

# Progress report 2019

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



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Vienna, 2019

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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 Directive 2012/27/EU ('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 12 February 2018, 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
<b>Primary energy consumption</b>				
<b>Final energy consumption</b>	1 064 179	1 089 929	1 109 585	1 129 644
- Households	249 356	265 927	273 302	276 446
- Services	99 045	101 304	98 312	99 960
- Industry	325 081	18 625	327 439	337 596
- Agriculture	21 206	21 720	21 979	22 041
- Transport	369 491	382 353	388 552	393 601
<b>Final energy savings</b>				
- Article 5	14.5	22.7	29.9	31.9
- Article 7	10 298	16 374	15 910	13 884

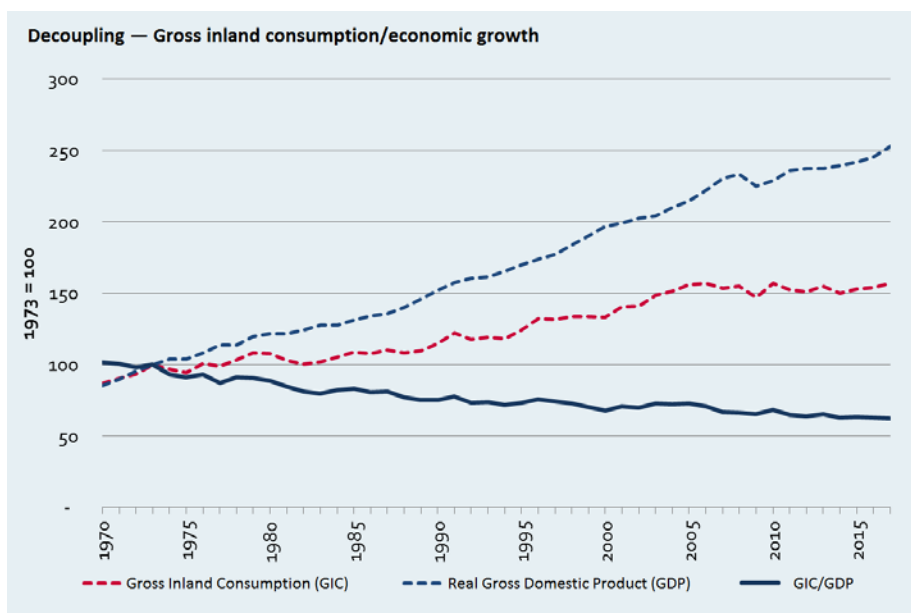
Sources: Statistics Austria. Calculations by the Austrian Energy Agency

## 2 An overview of energy efficiency developments in Austria

On account of the direction taken by Austrian energy policy at an early stage, it has been possible to improve energy efficiency considerably since the first oil crisis in the early 1970s and to largely decouple trends in energy consumption from economic development.

The long-term outlook therefore reveals that although Austria's real GDP increased by approximately 153 % between 1973 and 2017, gross inland consumption in 2017 increased by a comparatively small amount, i.e. +57 % compared to 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 38 %, i.e. well in excess of one-third.

Figure 1: Decoupling – Gross inland consumption/economic growth 1970 - 2016

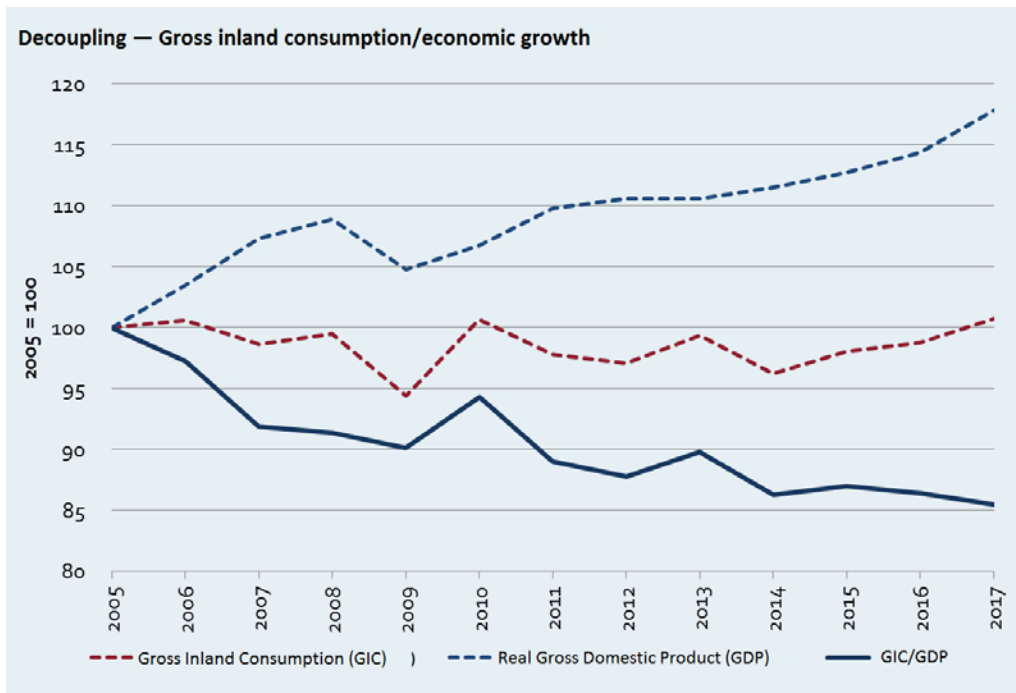


Source: Data from Statistics Austria, calculations by the Austrian Energy Agency

During the 1990s, however, this decoupling slowed somewhat, not least because of the existing high standards, coming to a standstill at the beginning of the 2000s. At times, relative energy consumption has increased briefly. However, the decoupling trend overall has successfully continued at an ever greater pace.

It is also possible to identify a positive trend in terms of the progression in decoupling since 2005. Although real gross domestic product increased by 17.8 % in Austria between 2005 and 2017, a constant trend was observed in gross inland consumption over the same period. Consequently, energy intensity only fell by 14.5 % over that period, i.e. by an average of 1.1 % per year. This trend shows that Austria has been able to decouple energy consumption from economic growth, inter alia, by implementing the Energy Efficiency Directive, the Ecodesign rules and the Directive on the energy performance of buildings.

Figure 2: Decoupling – Gross inland consumption/economic growth 2005 - 2017



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

A closer look at the trend in energy intensity over the period 2005 to 2017 is provided in the following chart.

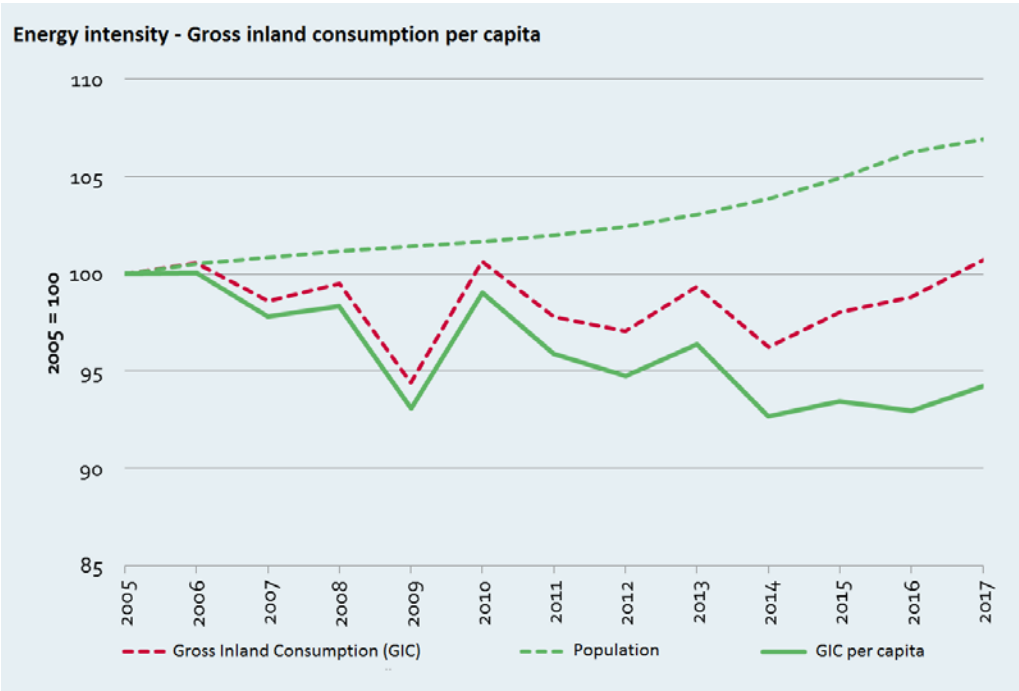
Figure 3: Energy intensity - Gross inland consumption over gross domestic product



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 2017, the population grew by approximately 7 % overall, whilst gross inland consumption remained largely constant. Between 2005 and 2017, this therefore resulted in a decline in energy consumption per capita by approximately 6 %.

Figure 4: Energy intensity - Gross inland consumption per capita



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



### 3 Statistical indicators (2017 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 1 437 ktoe or 5.1 % 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 2017 is provided below:

Table 2: Indicators 2017

	Category	Quantity	Unit
i)	<b>Primary energy consumption (other than non-energy consumption)</b>	32 774	Mtoe
ii)	<b>Total final energy consumption</b>	26 981	ktoe
iii)	<b>Final energy consumption by sector</b>		
	Households	6 603	ktoe
	Services	2 387	ktoe
	Industry	8 063	ktoe
	Agriculture	526	ktoe
	Transport (including transmission)	9 401	ktoe
iv)	<b>Gross value added by sector, nominal</b>		
	Services	181 224	Million EUR
	Industry	67 276	Million EUR
v)	<b>Household income</b>	205 066	Million EUR
vi)	<b>Gross domestic product</b>	299 374	Million EUR
	Conversion efficiency		
vii)	<b>Electricity generation from thermal power generation</b>	1 825	ktoe
viii)	<b>Electricity generation from combined heat and power plants</b>	875	ktoe
ix)	<b>Heat generation from thermal power generation</b>	2 122	ktoe
x)	<b>Heat generation from combined heat and power plants</b>	1 241	ktoe
xi)	<b>Fuel input for thermal power generation</b>	5 950	ktoe
	Fuel input for combined heat and power plants	2 634	ktoe
	Fuel input for heat generation	1 058	ktoe
	Energy transmission losses	624	ktoe
xii)	<b>Passenger transport</b>	12 657	Million pkm
xiii)	<b>Freight transport</b>	78 861	Million tkm
xv)	<b>Population</b>	8 795 073	-
	Total number of households (primary residences)	3 890 092	-

Source: Statistics Austria

## 4 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 Constitutional Affairs, Reforms, Deregulation and Justice and the Federal Ministry of Sustainability and Tourism, which possess and make use of the largest number of Federal-owned buildings. The 2014-18 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 2018 (in GWh)

Measure	2014	2015	2016	2017	2018
Renovation measures	-	0.425	2.419	2.978	2.978
Energy contracting	3.496	4.337	4.337	4.337	4.337
Energy management	0.522	0.211	0.211	0.211	0.211
Area downsizing	-	1.345	1.345	1.345	1.345
<b>Total</b>	<b>4.018</b>	<b>6.318</b>	<b>8.312</b>	8.871	8.871

Source: Notifications from public bodies

## 5 Energy savings pursuant to Article 7

In its 'Notification to the European Commission pursuant to Article 7 of the Energy Efficiency Directive (EED, 2012/27/EU)' (BMWFI 2013), Austria informed the European Commission that a system in accordance with Article 7(9) had been selected for the purposes of transposing Article 7 of the EED. In order to transpose Article 7, Austria has therefore put in place strategic measures and an obligation scheme. The following table provides an overview of the new annual savings achieved between 2014 and 2017. Analyses were carried out using data as at 25 January 2019.

The savings calculated for 2014-2017 are based on the measure notifications submitted by energy suppliers and public support bodies obliged to do so. Changes compared to the savings reported for 2014, 2015 and 2016 in the 2016 and 2017 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 system 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 Article 7 strategic measures

Measures	Target groups/sectors	Annual savings in TJ				Cumulative savings in TJ <sup>1</sup>
		2014	2015	2016	2017	
<b>Energy efficiency obligation scheme for energy suppliers</b>	All sectors	2 886.6	6 646.4	6 235.5	3 159.4	47 116.2
<b>Provincial support for housing construction, energy and the environment</b>	Housing, private households	2 026.3	2 027.9	2 117.6	2 594.9	21 019.0
<b>Domestic Environmental Support (Umweltförderung im Inland, UFI)</b>	Industry and services, processes and non-residential buildings	1 420.7	2 514.4	1 581.6	1 600.9	17 990.2
<b>Federal support for green electricity</b>	Decentralised energy generation	81.7	252.0	111.3	110.0	1 415.1
<b>Energy taxation</b>	All sectors, total energy consumption	3 254.2	3 796.6	4 555.9	5 694.9	39 213.4
<b>Motorway tolls for HGVs</b>	Commercial transport	70.0	81.7	98.0	122.5	843.5
<b>Austrian Federal</b>	Buildings	291.7	318.4	149.1	170.3	2 590.5

<sup>1</sup> Cumulated for each year of implementation up to 2017: 10 298\*4 + 16 374\*3 + 15 910\*2+13 884\*1

<b>Government's 'renovation initiative'</b>						
<i>klimaaktiv mobil</i> <b>climate initiative</b>	Transport	16.4	8.1	10.9	32.1	143.7
<b>Climate and Energy Fund</b>	Services, industry, transport, public bodies/municipalities/regions	250.0	728.6	1 050.2	399.1	5 685.2
<b>Total</b>		<b>10 278</b>	<b>16 374</b>	<b>15 910</b>	<b>13 884</b>	<b>136 016.8</b>

Source: Analyses by energy efficiency monitoring bodies

## 6 Updates to measures

#mission2030, Austria's climate and energy strategy, is a central project by the Federal Government. It builds on the following three goals of the European Energy Union, namely ecological sustainability, supply security and competitiveness/affordability. Core environmental objectives until 2030 have been set in the areas of greenhouse gas emissions, renewable energy and energy efficiency. Those objectives must be pursued through actively taking measures.

As growth must also be enabled in the future, Austria has set itself 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, the excess energy will have to be covered by energy from renewable sources.

Due to developments in the European Union in the field of energy efficiency, it is also necessary to restructure the national framework for the period until 2030. The existing Energy Efficiency Directive was principally transposed in Austria by the Energy Efficiency Act. The new rules laid down in the amended EU Directive have now been transposed through an amendment to the Energy Efficiency Act. The process of evaluating the existing national legal framework therefore began in autumn 2018. Policy options are being developed in collaboration with the relevant stakeholders. The objective is to achieve the desired increase in energy efficiency in a way which is more effective and free of bureaucracy. In this way, by bringing energy efficiency onto the 2030 trajectory, the 2030 climate and energy targets and the objectives of the Paris Climate Agreement will also be guaranteed.

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## Abbreviations

BGBL.	Federal Law Gazette ( <i>Bundesgesetzblatt</i> )
EED	Energy Efficiency Directive
NEEAP	National Energy Efficiency Action Plan