

Assessment of climate change policies as part of the European Semester

DRAFT Country Report Austria

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1 Short Summary

Austrian climate and energy policy priorities focus on renewable energy and energy efficiency. In addition, Austria has adopted legally binding GHG emission targets for six different sectors (transport, buildings, waste, energy and industry, agriculture, F-gases). For the period up to 2018, Austria's stated governmental priorities include the further development of renewable energy sources, implementing an import ban on nuclear energy from 2015 onwards, the thermal renovation of buildings, promotion of public transport and increased climate protection measures in the transport sector overall.

The Austrian non-ETS target under the Effort Sharing Decision (ESD) is -16% (compared to 2005). Non--ETS emissions were reduced by 11.4% between 2005 and 2013 which is above the interim target. According to the latest national projections submitted to the Commission and taking into account existing measures, the 2020 target is expected to be missed by a margin of 6.6 percentage points.

The key policy developments in the last year (Jan. 2014 – Jan. 2015) include the adoption of the Energy Efficiency Act in Jul. 2014 to implement the European Energy Efficiency Directive (EED) (See Chapter 4.2.2.). Furthermore, a number of transport-related measures like a new funding initiative aiming at a reduction of CO_2 emissions in climate- and energy-model regions in the transport sector, a flagship project on E-mobility and a funding programme encouraging the development and use of innovative technologies to increase efficiency in the transport system were adopted in 2014 (See Chapter 4.2.4.).

2 Climate and energy policy priorities

Austria is pursuing a variety of climate and energy policies. Climate-related instruments focus on renewable energy and energy efficiency. Furthermore, Austria has adopted legally binding GHG emission targets (see below). Regarding climate and energy, the Austrian government's work programme for the period 2013-18 states that Austria aims to continue the development of renewable energy sources. In addition, the programme includes an import ban on nuclear energy from 2015 onwards and aims for a long-term ban on fossil fuels. Further stated priorities of the political framework for the period 2013-18 are the thermal renovation of buildings, promotion of public transport, increased climate protection measures in the transport sector, further development of e-mobility and greening the truck toll structure (Bundeskanzleramt 2013).

In line with the EU's 2020 climate and energy targets, Austria aims to attain a 34% share for renewables in final energy consumption by 2020 (European Commission 2014a). In 2013, the share of renewables in final energy consumption amounted to 32.5%. Austria's 2020 non-ETS target is to achieve a 16% reduction of greenhouse gas emissions, compared to 2005 levels. In the ETS sectors the EU-wide 2020 target amounts to a 21 % reduction compared to 2005 levels in the ETS sectors (EEA 2014c). The emissions reductions in the non-ETS sector amounted to 11.4% in 2013 (compared to 2005). Between 2005 and 2013, Austria reduced its total GHG emissions by 13%. During the same period, Austria's economy grew by 11% (Umweltbundesamt 2014). Furthermore, Austria aims to increase energy efficiency and reduce final energy consumption to 1,050 PJ by 2020 according to its newly adopted 2014 Energy Efficiency Act (See below Chapter 4.2.2.). In 2013, the final energy consumption amounted to 1.119 Petajoule (1.8% higher than 2012; cf. Schleicher et al. 2013).

Austria's total energy import dependence has decreased from 69% in 2008 to 64% in 2012 (European Commission 2014). Austria's energy mix is relatively well diversified. . In 2012, oil accounted for 36% of the energy consumed while renewables (30%) were Austria's second largest energy source. In contrast, gas was still the second largest component in 2008 and accounted for 24.5% in 2010 (Lebensministerium 2011a) and 22% of the energy mix in 2012. In 2012, solid fuels accounted for 10% of Austria's energy mix (European Commission 2014).

There are approximately 190,000 green jobs in Austria (BMLFUW 2014b). About 5% of the Austrian workforce is employed in sectors such as renewable energy, soil and water protection and energy efficiency (OECD 2013b). Mainly due to the renewable energy sector, the number of green jobs is constantly increasing.

The climate protection initiative "klima:aktiv" designed by the Federal Ministry of Agriculture, Foresty, Environment and Water Management in 2004 and coordinated by the Austrian Energy Agency focuses on five pillars to support stakeholders with the energy transition: education and training of professionals, the development of standards and ensuring quality, informing and stimulating innovative approaches, providing advice and support and linking partners (klima:aktiv 2014).

The Austrian Minister for the Environment and the Minister for Economic Affairs initiated a stakeholder process in Apr. 2009 to establish a new Energy Strategy for Austria (BMLFUW 2014d). Austria's 2010 Energy Strategy was adoped by the Federal Government in Mar. 2010 and is founded on the following three principles: security of energy supply, energy efficiency and renewables. Security of supply shall be increased while ensuring the highest possible degree of cost effectiveness. The energy efficiency pillar aims for an energy efficiency improvement at all stages of the provision and use of energy. In the context of renewables, the focus is on the enhancement of hydro and wind power, biomass and photovoltaic (BMWFJ 2010). The implementing measures to ensure the Strategy's target of maintaining final energy consumption at 2005 levels are divided into several different categories, including industrial buildings, production and services, as well as trade and small-scale consumption, mobility, energy provision, security of energy supply and general measures (BMWFJ 2011).

Austria introduced a Climate Protection Act (Klimaschutzgesetz) in 2011. It constitutes an important pillar of Austria's climate policy until 2020. The Climate Protection Act was amended in 2013 to include maximum GHG emission amounts for different sectors (transport, buildings, waste, energy and industry, agriculture, F-gases) for the period 2013-2020 (BMLFUW 2014f). Specific measures of the Climate Protection Act include enhancing energy efficiency, increasing the use of renewable energy sources, recognition of climate change in spatial planning, mobility management, waste prevention, expansion of natural carbon sinks and promoting economic incentives for climate action (Austrian Energy Agency 2012). The Climate Protection Act builds on the Effort Sharing Decision and mainly aims to achieve the non-ETS emissions reduction target (Kommunalkredit 2012). It sets maximum GHG emission amounts for different sectors, including transport, heating, waste, industry, agriculture, F-gases, and other emissions (Lebensministerium 2011). Between 2008 and 2012, progress was made in the fields of waste and space heating, while transport and industry emissions exceeded the sectoral targets (Lebensministerium 2012f).

An Adaptation Strategy was adopted by the Federal Government in Oct. 2012 and by the Conference of the Heads of Provincial Governments on 16 May 2013. Its objectives are to reduce anticipated negative impacts of climate change on Austria's society, economy and nature/ecosystems and to use positive effects of climate change and allow synergies (BMLFUW 2014d).

3 GHG trends and projections

Austria reduced its total GHG emissions from 2005 to 2013 by 13%. The share of GHG emissions not covered by the European Emission Trading Scheme (EU ETS) is about 63%, which is above the EU28 average (see Table 1).¹

Table 1 Key data on GHG emissions

		National data			EU28	
		2005	2011	2012	2013	2013
Total GHG emissions	Mt CO₂eq	92.6	82.8	80.1	80.4	4 539
Non-ETS emissions	Share in total emissions	64%	63%	65%	63%	58%

Source: EEA 2014a; EEA 2014c

By 2020, Austria needs to reduce its emissions not covered by the EU ETS by 16% compared to 2005, according to the Effort Sharing Decision (ESD). The latest data for 2013 show that Austria not only met but exceeded its annual allocation interim target under the ESD for the year 2013 by 2 percentage points (see figures in Table 2). National projections indicate that the country will miss its 2020 target by about 6.6 percentage points with existing measures (WEM) but could come close to the target (within 0.5 percentage points) with additional measures (WAM) (EEA 2014a).

Table 2 Non-ETS emission targets, trend and projections

		Compared to base year
2013	ESD interim target	-9.4%
	ESD emissions	-11.4%
2020	ESD target	-16.0%
	ESD projections WEM	-9.4%
	ESD projections WAM	-15.5%

Source: EEA 2014a. Green indicates target met or exceeded, orange indicates a value below.

GHG emissions are mainly produced by direct fuel consumption (e.g. households for heat generation) followed by the transport and the energy industry sectors (see figure below for historic and estimated emissions by sector). Projections indicate that by 2020 emissions from direct fuel consumption, transport and industry will increase in comparison to 2013, while emissions from energy industries will decrease. Activities that fall under Land Use, Land Use Change and Forestry (LULUCF) are projected to turn from a carbon sink into a source of emissions for Austria.

¹ The European Environment Agency has developed a complex methodology to measure progress on the Non-ETS/ESD targets of all EU Member States. This report uses the figures derived on this basis. A detailed explanation and the underlying absolute amounts are contained in Annexes 1-3 of the EEA report No 6/2014 "Trends and projections in Europe 2014. Tracking progress towards Europe's climate and energy targets for 2020" available at http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2014/

40 30 Mt CO₂ equivalent 20 10 **Energy supply Energy use** Transport 1990 1995 2000 2005 2015 2020 Industrial proc. -10 Agriculture Waste -20 Int'l aviation LULUCF -30

Figure 1 GHG trends and projections by sector

Source: EEA 2014a. Actual data until 2012 and projections from 2010 onwards.

4 Policy development

This section covers significant developments made in key policy areas between Jan. and Dec. 2014. It does so through two different perspectives:

- 1) progress on the policies communicated under the National Reform Programme
- 2) developments in the identified national priority sectors and policy areas.

4.1 Key policies as outlined by the National Reform Programme

Member States prepare National Reform Programmes (NRPs) each Apr. outlining the country's progress and the key policies and measures to achieve targets under the EU 2020 Strategy. These key policies and measures are summarised in the following and their current status is given.

Table 3 Key policies and measures as outlined by the NRP 2014

Continuation of the Subsidies programme for thermal renovation of buildings (residential and business) ("Sanierungsscheck 2014")		
Status in the NRP	Continuation was planned to start in Mar. 2014.	
Status as per Dec 2014	Successful conclusion of the subsidies programme ("Sanierungsscheck 2014") in Aug. 2014 due to full exhaustion of the funds. Continuation of the subsidies programme planned again for 2015 (BMLFUW 2014a).	
Description of policy	See Chapter 4.2.2.	

Climate Protection Initiative "klima:aktiv"		
Status in the NRP	Implemented since 2004.	
Status as per Dec 2014	In force and extended from 2012 to 2020.	
Description of policy	The Climate Protection Initiative "klima:aktiv" focuses on five pillars to support stakeholders with the energy transition: education and training of professionals, the development of standards and ensuring quality, informing and stimulating innovative approaches, providing advice and support and linking partners (Klima:aktiv 2014). The initiative is coordinated by the Austrian Energy Agency.	

Climate and Energy Fund (Klima- und Energiefonds (KLIEN))		
Status in the NRP	In force since Jul. 2007.	
Status as per Dec 2014	In force. In 2014, KLIEN's budget amounted to 141.5 million EUR. The 2014 funding volume for energy research projects increased by 10 million EUR, compared to 2013 (Klima- und Energiefonds 2014a).	
Description of policy	The Climate and Energy Fund aim for a "Zero Emission Austria". The Climate and Energy Fund Act focuses on three key areas: research and development in the field of sustainable energy technologies and climate research, promotion of projects in the field of local and regional public transportation, environmentally friendly transportation of goods and mobility management projects and promotion of projects to support the market penetration of climate and sustainable energy technologies (Klima- und Energiefonds 2014c).	

Continuation of Electro-mobility Measures		
Status in the NRP	Continuation of measures defined in the implementation plan for electro- mobility adopted by the federal Austrain government in 2012 in order to foster the introduction of e-mobility in Austria (Federal Chancellery Austria 2014a).	
Status as per Dec 2014	Launch of new funding initiative for the creation of climate and energy model regions ("Klimafreundlich regionale Mobilität für Klima- und Energie-Modellregionen") in February 2014 (Kommunalkredit 2014). Launch of e-mobility research project "EMILIA" in Apr. 2014 (BMLFUW 2014).	
	Launch of new funding programme ("Leuchttürme der E-Mobilität") encouraging the development and use of innovative technologies to increase efficiency in the transport system in Sept. 2014 (Klima- und Energiefonds 2014).	
Description of policy	See Chapter 4.2.4.	

Green Electricity Act 2012	Green Electricity Act 2012		
Status in the NRP	In force since 1 July 2012.		
Status as per Dec 2014	In force.		
Description of policy	Increase the share of renewables in electricity production by 10.5 TWh by 2020 with quantitative targets for each technology (Federal Chancellery Austria 2014a).		

Austrian Fuel Act 2012 (Kraftstoffverordnung 2012) - Biofuel target and CO ₂ emission target		
Status in the NRP	In force since 3 December 2012.	
Status as per Dec 2014	In force.	
Description of policy	According to the Austrian Fuel Act 8.45% of all diesel and petrol fuels have to be substituted by biofuels by 2020 and suppliers have to meet a 6% reduction target for life cycle GHG emissions per unit of energy from fuel and energy supplied by 2020 (Federal Chancellery Austria 2014a).	

Energy Efficiency Act		
Status in the NRP	Submission of a new draft in 2014.	
Status as per Dec 2014	In force since 11 Jun. 2014.	
Description of policy	See Chapter 4.2.2.	

4.2 National policy priorities

The sub-sections below provide updates on key existing and new policies in priority sectors and policy areas of relevance to the energy and climate targets under the Europe 2020 strategy². Each sector or policy area contains information on the most important policy instruments in operation or development.

4.2.1 Environmental Taxation

In Austria the implicit tax rate on energy is below the EU average with a price of EUR 145 per ton of oil equivalent in 2012 (compared to the EUR 173 average) (Eurostat, tsdcc360). Furthermore, the share of environmental tax revenues in overall tax revenue was 5.7% in 2012 and therefore below the EU average of 6.1% (Eurostat, ten00064). However, comparing environmental tax revenues with GDP, Austria is close to the EU average, at 2.4% in 2012 (Eurostat, ten00065).

In 2012, the revenues from environmental taxes amounted to 8.2 billion EUR (compared to 7.5 billion EUR in 2010; Statistik Austria 2014a). Nearly 61% of the total environmental taxation revenues resulted from energy taxes while 31% resulted from transportation taxes, 7% from resource taxes and about 1% from pollution taxes (Statistik Austria 2014). Austria does not have an explicit carbon tax in place.

Since May 2014, producers of electricity from renewables are exempt from the payment of the so called "solar tax" ("Sonnensteuer") up to a generation of 25,000 kWh/year. The limit was increased from the former limit of 5,000 kWh/year and is supposed to guarantee the exemption from the electricity tax for the majority of private households, manufacturers and agricultural companies that have installed renewable energy generation capacity. The exemption applies to solar PV, small hydro power, biogas, biomass and wind energy (BMLFUW 2014c).

Austria is providing support to research and development in the energy sector. The Ministry of Transport, Technology and Innovation is responsible for the supervision of the research programmes in this area (OECD 2013). In 2008, 3.8% of the total public expenditure for research and development in the energy sector related to fossil fuels (CAN/CIDSE 2014). National expenses for environmental protection amounted to 11.0 billion EUR in 2011 (Statistik Austria 2014a). Energy tax exemptions applicable to liquefied petroleum gas (LPG) used in local public transport, an energy tax relief that applied to diesel used in railway transport as well as the rebate applying to diesel used for agricultural purposes expired at the end of 2012 (OECD 2013a).

4.2.2 Energy Efficiency

Within the EU28, Austria has the fifth least-energy-intensive economy. Energy intensity declined by 12% from 2005 to 2012 (Eurostat, tsdec360), while final energy consumption dropped by only 3% in that timeframe, with the reductions coming mainly from the services and transport sectors (Eurostat, tsdpc320). Austria is currently on track to meet its indicative EU energy efficiency target (EEA 2014a).

Energy efficiency in Austria's industry sector improved by 7% (compared to 21% for the EU) over the period 1996-2010. The largest improvements were obtained in the following sectors: transport

² The Consortium jointly with DG Clima identified these based on identified challenges in Country Profiles (EEA, 2014), share of sectors in total GHG emissions, and Country Specific Recommendations (2014). DG Clima has identified additional relevant issues to be reviewed for some or all Member States, including country specific energy challenges.

vehicles, steel and chemical industry while negative developments were identified in other sectors like wood, non-ferrous, pulp and paper, food, mining and construction. Energy efficiency improved by 34% (compared to 25% for the EU) in the household sector and by 24% (compared to 20% for the EU) in the transport sector over the period 1990 to 2010 (Odyssee 2012).

After lengthy negotiations, the Energy Efficiency Act (Energieeffizienz-Gesetz) was adopted by the Austrian National Council in Jul. 2014. The main objective of the Energy Efficiency Act is the implementation of the European Energy Efficiency Directive (EED). Further objectives are the improvement of energy security through reduced energy consumption, increasing the share of renewables in the energy mix and reducing greenhouse gas emissions (BMWFW 2014a). Two prior attempts in May 2013 and autumn 2013 to pass an Energy Efficiency Act had been unsuccessful due to a lack of political agreement in the Austrian parliament (EEÖ 2013). In line with the EED, Austria's energy efficiency shall now be increased by 1.5 % per year to ensure that the target of a final national energy consumption does not exceed 1,050 Petajoules in 2020. In 2013, the final energy consumption amounted to 1,119 PJ (Statistik Austria 2014a).

The consumption reduction requirements under the Energy Efficiency Act apply to energy providers, large companies, and government agencies in particular (Faolex 2014). From 2015 onwards, energy suppliers have to prove the implementation of energy efficiency measures of at least 0.6 % of the energy sales per year (BMWFW 2014). A compensation payment of EUR 0.20 per kWh has to be paid if this goal is not met (EVN 2014).

Under the Energy Efficiency Act (§9), large companies are legally obliged to introduce an energy management system or must carry out energy audits while small and medium-sized enterprises are entitled to take voluntary energy advice for which incentive funding is available. Pursuant to §5 Energy Efficiency Act, this entails receiving acurate information on the existing energy consumption profile of the company to identify and quantify any opportunities for cost-effective energy savings. In addition, the Energy Efficiency Act aims to contribute to an optimisation of the electricity and gas networks and the renovation of residential and commercial buildings (Lugger/Bankler 2014).

The Energy Efficiency Act is expected to lead to a 550 million EUR higher gross domestic product and 6,400 new jobs in the "energy efficiency" sector (BMWFW 2014a).

The 2014 subsidies programme for thermal renovation of buildings (residential and business) ("Sanierungsscheck 2014") was successfully concluded in Aug. 2014 due Programme aimed at the promotion of refurbishment measures in order to improve efficient energy use in private households and companies. It also promoted investments and jobs and contributes to the energy efficiency target. The continuation of the subsidies programme is planned for 2015 (BMLFUW 2014a).

4.2.3 Renewable Energies

The share of renewables in gross final energy consumption was 32.1% in 2012, which is above the indicative 2012 target of 25.4% set out by the Renewable Energy Directive (RED). The average annual growth rate was 4% between 2005 and 2012. Thus, an annual growth rate of only 0.5% is needed between 2013 and 2020 to reach the 2020 target of 34% (EEA 2014a). The share of renewable electricity generation in final electricity consumption increased only slightly from 62.5% to 65.5% between 2005 and 2012, while the share of renewable heating increased by almost half from 22.6% to 32.8% (Eurostat, SHARES 2014).

Austria's electricity generation mix is dominated by hydro power due to favourable natural conditions and there is great potential for wind and PV (Keep on Track 2014). The primary support scheme for renewables is a feed-in-tariff (FIT) set out in the Green Electricity Act of of 2002. A significant revision took place in 2012 when the annual support for renewables was increased from 21 million EUR to 50 million EUR. The FIT is determined annually by the Minister of Economy, Family and Youth. In comparison to 2013, the FIT was reduced by 1% in 2014 pursuant to §13a para. 1 of the Regulation of the Minister of Economy, Family and Youth determining the feed-in tariffs for the purchase of electricity from renewable energy plants on the basis of contracts (RES Legal 2014). The Green Electricity Act aims to increase the amount of renewables on electricity production by 10.5TWh by 2020. It

establishes technology-dependent 2020 targets for renewable energy (additional 1,000 MW of hydro power, 2,000 MW of wind energy, 200 MW of biomass and biogas, and 1,200 MW of PV). To be eligible for the FIT, plants must be registered as a "green electricity plant" (Ökostromanlage) (RES Legal 2014). Biomass power plants are entitled to receive the FIT for 15 years; other plants are entitled to the support for a period a 13 years (cf. §16(1)(1) and (2) Green Electricity Act).

In addition to the Green Electricity Act, Austria introduced a subsidy scheme for photovoltaic (PV) installations ("Photovoltaik-Anlagen 2013") in Apr. 2013. In 2013, the subsidy scheme supported approximately 9,500 PV plant installations in Austria, amounting to an increase of 3,400 installations compared to 2012. The PV grant scheme was relaunched in Mar. 2014. In comparison to 2013, companies now also may apply for this scheme. Installations with a maximum capacity of 5 kWp are eligible (Kommunalkredit 2014a).

Austrian heat supply is composed of four components. Each component (oil, gas, biomass and disctrict heating) has a share of about 20-25% (Keep on Track 2014). Austria has not implemented a federal regulation providing a legal framework for the connection of RES-H plants to the heating grid (RES LEGAL 2014; Keep on Track 2014). There is huge potential for the use of solar thermal installations for hot water supply. The Solar Heat Roadmap has been set up in 2008 to achieve the 2020 goal (10% share of solar thermal energy) (Keep on Track 2014).

Generally, the annually restricted volume for renewables subsidies constitutes a barrier for the RES development in the electricity sector as it reduces investors' trust in the RES market (EREC 2013). Further barriers concern the integration of RES-E in spatial planning and environmental planning, the implementation of the EU-water framework directive which is causing difficulties for the development of hydropower in Austria and the costs of administrative procedures (Keep on Track 2014). In the heating and cooling sector, the dominance of conventional retailers hinders the development of renewable energies. Further barriers in the heating and cooling sector concern technological deficits and uncertainties of the heating and cooling technologies, the duration of administrative procedures for the decision and planning process and the lack of eficiency criteria for the reconstruction of existing heating systems (Keep on Track 2014).

4.2.4 Transport

GHG emissions as well as energy consumption from transport have increased between 1990 and 2012 but show a downward trend since 2005. While emissions in other sectors were also reduced, the proportion of the transport emissions in Austria's total emissions has remained constant at around 26% since 2005 (Eurostat, tsdcc210 and tsdpc320).

Average emissions for newly registered cars are moderate in Austria with a level of 131.6 CO₂/km. This value is the fifteenth highest in the EU and has decreased by 19% between 2005 and 2013, a lower rate than the EU average of 22% (Eurostat, tsdtr450). The road fuel excise duties on petrol and diesel are close to the EU average (EEA 2014b).

In Austria, the Car Registration Tax regulates the charges for new cars based on fuel consumption in combination with a gradual $\rm CO_2$ bonus/malus system. Under the bonus-malus system, cars emitting less than 120g/km receive a maximum bonus of 300 EUR. An additional bonus of maximum 500 EUR was available until 31 December 2014 for alternative fuel vehicles including hybrid vehicles (ACEA 2013). However, Austria does not apply a specific ownership tax. Instead an engine-related insurance tax has been introduced, which is based on kW (passenger cars) and weight (commercial) (ACEA 2012, 2014). Also, all vehicles travelling on Austrian highways and expressways have to pay a toll, the so-called 'vignette' (CE Delft 2012).

In the context of the Car Registration Tax, tax exemptions apply inter alia to electric or electrohydraulic cars. Until Dec. 2015, a deduction of EUR 600 applies to environmental-friendly vehicles (hybrid, E85, LNG, hydrogene cars, etc.) (FFOE 2014).

Existing policies include the Fuel Act (Kraftstoffverordnung) implementing the European Biofuels Directive 2003/30/EC (Keep on Track 2014), the Mineral Oil Tax Act (Mineralölsteuergesetz 1995) and

the Bioethanol Blending Order (Bioethanolgemischverodnung 2007) (RES Legal 2014a).

According to the Austrian Fuel Act, 8.45% of all diesel and petrol fuels have to be substituted through biofuels by 2020. A 5.75% substitution target is applicable since 1 Jan. 2009 already (§5(1) Fuel Act). The EU biofuel target of 5.75% by 2010 has been met (Keep on Track 2014). By 2020 suppliers have to meet a 6% reduction target for life cycle GHG emissions per unit of energy from fuel and energy supplied (§7(1) Fuel Act).

Under the Mineral Oil Tax Act and the Bioethanol Blending Order, biofuels with a minimum content of biogenic material are subject to a lower mineral oil tax (RES Legal 2014a).

In the rail sector, 92% of the electricity used in the network of the Austrian railway company ÖBB is generated by renewable energy sources (ÖBB Infrastruktur AG 2012; Keep on Track 2014).

Energy intensity in the Austrian transport sector is above the EU average. In 2012, it accounted for a third of the final energy consumption in the country (European Commission 2014).

A Transport Master Plan was introduced at the end of 2012. It sets forth a catalogue of measures to support the reduction of GHG emissions in the transport sector. The Plan aims at decreasing GHG emissions by 6% by 2020 and by 19% by 2025. The measures are mainly concentrated on the improvement of public transport, cycling, and electro-mobility. Furthermore, the plan suggests moving 40% of freight transport from road to railway by 2025. According to a study published by VCÖ (Verkehrsclub Österreich), the implementation of the Transport Master Plan has already had positive impacts on the sector as the number of passengers in public transport has increased (BMVIT 2013). The high share of renewable energy in electricity generation provides a very good basis for electromobility in Austria. In Jun. 2012, different ministries cooperated in developing an Action Plan on Electromobility in and from Austria. The plan lays out a catalogue of specific measures to integrate electro mobility in the transport system, to establish intelligent incentive systems and to create the necessary infrastructure.

In addition, Austria has adopted the climate protection initiative "klima:aktiv mobil (2013-2020)". The Initiative is coordinated by the Austrian Federal Ministry of Agriculture and Forestry, Environment and Water Management and receives support from the Austrian Chamber of Commerce, the Austrian Association of Cities and Towns and the Austrian Association of Municipalities (Klima:aktiv 2014a). Its purpose is to promote mobility management, alternative fuels and vehicles, e-mobility, eco-driving and cycling (Federal Chancellery Austria 2014a). The Initiative intends to motivate and support various actors such as companies, cities, municipalities and tourism operators to develop and implement measures to reduce transport related CO₂ emissions. The initiative offers five pillars of support (consulting, financial support, education and certification, information and motivation and awareness raising, awarding of partners committed to CO₂ reduction projects) (Federal Chancellery Austria 2014a).

In 2014, a number of measures fostering e-mobility in Austria have been implemented. Under the 2014 programme of the Climate and Energy Fund 8 climate-friendly mobility projects will be funded with a budget of € 34.3 million as one of three key pillars of the fund. The aim of this support is to sustainably redesign the Austrian mobility system and to guarantee the long-term affordability of rural and municipal mobility (Klima- und Energiefonds 2014a).

In February 2014, the Federal Ministry of Agriculture, Forestry, Environment and Water Management launched a new funding initiative ("Klimafreundlich regionale Mobilität für Klima- und Energie-Modellregionen"). Mobility and transport related measures aiming at a reduction of CO₂ emissions in climate- and energy-model regions are eligible for funding (Kommunalkredit 2014).

In Apr. 2014, a flagship project for E-mobility ("EMILIA") was launched. It is coordinated by the Austrian Institute for Technology (AIT) and aims at promoting the use of electric vehicles in the freight logistics in urban areas. The project will run until May 2017. Its funding volume is 2,651 million EUR. In Sept. 2014, the funding programme "Leuchttürme der E-Mobilität" was launched by the Austrian Ministry for Transport, Innovation and Technology. The funding programme encourages the development and use of innovative technologies to increase efficiency in the transport system.

Generally, a lack of e-mobility infrastructure and infrastructure development constitutes a barrier for the transport sector. While the Austrian Energy Strategy aims for 250,000 electric vehicles and plug-in hybrid vehicles by 2020, the number of such vehicles merely amounted to 2,000 in 2013 (Keep on Track 2014).

In addition, Austria has a national cycling strategy (Masterplan Cycling). Its purpose is to contribute to the EU 2020 GHG emission reduction target in transport and reach a cycling modal share goal of 10% until 2015 (Federal Chancellery Austria 2014a).

4.2.5 Land use, land use change and forestry (LULUCF)

Agriculture and forestry are an indispensable part of Austria's overall economy. In line with the EU's Common Agricultural Policy (CAP) the objectives of the Austrian agricultural policy (set out in the Agriculture Act of 1992) are:

- "to preserve a viable, economically sound, farm-based agriculture in an intact rural area;
- to promote the manifold earning and employment combinations between agriculture and other economic sectors;
- to encourage market-oriented production, processing and marketing;
- to support agriculture in order to enable it to balance natural disadvantages compared
- to other branches of the economy, to safeguard
- optimum supply of the population with high quality food and raw materials and
- the natural assets of soil, water and air, to preserve and
- shape the cultural and recreational landscape and
- to support the protection against natural hazards." (BMLFUW 2014d).

Nearly 50% of Austria's territory is covered by forests. The primary objective of the Austrian Forest Act is to ensure the sustainability of forest management and to secure the different forest functions (BMLFUW 2007). The Forest Act focuses on aspects including the conservation of woodland and forest soil, the preservation of forests so that the productive capacity of the forest soil is ensured and the economical as well as the social functions of the forests are guaranteed. In addition it addresses reafforestation and special treatment of protective and protection forests and forest protection against pests, fires and air pollution (Hanak-Hammerl 2014).

In 2012, net removals from LULUCF in Austria amounted to 3,839 Gg CO_2 equivalents. This corresponds to 4.8% of total national emissions (without LULUCF). Over the observed period (1990-2012), the overall trend in net emission removals from LULUCF is minus 61% (Environment Agency Austria 2014). LULUCF emissions show an increasing trend until 2020 and are projected to change from a net sink of 3.8 Mt CO_2 e in 2012 to a net source of 2.9 Mt CO_2 e in 2015 and of 4.4 Mt CO_2 e in 2020 (BMLFUW 2014d).

Despite this positive trend in the past, emissions from LULUCF, however, show an increasing trend up to 2020. They are projected to change from a net sink of 3.8 Mt CO₂e in 2012 to a net source of 2.9 Mt CO₂e in 2015 and of 4.4 Mt CO₂e in 2020 (Environment Agency Austria 2014). Between 2005 and 2012, the demand for wooden biomass in Austria has increased by around 5% annually. An important pillar of the Austrian Energy Strategy is to mobilise additional forest biomass. Between 2005 and 2020, an additional 50PJ of forest biomass shall be mobilised (BMLFUW 2014d). Until the end of 2015, Austria will develop the "Austrian Forest Strategy 2020" together with relevant stakeholders. The Forest Strategy aims to help balancing various interests and claims to the Austrian forest and solve potential conflicts of use. The strategy also aims to ensure ongoing optimisation and the sustainable management and conservation of Austrian forests (BMLFUW 2014e).

4.3 Policy progress on past CSRs

The EU Commission provides Country Specific Recommendations (CSRs) for each MS for consideration and endorsement by the European Council. The recommendations are designed to address the major challenges in relation to the targets of the EU 2020 Strategy.

Five CSRs were issues in 2014 for Austria. These were in the areas of public finances; pensions and

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health care; taxation, labour market, education and training; competition in the services sector and public administration; bank restructuring (European Commission 2014b and 2014c).

No CSRs have been issued in the climate and energy area.

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