



Low Carbon Ukraine

Policy advice on low-carbon policies for Ukraine



Supported by



Federal Ministry
for the Environment, Nature Conservation,
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Based on a decision of the German Bundestag



Investment needs for reaching the 2030 NDC targets: An explanatory note

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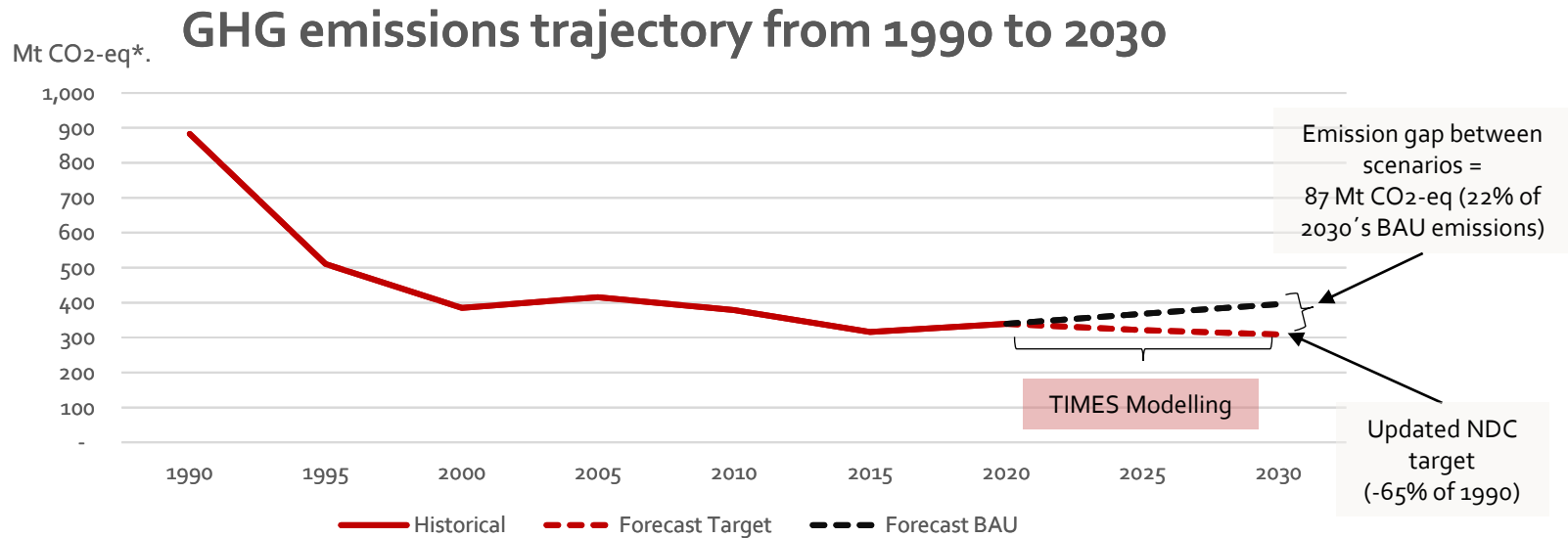
Structure

1. Introduction
2. Updated NDC emission reduction target
3. Sectoral emission reduction targets
4. Sectoral investment needs
5. Total investment needs

1. Introduction

- **Ukraine's Updated NDC accompanied by "Analytical Report for Ukraine's Updated NDC"**
 - States aggregate GHG emission reduction target for 2030
 - Presents economically optimal emission reductions by sectors
 - Presents corresponding investment needs
 - Is based on TIMES modelling
- **There exists confusion about magnitude of investment needs**
 - Analytical report only reports **total investments (EUR 102bn)** including business-as-usual investments,
 - Does not report that **EUR 55 bn (BAU investments)** are expected "in any case" and only **EUR 47bn (additional investments)** are required for NDC implementation

2. Updated NDC emission reduction target



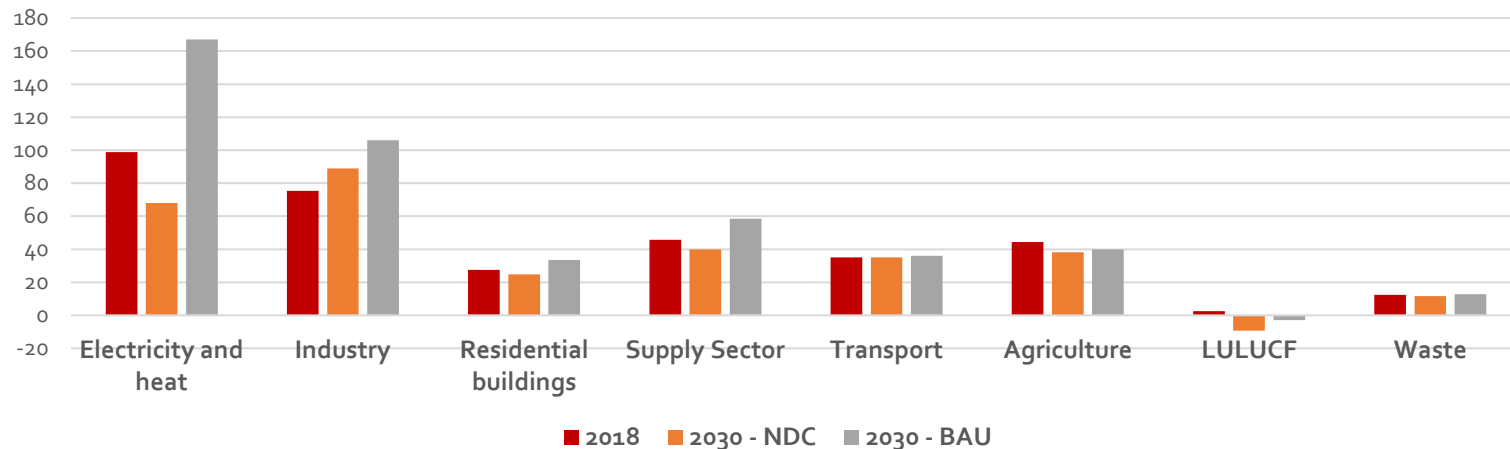
Source: own illustration based on Ministry of Energy and Environmental Protection of Ukraine (2020), Updated NDC, National Economic Strategy until 2030, TIMES modelling results

*Mt CO₂-eq = Million tons of CO₂-equivalent emissions (including CO₂, methane, N₂O, etc.)

- To implement the NDC, investments are needed to bridge the gap from a “business-as-usual development” (BAU) to the NDC target emissions.

3. Sectoral emission reduction targets

Sectoral GHG emissions, Mt CO₂-eq*

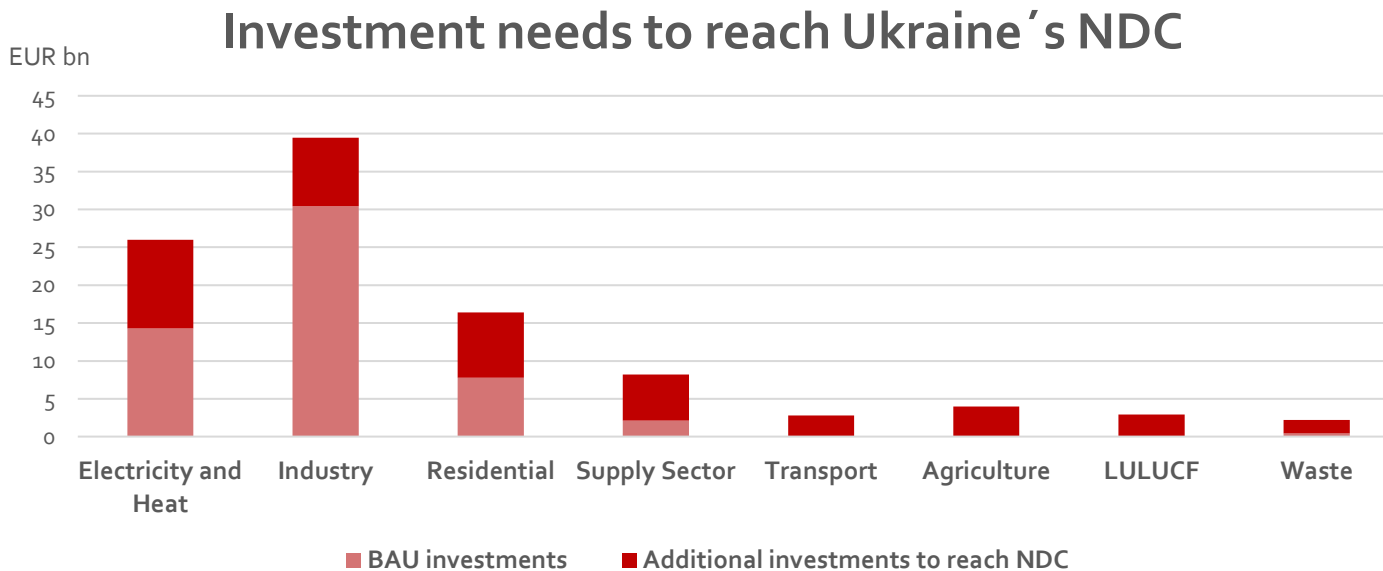


Source: own illustration based on Ministry of Energy and Environmental Protection of Ukraine (2020), Updated NDC, TIMES modelling results

*Mt CO₂-eq = Million tons of CO₂-equivalent emissions (including CO₂, methane, NO₂, etc.)

- Largest reductions required in electricity and heat sector
- Industry emissions continue to grow until 2030, due to high costs of abatement technology in this sector

4. Sectoral investment needs



Source: own illustration based on Ministry of Energy and Environmental Protection of Ukraine (2020), Updated NDC, TIMES modelling results, own calculations

- **Need to incentivise additional investments**
- **Need to ensure that BAU investments flow into NDC-compliant projects**

5. Total investment needs

	BAU Scenario (EUR bn)	Target Scenario (EUR bn)	Difference (EUR bn)
<i>Electricity and Heat</i>	14.3	26.0	11.7
<i>Industry</i>	30.4	39.5	9.0
<i>Residential</i>	7.8	16.4	8.6
<i>Supply Sector</i>	2.1	8.2	6.1
<i>Transport</i>	0.0	2.8	2.8
<i>Agriculture</i>	0.0	4.0	4.0
<i>LULUCF</i>	0.1	2.9	2.9
<i>Waste</i>	0.4	2.2	1.8
Total	55.1	102.0	46.9

➤ **Additional investments (difference) is the relevant indicator to discuss**



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