



# The Implementation of the European Energy Efficiency Directive: Will Austria achieve its Efficiency Targets in 2020?



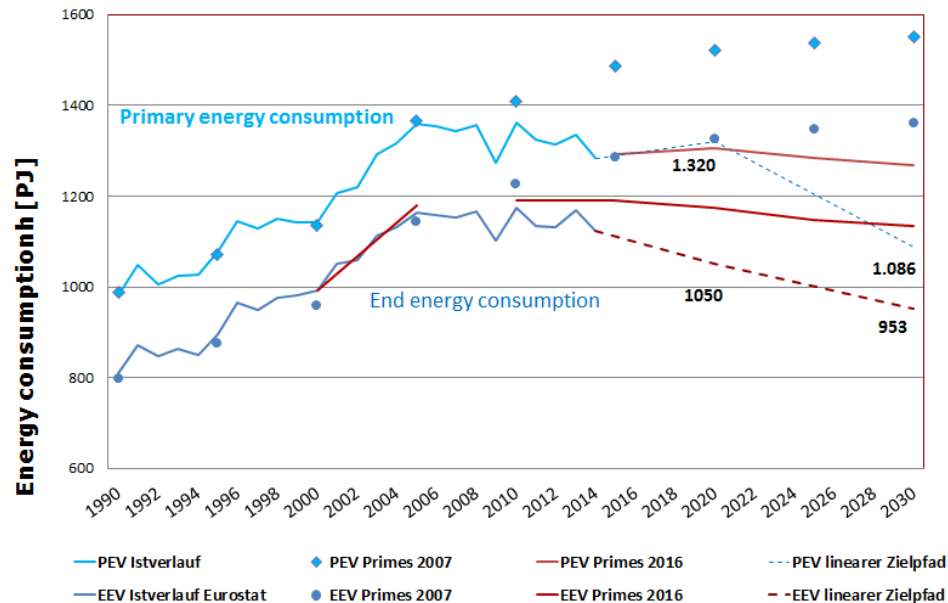
# Energy Efficiency Directive (EED – 2012/27/EU)

# 20 - 20 - 20 targets: EU and AT (EE, RES and CO<sub>2</sub>)

			
		2020	2020
<b>Energy efficiency</b>		20 %	No EU requirements for national targets
<b>Renewable energy</b>		20 %	34 %
<b>Greenhouse gases</b>	Total	-20 % (comp. to 2005)	Only non-ETS
	Emission Trading System (ETS)	-21 % (comp. to 2005)	Only on EU level
	Non ETS	-10 % (comp. to 2005)	-16 % (comp. to 2005)

# 2020 (EED) and 2030 (EED review) targets: Impacts for Austria

- EU-side binding improvements in energy efficiency by 20 % based on EED (by 30 % - EED Review) transferred to Austria means (indicative targets):
  - By 2020: 1.320 PJ primary energy consumption and 1.050 PJ final energy consumption
  - (By 2030: 1.086 PJ primary energy consumption and max. 953 PJ final energy consumption)



Source: BMWFW

# Implementation of EED in Austrian law (the Austrian Energy Efficiency Act)

# Corner points of the Austrian Energy Efficiency Act (EEffG)

- Energy obligation scheme for energy companies (159 PJ<sub>kum</sub>)
- Strategic ‚policy‘ measures (151 PJ<sub>kum</sub>)
- Energy audits and energy management systems in large enterprises (non-SMEs)
- Energy advice to SMEs
- Qualification scheme for independent experts performing energy services (like audits, ...)
- Energy savings by the Federal State (48,2 GWh<sub>kum</sub>) and by BIG (125 GWh<sub>kum</sub>)
- Best practice activities, info service and energy experts of the federal state
- NEAAP (in coordination with the Austrian ‚Länder‘)

**Energy efficiency target by 2020:**

Final energy consumption  
**1.050 PJ**

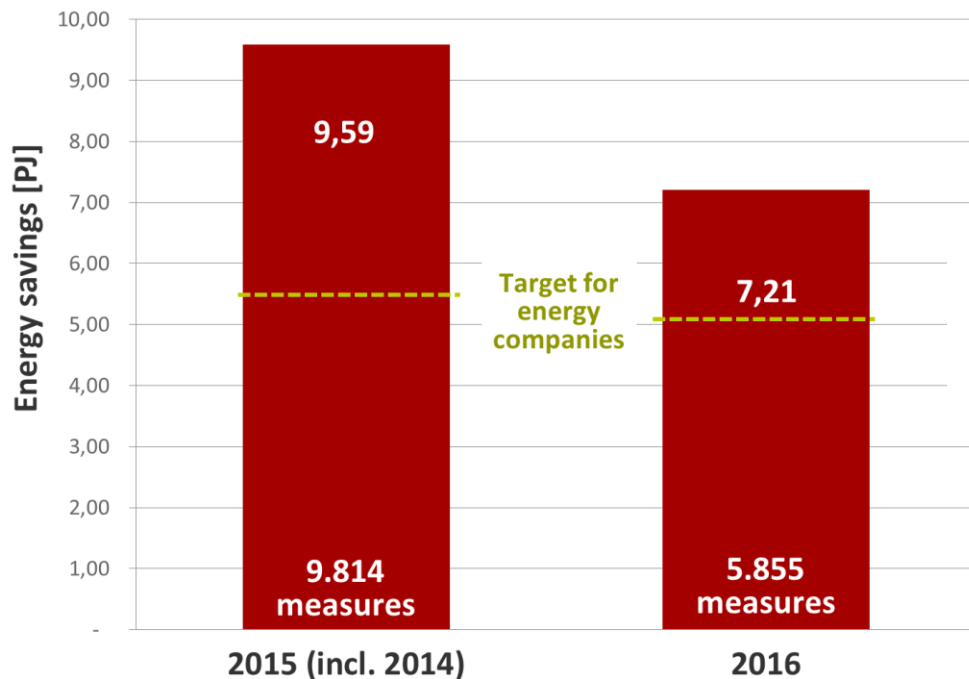
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2016<sub>prel</sub>  
1.121 PJ

monitoringstelle energieeffizienz

# Monitored energy savings till 2017 (obligation periods 2015 and 2016)

# Results from the obligation scheme (ref. to Art. 7 EED)



Status: April 2017



**1890**  
Large Enterprises



**430**  
Energy companies

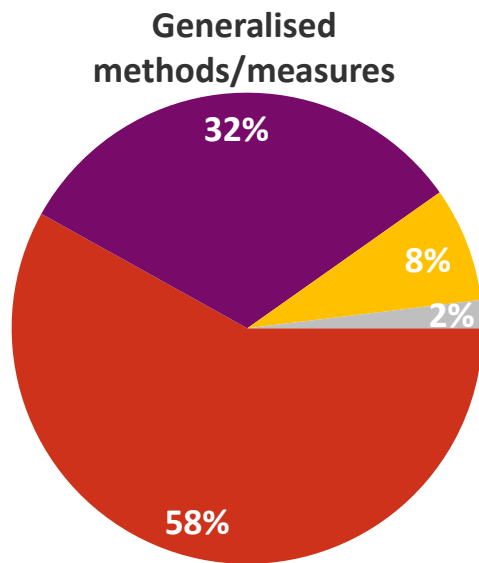
Calculation basis: NEEAP 2017



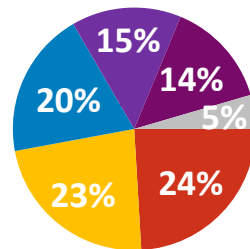
# Modernisation of heating systems are dominating achieved energy savings

## Division of the savings volume by category

Obligation year: 2016



Individual measures



- Heating system and domestic hot water
- Electric lighting
- Industrial plants and processes
- Behaviour change measures
- Mobility
- Other measures

Calculation method  
generalised vs. Individual  
methods

2015 | 50:50

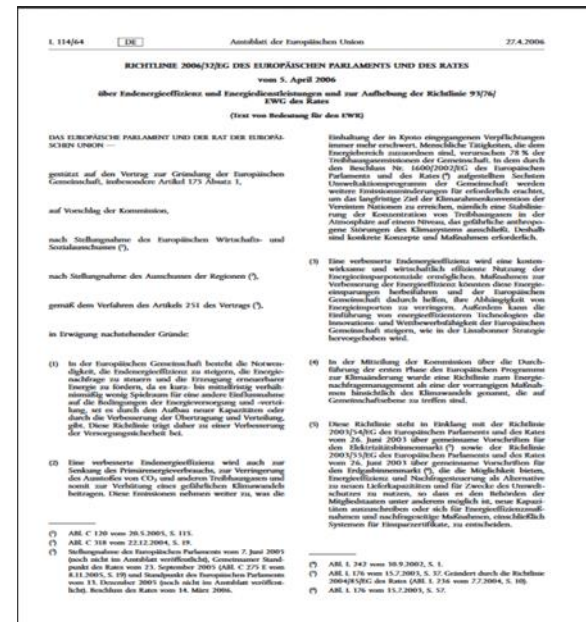
2016 | 66:34

Calculation basis: NEEAP 2017

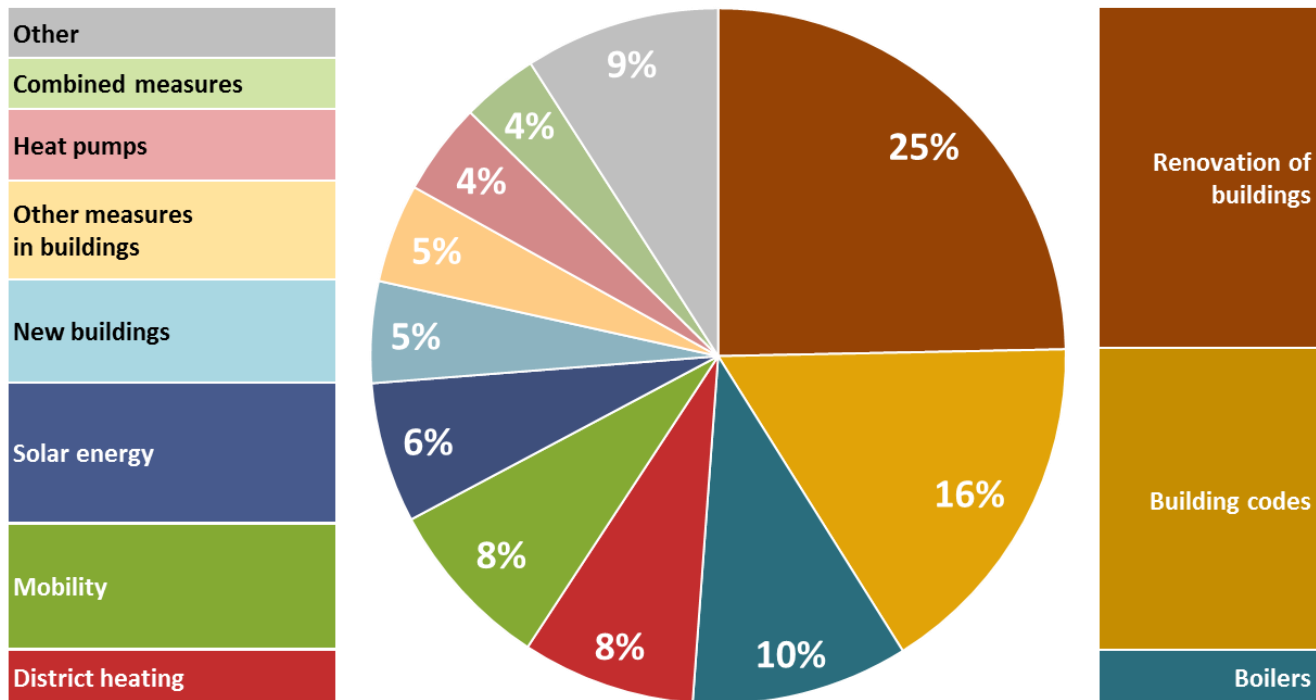
**Achieved energy efficiency  
targets referring to EED  
(2012/27/EED and ESD  
(2006/32/EG)**

# Target for energy savings referring to ESD

- Referring to directive 2006/32/EG (energy end-use efficiency and energy service directive) Austria has to achieve an energy savings target of **80,4 PJ in 2016**.
- In total, the reported energy savings stated by the energy companies amount to **88,6 PJ** by the end of **2015**.
- Austria could achieve the required target of 80,4 PJ already by the end of 2015!**



# Division of the energy savings volume by categories achieved in Austria referring to ESD targets



# Energy savings achieved by implementing Art. 7 EED (energy efficiency obligation scheme)

- Austria has opted for a system in accordance with Article 7(9), implementing both policy ‘strategic’ measures and obligation schemes
- **In fulfilling of Art 7 EED, Austria will have to achieve cumulated energy savings of 217,728 TJ from 1.1.2014 to 31.12.2020.**

	2014	2015	2016	2017	2018	2019	2020	Cumulated
Early actions of up to 25 % of the target	10.368	10.368	10.368	10.368	10.368	10.368	10.368	72.576
	3.888	3.888	3.888	3.888	3.888	3.888	3.888	27.216
		9.072	9.072	9.072	9.072	9.072	9.072	54.432
			9.072	9.072	9.072	9.072	9.072	45.360
Yearly new savings by strategic measures and by measures from energy companies				9.072	9.072	9.072	9.072	36.288
					9.072	9.072	9.072	27.216
						9.072	9.072	18.144
							9.072	9.072
<b>Total energy savings 2014 -2020</b>								<b>217.728</b>
<b>Interim targets (without early actions)</b>		<b>2014 - 2017:</b>		<b>69.984</b>	<b>2018-2020:</b>		<b>147.744</b>	

# Overview of measures for fulfilling Art. 7 EED (incl. both strategic measures and measures by energy companies)

Type of measure	Sectors	Achieved yearly savings [in TJ]		Cumulated in [TJ]
		2014	2015	2014-2020
Measures by energy companies	All sectors	2.440,6	7.246,9	60.565,8
Environmental subsidies by the Austrian Länder	Buildings (private)	1.956,0	1.772,1	24.324,5
Domestic environmental subsidies (UFI)	Industry and Services, processes and buildings (non-residential)	1.444,3	2.261,7	23.680,0
Subsidies for green electricity	Decentralised energy production	32,0	140,7	1.068,2
Energy taxes	All sectors	3.254,3	3.796,7	45.560,0
Federal Road Toll Act	Commercial transportation	70,0	81,7	980,0
Federal renovation initiative	Buildings (private and commercial)	296,5	329,1	4.050,4
Klimaaktiv programme mobility	Mobility	11,3	-	79,3
Support under the Climate and Energy Fund	Services, industry, transportation, public bodies / municipalities / regions	254,1	753,1	6.297,7
<b>Summe</b>		<b>9.759</b>	<b>16.382</b>	<b>166.606</b>

# Summary and conclusions

- **Austria achieved the 2016 ESD targets already by the end of 2015.**
- **The achieved savings in 2014 and 2015 are in line to fulfill article 7 EED requirements (as notified by Austria to the EU)**

	Achieved energy savings [TJ/a]							Cumulated savings [TJ]	
	2014	2015	2016	2017	2018	2019	2020	Actuell	Target
<b>Measures</b>									
<b>2014</b>	9.743	9.743	9.743	9.743	9.743	9.743	9.743	<b>68.198</b>	<b>27.216</b>
<b>2015</b>		16.416	16.416	16.416	16.416	16.416	16.416	<b>98.497</b>	<b>54.432</b>
<b>2016</b>			-	-	-	-	-	-	<b>45.360</b>
<b>2017</b>				-	-	-	-	-	<b>36.288</b>
<b>2018</b>					-	-	-	-	<b>27.216</b>
<b>2019</b>						-	-	-	<b>18.144</b>
<b>2020</b>							-	-	<b>9.072</b>
<b>Total</b>								<b>166.695</b>	<b>217.728</b>

- Article 3 EED goal for Austria (final energy consumption: 1050 PJ) comes into reach; by 2015 the final energy consumption amounted to 1.087 PJ; preliminary numbers for 2016 however showed 1.121 PJ. In case that the prel. final energy consumption gets confirmed by the statistical office, further efforts/analysis are necessary.

# Contact

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