



Low Carbon Ukraine

Policy advice on low-carbon policies for Ukraine



Supported by



Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

Based on a decision of the German Bundestag

Policy reforms supporting Ukraine's green reconstruction

Keynote presentation for the panel discussion on October 19th, 2022

Rouven Stubbe

Berlin/Kyiv, October 2022

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Structure

Motivation

Rebuild quick vs. rebuild green?

Part I: Electricity system

- a) Overview – Ukraine’s electricity system
- b) Policies for a green reconstruction of the electricity sector

Part II: District heat system

- a) Overview – Ukraine’s district heat system
- b) Policies for a green reconstruction of the district heat system

Part III: Residential sector & individual heat systems

- a) Overview – Ukraine’s residential sector
- b) Policies for a green reconstruction of the residential sector

Complementary policies

Conclusion

1. Motivation

Economic reasons for a green reconstruction:

Efficiency gains & cost decrease of green technologies

Increase in fossil energy prices & price volatility

Energy supply security

EU accession perspective

BUT: Regulatory obstacles & disincentives for mobilising investments in low- or zero-carbon assets

➤ **Policy reforms needed to overcome obstacles and mobilise investments**

2. Rebuild quick vs. rebuild green?

Emergency reconstruction:

- Ensuring people have a roof over their head and heat for the winter
- **Low investment cost more important than low operational cost**

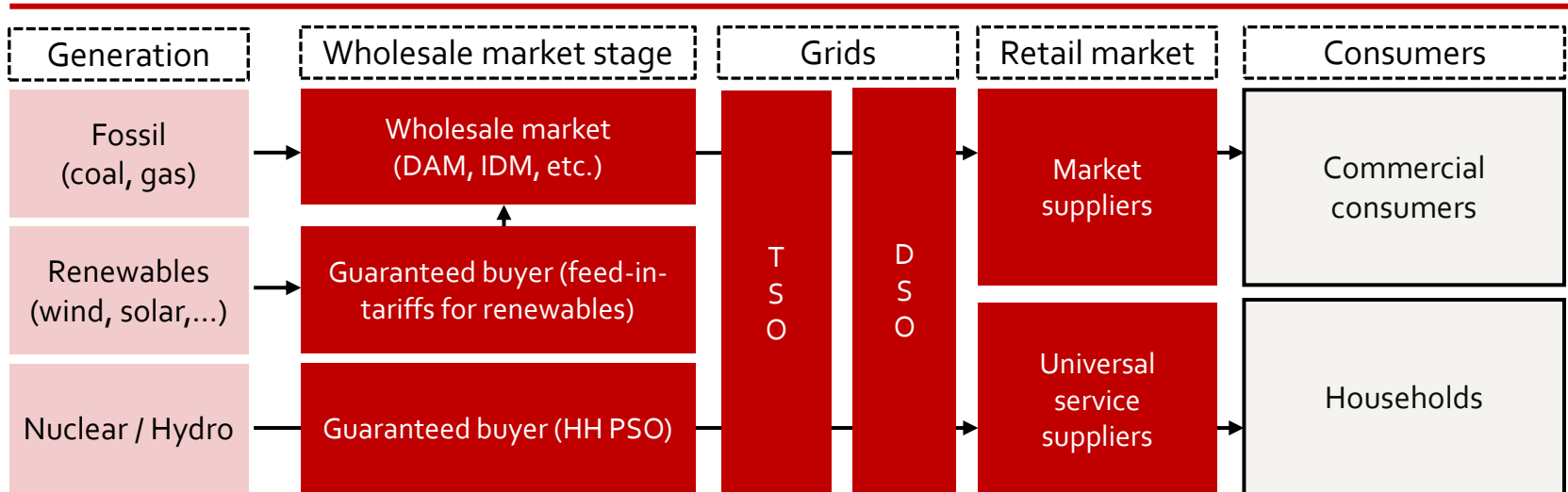
Post-war reconstruction:

- “Build back better”
- Emphasis on energy efficiency
- **Low operational cost can lead to lower levelised cost**

- **Emergency measures should prioritise temporary solutions that do not prevent investment into more modern and green assets**

Part I:
Electricity System

I. (a) Overview – Ukraine’s electricity system



Opportunities for decarbonisation

- Wind, Solar, sustainable biomass
- Gas peaker plants (H₂-ready)
- Energy storage (PSP, batteries)
- Demand-side management



Obstacles to mobilising investments

- Market concentration
- Price caps → insufficient incentives to invest in flexibility
- Unstable environment for RES support
- Subsidised consumer tariffs → low incentives for energy efficiency

I. (b) Policies for a green reconstruction of the electricity sector

Market power mitigation on the electricity wholesale market

- REMIT implementation (legal basis now adopted)
- Commercial integration with ENTSO-E markets
- Standardisation of forward products
- *To be considered:* Antitrust measures (energy release programmes, compulsory divestments, market concentration rules for reconstruction support)
- *To be considered:* Reform of market design (long-term standardised forward contracting obligations for retailers)

Phasing out wholesale market price caps

- Remove price floors & ceilings on day-ahead, intraday & balancing markets

Financing & de-risking investments in renewable energy sources

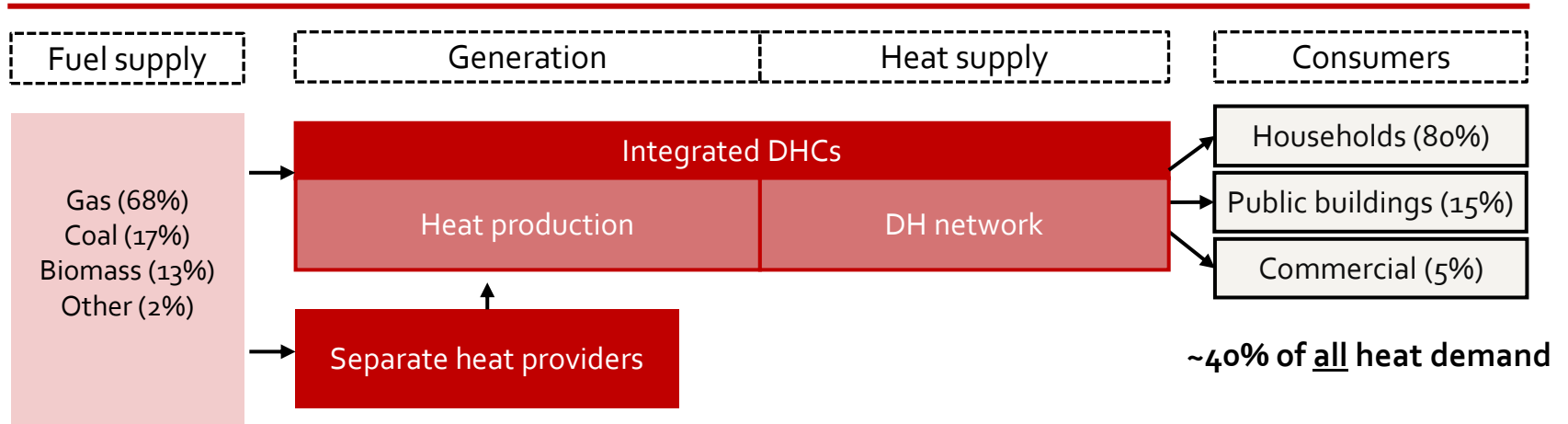
- Introduce auction scheme for feed-in premiums

Liberalising retail consumer prices

- Phase out consumer price subsidies (household PSO)

Part II:
District heat system

II. (a) Overview – Ukraine’s district heat system



Opportunities for energy efficiency & decarbonisation

- Biomass CHPs
- Utility-scale heat pumps
- Centralised electric boilers
- Centralised heat storage



Obstacles to mobilising investments

- Subsidised / regulated gas prices for DHCs
- Low payment discipline
- Politicised tariff-setting
- Split regulation system (NEURC / MinRegion)

II. (b) Policies for a green reconstruction of the heat sector

Phasing out gas subsidies

- Phase-out regulated prices for gas provision from Naftogaz to DHCs
- *In tandem*: Gas release program
 - Oblige Naftogaz to sell produced gas on transparent trading platform

Tackling payment discipline

- Improve bills collection framework
 - Allow for adequate fines and penalties for non-payment (only after end of war)

Tariff reform – incentive-based regulation

- Improve transparency of tariff-setting
- Take into account the pass-through of costs to consumers
- Include rewards (incentives) and penalties (sanctions) for efficiency and quality of service targets

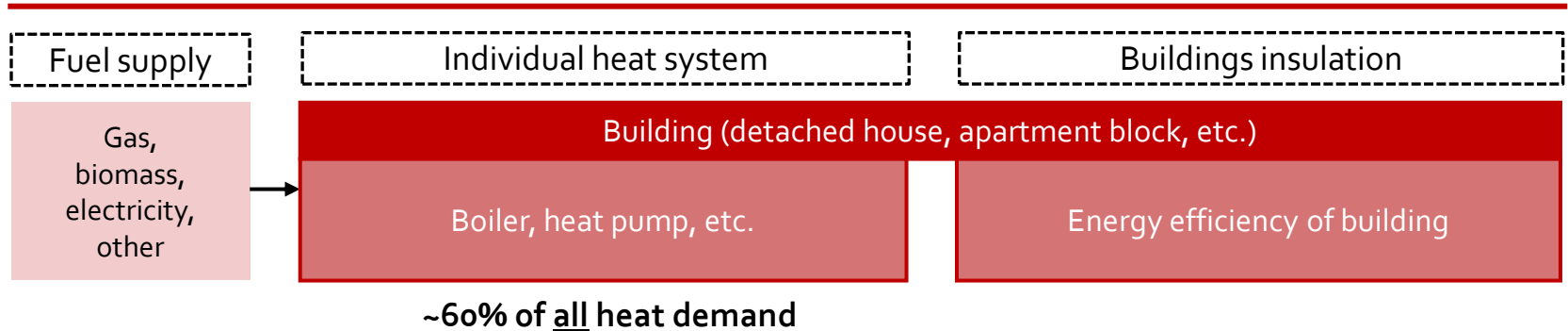
Harmonising district heating regulations

- Move from two- to a single-tariff system (unified methodology)
 - Consolidate NEURC and government regulations

Part III:

Residential sector & individual heat systems

III. (a) Overview – Ukraine’s residential sector



Opportunities for energy efficiency & decarbonisation

- Heat pumps
- Efficient biomass (wood pellets)
- Solar thermal systems
- Thermal insulation (energy eff.)



Obstacles to mobilising investments

- Low incentive to invest in energy efficient renovation & reconstruction due to subsidised electricity & heat tariffs (see previous sections)
- Low rate of home-owner associations in multi-apartment buildings
- Gaps in primary legislation to conform with EU directives
- Insufficient support programmes for energy efficiency investments

III. (b) Policies for a green reconstruction of the residential sector

Phasing out electricity, gas & district heat subsidies

- see previous sections

Update legislation on the management of the multi-apartment buildings

- Incentivise establishment of homeowner associations

Completing harmonisation of regulation for energy efficiency in buildings with EU legislation

- Close gaps in primary legislation, streamline secondary legislation

Increase scale and scope of support for energy efficient renovations and reconstruction

- Seek support from international partners to increase funding & scope of Energy Efficiency Fund
- Re-establish “Warm Loans” programme for individual buildings
- Targeted funding (as part of above programmes) for reconstruction of war-damaged buildings

Complementary policies

Carbon pricing

- An adequate carbon price covering all energy-consuming sectors can efficiently guide investments in low-carbon assets across sectors
- Should mirror EU-ETS & prospective EU-ETS-II and gradually converge to EU price levels
 - Avoids economic shock & stranded assets upon future EU accession
 - Diverts EU-CBAM revenues to Ukraine

Strengthened social transfers

- Targeted or broad-based transfers to compensate households for increased electricity & heat tariffs
 - Consumption-independent (preserve incentive for energy efficiency)
 - Improved HUS transfers (targeted) or per-capita transfers (broad)

Complementary policies (continued)

Improved governance of state- & municipally-owned enterprises

- Remove all irregular obligations of Energoatom, Ukrhydroenergo, Naftogaz, and DHCs, such as...
 - provision of energy services at subsidised prices
 - financial cross-subsidisation inside energy markets
 - Only profits should be disbursed to the national/municipal budgets, being fully fungible (not subject to earmarks for specific uses or supplying “special funds”)
- Ensure that SOE’s & MOE’s management has the ability to independently manage and run the companies, subject to oversight by the public owner as per international best practice

Conclusion

- There are opportunities for the electricity, heat, and residential sectors to cost-effectively boost decarbonisation & energy efficiency during reconstruction
- But regulatory obstacles & disincentives for mobilising investments in low- or zero-carbon assets exist

Key policy reforms:

Electricity

- Mitigating market power & phasing out wholesale market price caps
- Financing & de-risking investments in renewable energy sources
- Liberalising electricity retail consumer prices

Gas and district heating

- Gas release programme
- Phasing out gas subsidies
- Tackling underfinancing of district heating companies
- Harmonising district heating regulations

Residential

- Legal reforms to facilitate multi-apartment homes' renovation
- Harmonisation with EU legislation
- Increased scale & scope of funding for energy efficient renovation & reconstruction (EEF, Warm Loans)

Carbon pricing

Social transfers

Governance of state-owned enterprises

Conclusion

Ukraine's green reconstruction is not an expensive luxury but an economic necessity to ensure future competitiveness within the European Union and a progressively decarbonising global economy.

Further readings



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Policy Proposal Series [PPr/03/2022]

Policy reforms supporting Ukraine's green reconstruction

Rouven Stubbe
Manuel von Mettenheim
David Saha
Ievgenii Chervachenko
Pavel Bilek
Robert Kirchner



Berlin/Kyiv, August 2022

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[Link to English publication](#)



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Серія політичних пропозицій [PPr/03/2022]

Реформи для підтримки зеленого відновлення України

Рувен Штуббе
Мануель фон Меттенхайм
Девід Саха
Євген Червяченко
Павел Білек
Роберт Кірхнер



Берлін/Київ, серпень 2022 року

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[Посилання на українське видання](#)



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