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Energy, Mobility,
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Progress report 2020

in accordance with Article 24(1) of Directive 2012/27/EU

Credits

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Authors: Angelika Melmuka, Christoph Ploiner, Gregor Thenius, Günter Simader - Austrian Energy Agency
Compiled by: BMK/Department VII/4 - Energy Efficiency and Buildings
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1 Introduction

By submitting this progress report, the Republic of Austria is fulfilling its reporting duty under Article 24(1) of the Energy Efficiency Directive (EED), which requires Member States to report on the progress achieved towards national energy efficiency targets by 30 April each year. Annex XIV Part 1 of the EED stipulates that the report must contain the following minimum information:

- indicators (for this purpose, the Commission asked Member States to fill in the template supplied on 20 February 2020, see Annex),
- where energy consumption remains stable or is growing in a given sector, reasons for this,
- major legislative and non-legislative measures implemented in the previous year,
- energy savings in public buildings pursuant to Article 5(6),
- energy savings pursuant to Article 7(1) (energy efficiency obligation scheme) and Article 7(9) (alternative measures).

This report contains a short overview of energy efficiency developments in Austria, the information required by Annex XIV Part 1 of the EED and the completed template. The European Commission's template for reporting indicators can be found in the attached Excel file.

Table 1: Summary of key indicators in TJ

	2014	2015	2016	2017	2018
Primary energy consumption	1,299,527	1,334,802	1,347,373	1,386,378	1,345,200
Final energy consumption	1,064,483	1,095,641	1,123,724	1,141,033	1,125,947
Households	261,884	277,540	288,549	291,227	272,111
Services	101,446	103,783	101,182	109,823	105,327
Industry	307,059	307,826	318,787	320,205	323,654
Agriculture	22,298	22,944	23,198	23,438	22,403
Transport	371,795	383,548	392,009	396,340	402,452

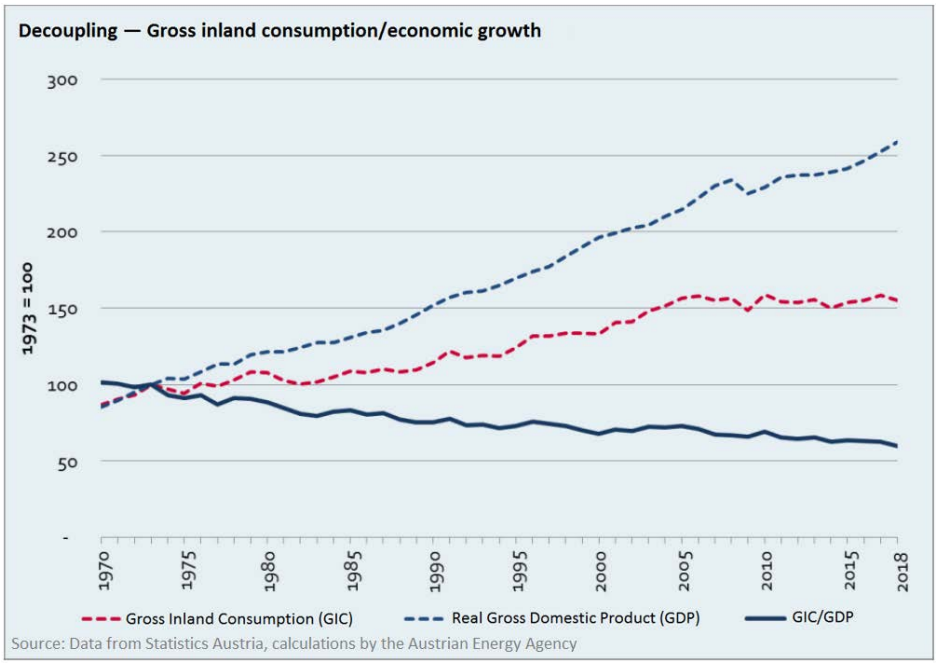
	2014	2015	2016	2017	2018
Final energy savings					
Article 5	14.5	22.7	29.9	31.9	31.9
Article 7	10,518	16,853	16,158	14,044	15,575

Source: Statistics Austria. Calculations by the Austrian Energy Agency

2 An overview of energy efficiency developments in Austria

The long-term outlook therefore reveals that Austria's real GDP increased by 158.6% between 1973 and 2018 and gross inland consumption in 2018 was 54.9% above that of 1973. This means that energy intensity or relative energy consumption (i.e. the amount of total energy required to produce a GDP unit) has fallen by 40%, i.e. well in excess of one-third.

Figure 1: Decoupling – Gross inland consumption/economic growth 1970 - 2018



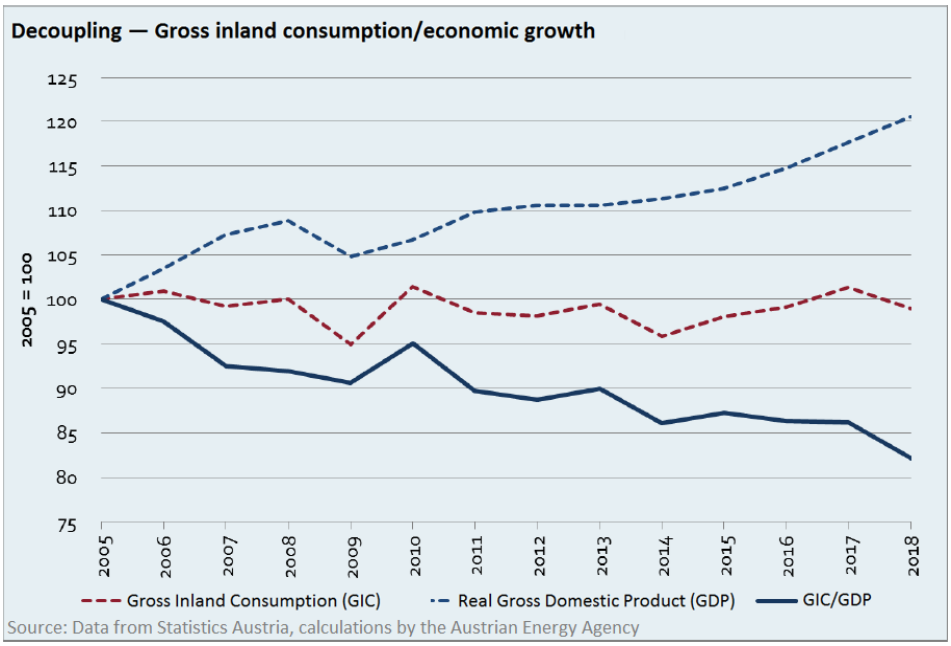
Source: Data from Statistics Austria, calculations by the Austrian Energy Agency

During the 1990s, however, this decoupling slowed somewhat, coming virtually to a standstill at the beginning of the 2000s.

Since 2005, a positive trend in energy intensity has been observed. Although real gross domestic product increased by 20.5% in Austria between 2005 and 2018, a constant trend was observed in gross inland consumption over the same period. Consequently, energy

intensity improved by 17.9% over that period, i.e. by an average of 1.4% per year. This trend shows that measures such as the implementation of the Energy Efficiency Directive, Ecodesign rules and the Directive on the energy performance of buildings are proving effective and that, at least in part, it has been possible to decouple energy consumption from economic growth.

Figure 2: Decoupling – Gross inland consumption/economic growth 2005 - 2018



Source: Data from Statistics Austria, calculations by the Austrian Energy Agency

The following chart offers a closer look at the trend in energy intensity over the period 2005 to 2018.

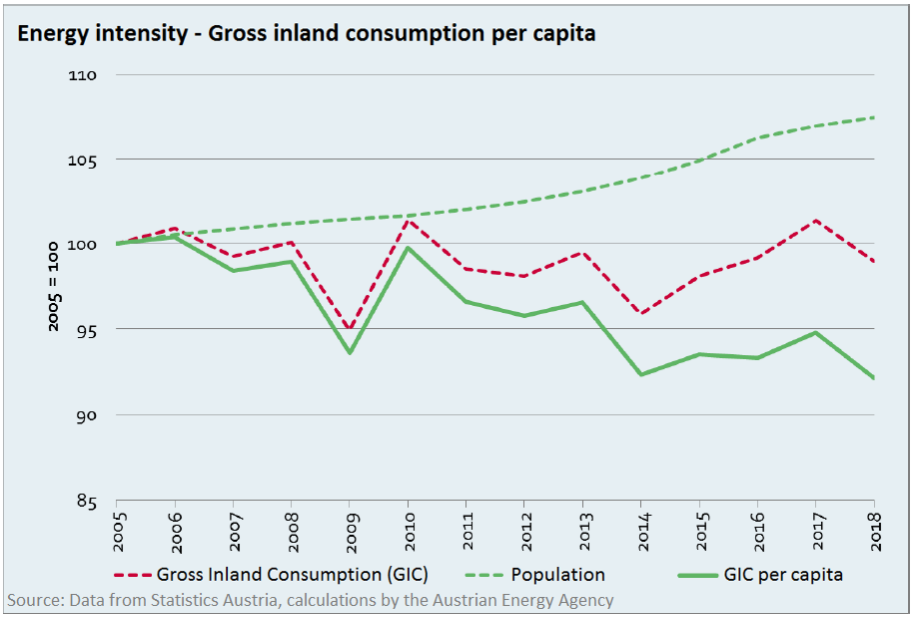
Figure 3: Energy intensity - Gross inland consumption over gross domestic product

Source: Data from Statistics Austria, calculations by the Austrian Energy Agency

The fluctuations in the above chart illustrate that changes in energy intensity – alongside other factors such as economic growth – are also influenced by weather conditions.

If gross inland consumption is considered alongside the population of Austria, it can be seen that over the period 2005 to 2018, the population grew by approximately 7% overall, whilst gross inland consumption remained largely constant. Between 2005 and 2018, this therefore resulted in a decline in energy consumption per capita by approximately 8%.

Figure 4: Energy intensity - Gross inland consumption per capita



Source: Data from Statistics Austria, calculations by the Austrian Energy Agency

3 Statistical indicators (2018 data)

Enclosed is the template provided by the European Commission to be filled out. The figures notified are based on data from the national statistics office (Statistics Austria). Final energy consumption differs between national data and EUROSTAT data by a total 1,018 ktoe or 3.6% and is mainly due to the different classification by material of energy sources used in iron and steel production for consumption purposes in the energy sector. As in previous progress reports, a brief summary of the indicators based on national data for 2018 is provided below:

Table 2: Indicators 2018

	Category	Quantity	Unit
i)	Primary energy consumption (other than non-energy consumption)	32.13	Mtoe
ii)	Total final energy consumption	26,893	ktoe
iii)	Final energy consumption by sector		
	Households	6,499	ktoe
	Services	2,516	ktoe
	Industry	7,730	ktoe
	Agriculture	535	ktoe
	Transport (including transmission)	9,612	ktoe
iv)	Gross value added by sector, nominal		
	Services	246,862	€ million
	Industry	86,110	€ million
v)	Household income	214,646	€ million
vi)	Real gross domestic product (based on 2015)	368,857	€ million
	Conversion efficiency		
vii)	Electricity generation from thermal power generation	1,712	ktoe
viii)	Electricity generation from combined heat and power plants	829	ktoe
ix)	Heat generation from thermal power generation	1,983	ktoe

	Category	Quantity	Unit
x)	Heat generation from combined heat and power plants	1,182	ktoe
xi)	Fuel input for thermal power generation	5,619	ktoe
	Fuel input for combined heat and power plants	2,536	ktoe
	Fuel input for heat generation	931	ktoe
	Energy transmission losses	612	ktoe
xii)	Passenger transport (rail)	13,205	million pkm
xiii)	Freight transport	81,947	Million tkm
xv)	Population	8,837,707	-
	Total number of households (primary residences)	3,916,100	-

Source: Statistics Austria. Calculations by the Austrian Energy Agency

4 Updates to measures

A key project for the Austrian Federal Government is to achieve climate neutrality by 2040. Consequently, the Government's programme includes specific rules and measures for reducing greenhouse gas emissions, increasing the share of renewable energy and improving energy efficiency, in addition to targets related to supply security, competitiveness and ecological sustainability.

In its National Energy and Climate Plan, Austria has the target of improving primary energy intensity by 25-30% as compared to 2015. If primary energy demand exceeds 1,200 petajoules (PJ) by 2030, excess energy will have to be covered using energy from renewable sources. In view of the new 2040 climate neutrality target and in the context of the European Green Deal, this target will be evaluated in the coming months. As part of this, an assessment will be carried out into whether greater ambition is needed in the area of energy efficiency in order to meet the targets set in the Government's plan and the European Green Deal.

The planned amendment to the Austrian Energy Efficiency Act will include the new 2030 energy efficiency targets and will take into account changes made to the European Energy Efficiency Directive.

Last year, an extensive consultation was carried out to evaluate the existing body of rules. Different courses of action were developed with relevant stakeholders with the primary aim of making legislation more effective, whilst at the same time reducing bureaucracy. The expected cornerstones of the new legal framework will be as follows:

- An end-use energy savings obligation scheme will remain in place for energy suppliers.
- Furthermore, a fund will be set up for financing household energy efficiency measures (with special attention to social hardship).
- The list of measures which may be counted towards the savings obligation will be clearly limited to measures which can be proven to guarantee real reductions in energy consumption. Measures which involve switching to fossil-energy based technology will no longer be eligible.
- Energy audits will be extended to a wider pool of companies to enhance reductions in energy consumption and GHGs in the non-ETS sector.

- A particular aim is to increase the quality of renovation works and thereby reduce energy consumption. Specific measures include creating a renovation strategy for all planned large-scale renovation measures, establishing environmentally-friendly renovation as a support priority, and carrying out measures to combat energy poverty.

5 Energy savings pursuant to Article 5

An assessment of Federal buildings and associated final energy savings showed that Federal buildings will be able to meet the 48.2 GWh savings objective laid down in Article 5 between 2014 and 2020.

The measures for achieving the necessary savings affect in particular the Federal Ministry of Defence, the Federal Ministry of Justice and the Federal Ministry of Agriculture, Regions and Tourism, which possess and make use of the largest number of Federal-owned buildings. The 2014-19 sub-targets were met largely due to energy contracting projects initiated promptly. Additional renovation measures have also been carried out since 2016. Consequently, the following savings were achieved for those years (in GWh):

Table 3: Savings pursuant to Article 5 between 2014 and 2019 (in GWh)

Measure	2014	2015	2016	2017	2018	2019
Renovation measures	-	0.425	2.419	2.966	2.966	2.986
Energy contracting	3.496	4.337	4.337	4.337	4.337	5.645
Energy management	0.522	0.211	0.211	0.211	0.211	0.211
Area downsizing	-	1.345	1.345	1.345	1.345	1.449
Total	**4.018**	**6.318**	**8.312**	**8.859**	**8.859**	**10.291**

Source: Notifications from public bodies

6 Energy savings pursuant to Article 7

For the purposes of implementing Article 7, Austria has opted for a system in accordance with Article 7(9), implementing both policy measures and obligation schemes. The following table provides an overview of the new annual savings achieved between 2014 and 2018. Analyses were carried out using data as at 17 February 2020.

The savings calculated for 2014-2018 are based on the measure notifications submitted by energy suppliers and public support bodies obliged to do so. Changes compared to the savings for the years 2014 to 2017 notified in the 2016 to 2019 progress reports and 2017 NEEAP are the result of additional notifications and the withdrawal of measures as part of ongoing checks of the energy efficiency obligation scheme for energy suppliers.

The final energy savings achieved through energy taxation and the HGV toll were calculated by the Austrian Institute for Economic Research according to the provisions under Article 7 of and Annex V to the EED. The final energy savings from all other measures were calculated using the method set out in the Guidelines Regulation pursuant to Section 27 of the Energy Efficiency Act.

Table 4: Overview of 2014-2018 final energy savings from policy measures and the energy efficiency obligation scheme under Article 7 of the EED in TJ

Measure	2014	2015	2016	2017	2018	Cumulated[1]
Energy efficiency obligation scheme for energy suppliers	3,076.2	7,078.1	6,608.2	3,525.4	2,515.9	73,084.2
Provincial support for housing construction, energy and the environment	2,041.9	2,044.4	2,065.1	2,487.0	2,167.5	31,723.9
Domestic Environmental Support (Umweltförderung im Inland, UFI)	1,430.9	2,534.9	1,542.4	1,532.6	1,515.1	26,501.7
Federal support for green electricity	82.2	254.0	108.5	105.3	1,001.1	2,964.6

[1] Cumulated for each year of implementation up to 2018: 10,518*5 + 16,853*4 + 16,158*3 + 14,044*2 + +15,575*1

Measure	2014	2015	2016	2017	2018	Cumulated[1]
Energy taxation	3,254.2	3,796.6	4,555.9	5,694.9	7,593.2	64,108.3
Motorway tolls for HGVs	70.0	81.7	98.0	122.5	163.3	1,379.0
Austrian Federal Government's 'renovation initiative'	293.8	321.0	145.4	163.0	178.2	3,693.5
klimaaktiv mobil climate initiative	16.5	8.2	10.6	30.7	4.6	213.1
Climate and Energy Fund	251.8	734.6	1,024.1	382.1	436.2	8,469.8
Total	**10,518**	**16,853**	**16,158**	**14,044**	**15,575**	**212,138.0**

Source: analyses by energy efficiency monitoring body

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Abbreviations

BGBl.	Bundesgesetzblatt (Federal Law Gazette)

Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology
Stubenring 1, 1010 Vienna
+43 1 711 00-603054
vii4@bmk.gv.at
bmk.gv.at