Common barriers for the electricity, heating and transport sector

Federal system hampers implementation of RES targets

The decentralised political system of the Federal Republic of Austria can lead to non-transparencies and sometimes even hampers the implementation of national renewable energy targets. Furthermore, it has a negative effect on the realisation of new support schemes and leads to inefficient administrative steps and in some cases even double subsidies (Schneider, Umweltbundesamt).

There is a lack of harmonised guidelines for the installation of renewable energy plants. If there are no clear national guidelines, the quality of the RES installations could suffer which would eventually lead to a general loss of trust in the renewable energy sector. Some federal states in Austria developed their own planning guideline while others failed to do so. Currently, Austria is trying to harmonise these guidelines with own regulations (so called 15a arrangements). However, the implementation of guidelines still lies in the competency of the federal states (Karner, EEÖ).

Similar to the electricity sector, the federal political system of Austria may in some cases also constitute a barrier to the development of the renewable heating sector. As the heating legislation as well as the planning and building laws lie in the competency of the federal states, the harmonisation of the different regulations can prove difficult (Schneider, Umweltbundesamt).

Specific barriers to the development of the biomass sector

With regard to biomass, representatives of the biomass association complained about lacking legal security in some parts of the approval procedure, missing technological knowledge on the side of the authorities, the different application or interpretation of existing federal legislation and the complicated financing of projects due to the negative image of the technology (Pfemeter, Austrian Biomass Association).

However, some of these arguments were weakened by a representative of the Federal Environment Agency (Umweltbundesamt). While the combustion of biomass in newly constructed plants is unequivocally supported by Austrian decision makers, the use of outdated installations or the firing of unsuitable combustibles may lead to issues regarding fine dust pollution. (Schneider, Umweltbundesamt).

The construction rates of new biomass stoves are fluctuating and are highly depending on the respective prices for mineral oil or firewood and subsidies. Additionally, the mineral oil industry effectively promotes the switch to more efficient heating stoves which eventually leads to a lock-in to a fossil technology (Schneider, Umweltbundesamt).



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