



EU4Energy



NATIONAL ENERGY EFFICIENCY ACTION PLAN (NEEAP) OF THE REPUBLIC OF AZERBAIJAN

INDICATIVE NATIONAL ENERGY EFFICIENCY TARGET



Funded under the EU4Energy Initiative of the European Union



NATIONAL ENERGY EFFICIENCY TARGET

Law on Efficient Use of Energy Resources and Energy Efficiency

Azerbaijan has to set a national energy efficiency target based on:

- primary or final energy consumption
- primary or final energy savings
- energy consumption

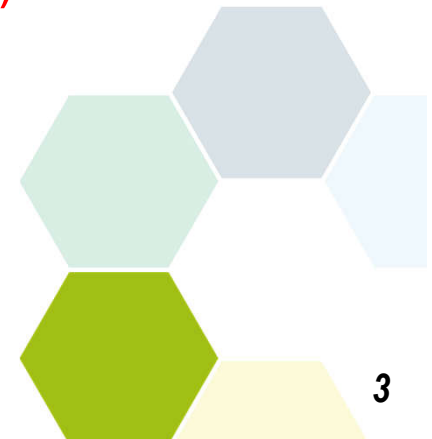
AZ NEEAP (5Y) =





INDICATIVE TARGET

- **Based on methodology and experience of EU MS**
 - ✓ Energy Services Directive (2006/32/EC)
 - ✓ Energy Efficiency Directive (2012/27/EU)
 - ✓ Amending Directive (2018/2002)
 - ✓ NEEAPs – every 3 years since 2007
 - ✓ **Integrated national energy & climate plan (NECP) 2021-2030**
- **Transparent calculation**
- **Based on available studies and reports**





INDICATIVE TARGET (CONSIDERATIONS)

- The most cost-effective EE potential - supply side
 - ✓ **the indicative energy target for the 2021-2025 is proposed to be set based on primary energy savings**
- The Action Plan of the “Strategic Road Map on Public Utilities”:
 - ✓ all natural gas saved should be exported.
 - ✓ **potential primary savings should be also expressed in cubic meters of saved natural gas and in USD or AZN**
- Separate calculation of potential savings:
 - ✓ **Demand side: top-down approach**
 - ✓ **Supply side: bottom-up approach**





INDICATIVE TARGET (CONSIDERATIONS)

- Azerbaijan commitment to reduce GHG emissions by 35% in 2030 (the Milli Mejlis ratified the Paris Agreement October 2016)
 - ✓ **NEEAP should contribute more than 50% of the remaining net emissions reduction**

*Dynamics of GHG emissions and absorptions per sectors,
1990-2013 MtCO_{2e}*

Sector	1990	2000	2005	2013	2030 target	To achieve
Total emissions	73.3	40.8	49.5	61.8	47.7	-14.2
Removal	-3.7	-4.9	-5.3	-8.0	-2.4	5.6
Net emissions	69.6	35.9	44.1	53.9	45.3	-8.6



DEMAND SIDE POTENTIAL SAVINGS, MTOE (1)

	2013	2014	2015	2016	2017	2013-2017 average
Primary energy consumption, excluding non-energy use	13.8	14.3	14.8	14.6	14.4	14.4
Energy transformation	3.4	3.5	3.8	3.7	4.0	
Energy industries own use	1.2	1.2	1.2	1.1	1.1	
Losses	1.2	1.2	1.3	1.0	1.0	
Final consumption	7.8	8.2	8.3	8.6	8.2	8.2
Target final energy saving (5%)						0.41
Target primary energy savings						0.57



DEMAND SIDE POTENTIAL SAVINGS, MTOE (2)

- The EE policies in Azerbaijan are yet to be adopted.
 - ✓ **2 years - 2021-2022** are needed to develop demand side measures
 - ✓ **Gradual increase of savings over the years**

	2021	2022	2023	2024	2025	Total savings 2021-2025
Annual new savings from demand-side*, Mtoe					0.16	
				0.1	0.1	
			0.07	0.07	0.07	
Total demand side savings, Mtoe	0	0	0.07	0.17	0.33	0.57

*Highlighted are the annual new savings for a specific year





SUPPLY SIDE POTENTIAL SAVINGS (1)

	Savings, Mtoe	Natural gas savings, mcm	CO2 emissions reduction, MtCO2	Average export price in 2017, USD/thsd. cubic m	Savings, M USD
Improvement of the capacity utilisation factor of power plants by 8pp (the level of year 2008)	0.437	481.9	1.157	158	76.3
Improvement of the average power plant efficiency by 6pp (the level of year 2014)	1.044	1,150.8	2.762	158	182.1
Reduction of electricity losses to the average level of neighbouring Georgia (6%)	0.220	242.6	0.582	158	38.4
Reduction of natural gas losses by 1pp (6.1%)	0.099	108.7	0.261	158	17.2
Reduction of heat losses by 3.5pp (the level of year 2008)	0.005	6.0	0.014	158	0.9
Total	1.805	1,990	4.776	158	314.9



SUPPLY SIDE POTENTIAL SAVINGS (2)

- The EE policies in Azerbaijan are yet to be adopted.
 - ✓ **1 year - 2021 is needed to develop supply side measures**
 - ✓ **Gradual increase of savings over the years**

	2021	2022	2023	2024	2025	Total savings 2021-2025
Annual new savings from supply-side**, Mtoe					0.6	
				0.5	0.5	
			0.4	0.4	0.4	
		0.3	0.3	0.3	0.3	
Total supply side savings, Mtoe	0	0.3	0.7	1.2	1.8	4.0

*Highlighted are the annual new savings for a specific year





INDICATIVE TARGET (OVERALL)

	2021	2022	2023	2024	2025	Total savings 2021-2025
Annual new savings from demand-side*, Mtoe					0.16	
				0.1	0.1	
			0.07	0.07	0.07	
Total demand side savings, Mtoe	0	0	0.07	0.17	0.33	0.57
Annual new savings from supply-side*, Mtoe					0.6	
				0.5	0.5	
			0.4	0.4	0.4	
		0.3	0.3	0.3	0.3	
Total supply side savings, Mtoe	0	0.3	0.7	1.2	1.8	4.0
Total savings (demand and supply side), Mtoe	0	0.3	0.77	1.37	2.13	4.57
- Savings, mcm of natural gas	0	331	849	1,510	2,348	5,038
- Savings, M USD**	0	52	134	239	371	797
- CO ₂ emissions reduction, MtCO ₂	0	0.8	2.0	3.6	5.6	12.1

** based on the average export price of in 2017, i.e. 158.2 USD/thsd. cubic m



**Təşəkkür
edirəm**