

REFORM

Green electrification in Poland: from sectoral challenges to a systemic perspective

Aleksander Śniegocki
CEO | Reform Institute

June 2023



NEW YORK	14-
PARIS	14-
4 DUNA	10-
5 GENEVA	4- 5
6 TOULOUSE	4- 5
BERLIN TEL	4- 5
GOTEBORG	4- 5
ISTANBUL	3-
MADRID	9-
LONDON LHR	9-



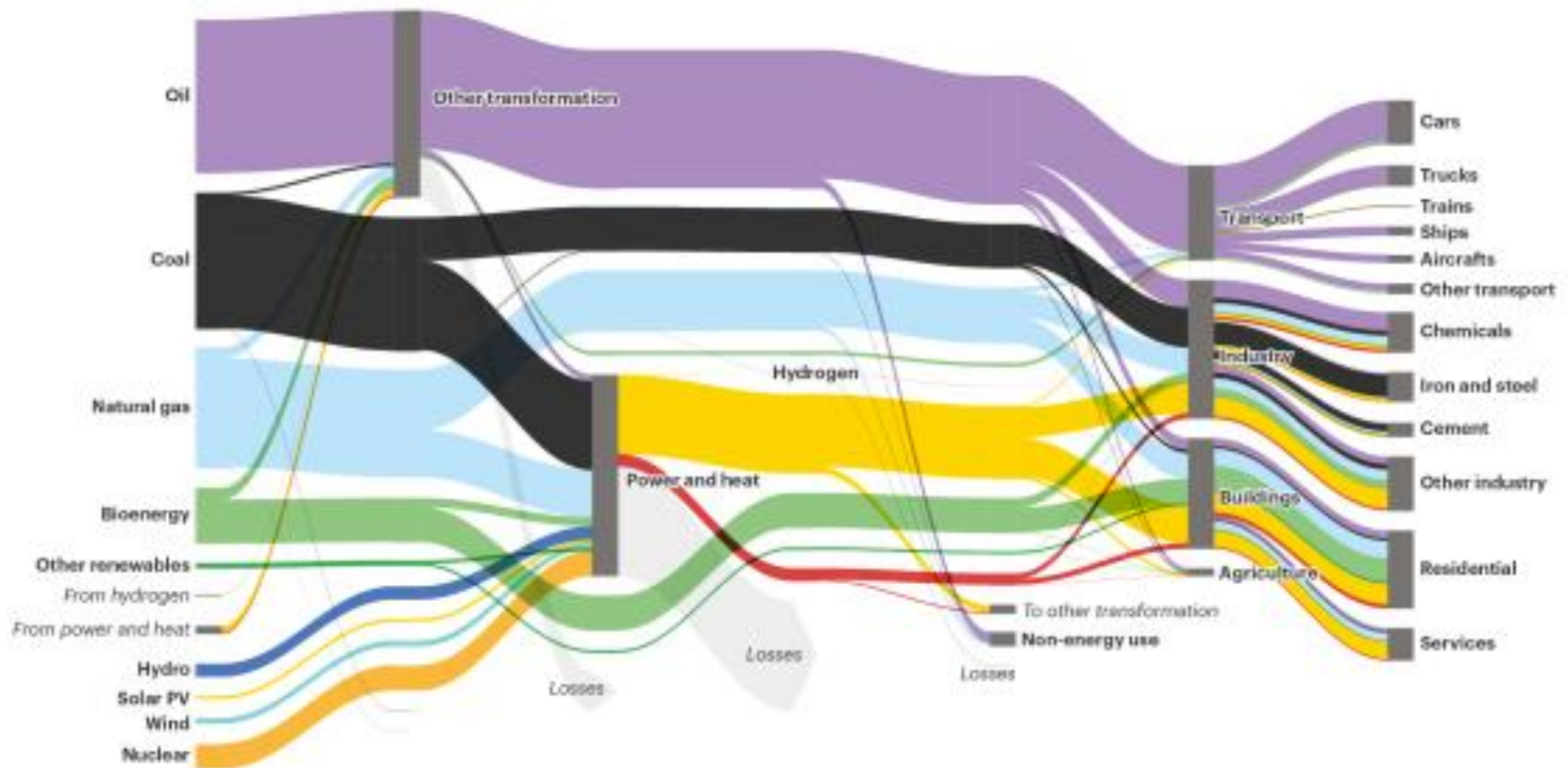
About us

- Reform Institute - is an independent think tank established at the end of 2021, which supports the continuous improvement of the process of formulation, implementation, monitoring and evaluation of public policies in Poland, Europe and the world
- One of our key objectives is to support the transition of the energy system and to protect the climate.

Green electrification as a global trend

Global energy system today

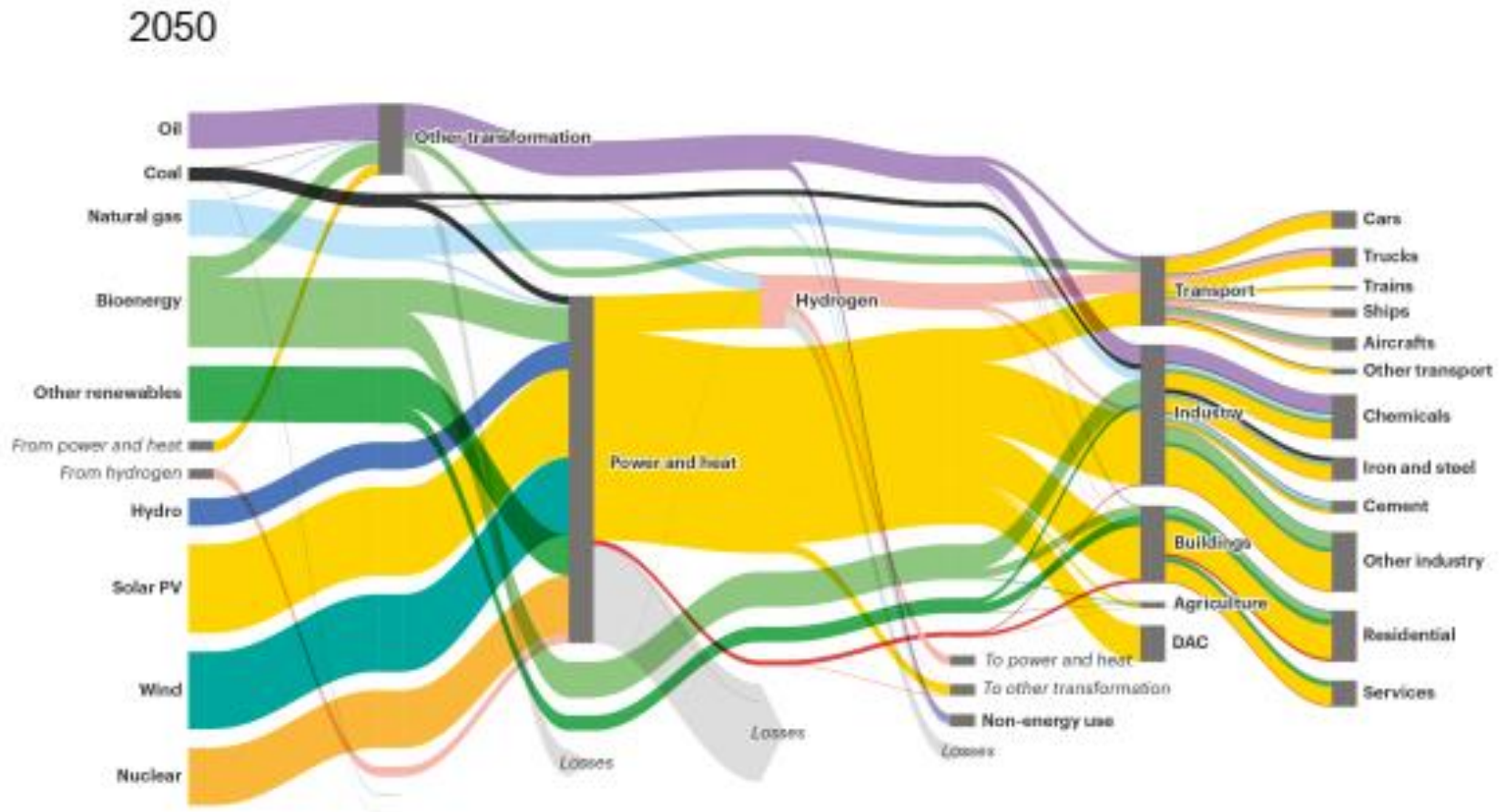
2021



Source: IEA, Energy Technology Perspectives 2023

Green electrification as a global trend

Global energy system in a net zero world

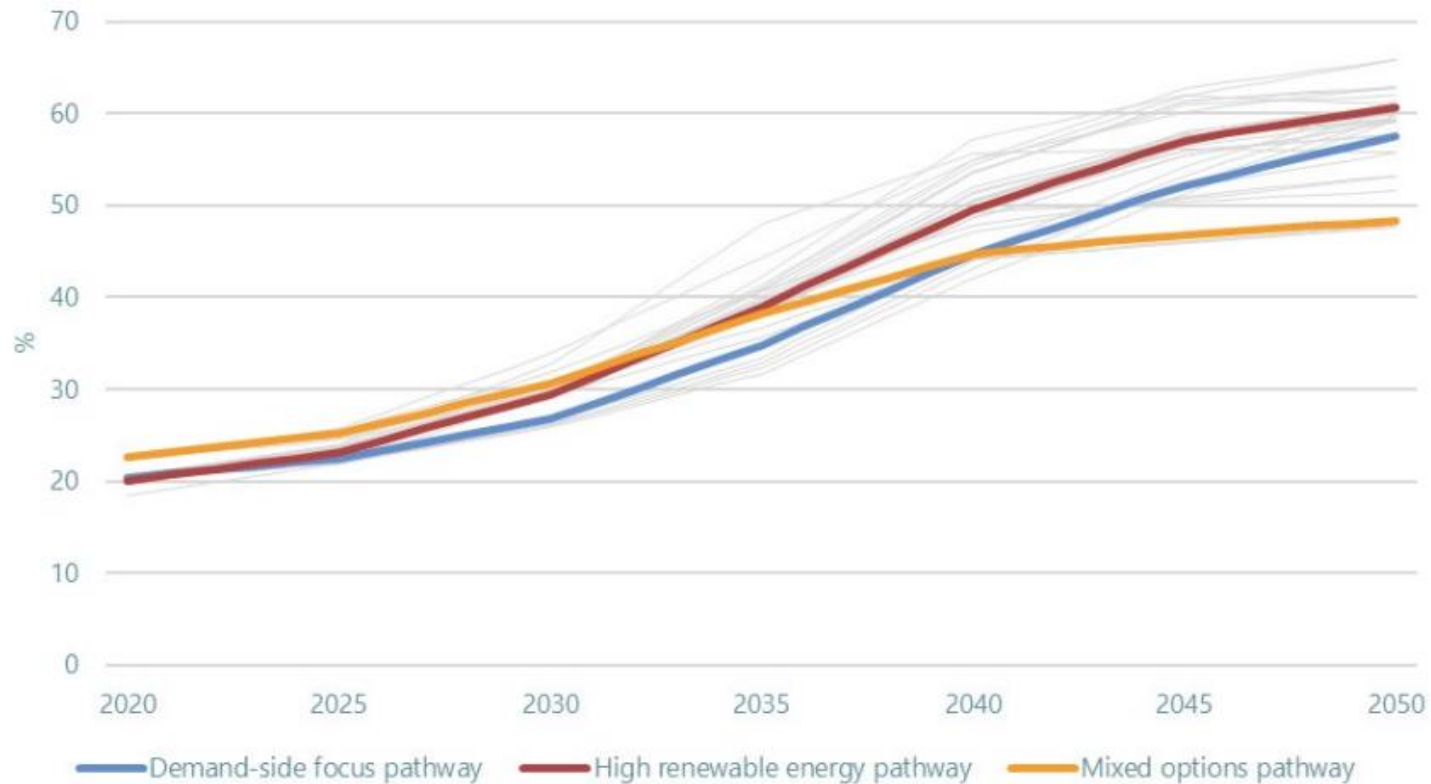


Source: IEA, Energy Technology Perspectives 2023



Green electrification on the road to the EU climate neutrality

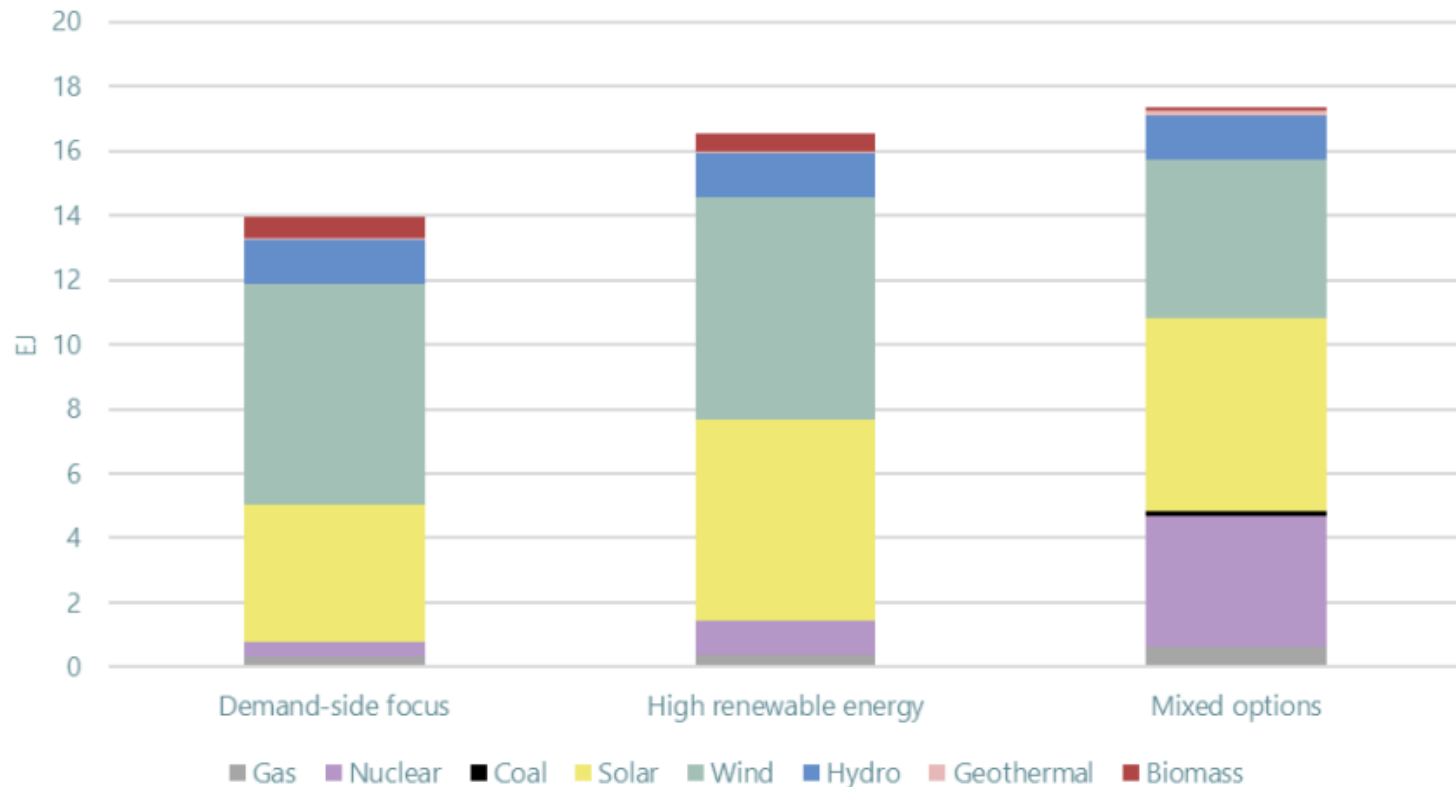
Electrification share of final energy in the EU



Source: European Scientific Advisory Board on Climate change report on EU-wide 2040 climate target and a greenhouse gas budget for 2030–2050

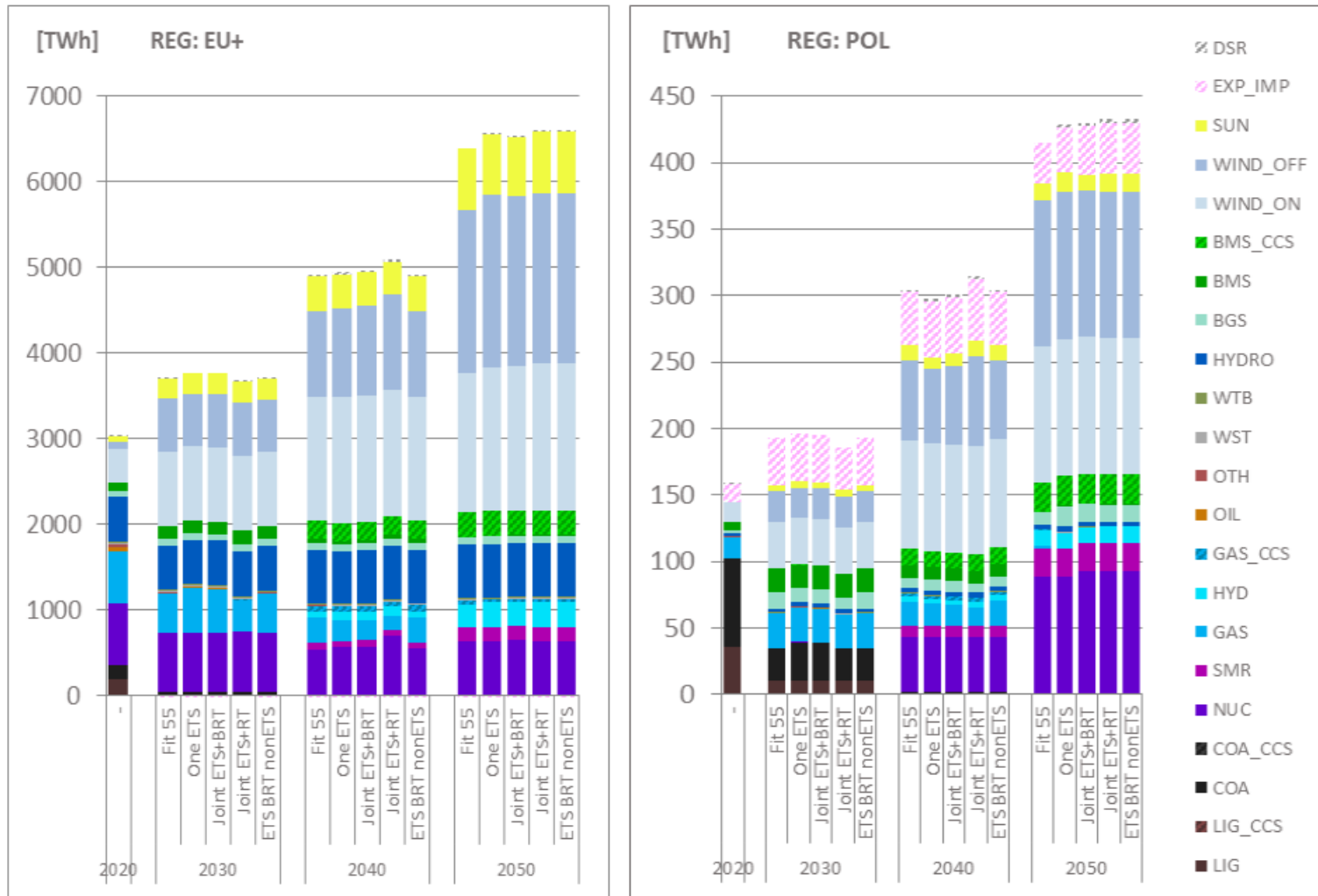
Green electrification on the road to the EU climate neutrality

Fuel and electricity generation in 2040 by source



Source: European Scientific Advisory Board on Climate change report on EU-wide 2040 climate target and a greenhouse gas budget for 2030–2050

Net zero in the EU: a view from Poland



Source: KOBiZE (2023), VIIEW on EU ETS 2050: Changing the scope of the EU ETS



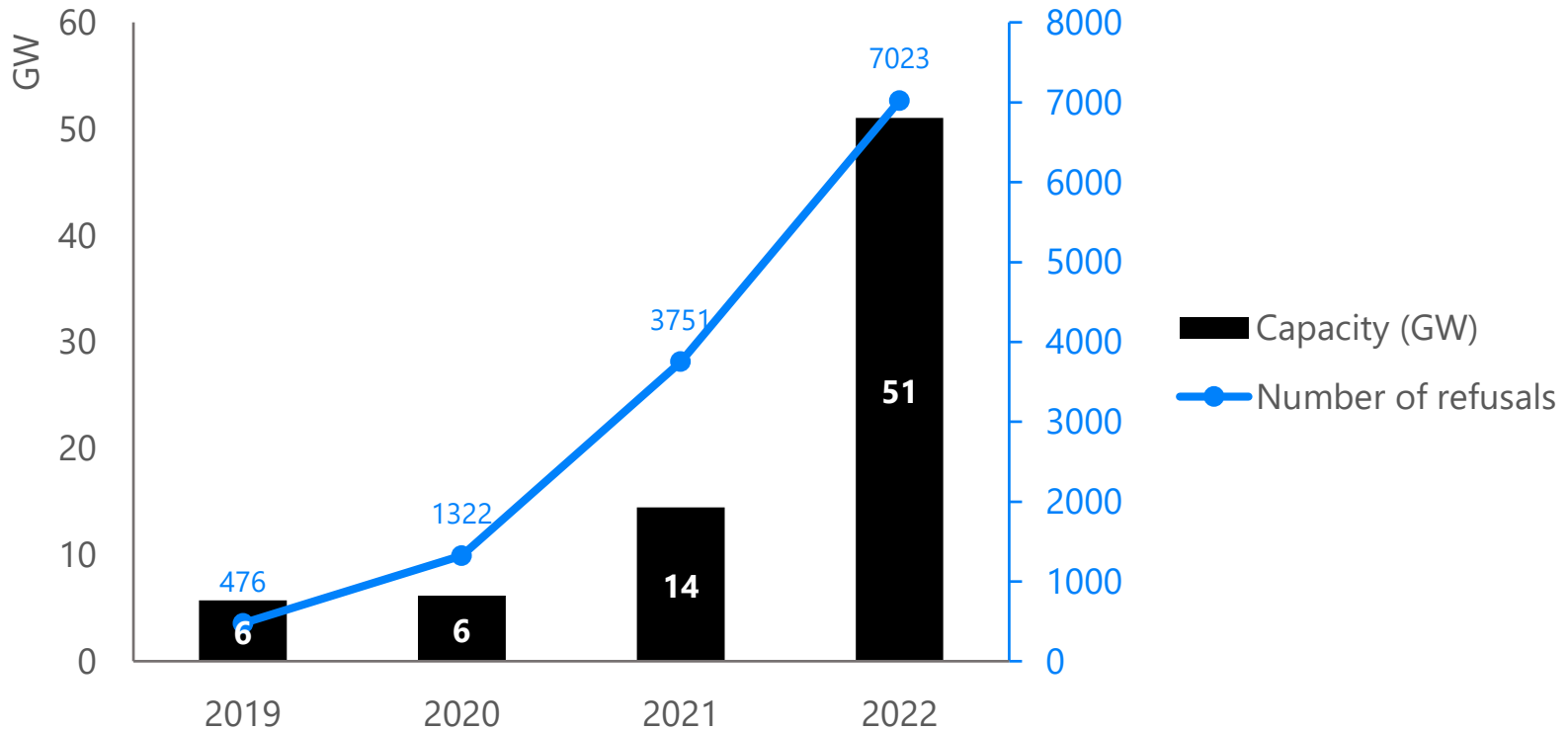
Key cross-sectoral challenges of green electrification

- Based on the sectoral and cross-sectoral discussions we have identified two major challenges for the green electrification in Poland
 - **Electricity grid management**
 - **Permitting processes**
- Common issues:
 - Complex, multi-stakeholder problems
 - Demand-side sectors typically not included in the discussions
 - Rapid escalation of the problem as investments scale up



Grid connections: an escalating problem

Refusals to connect producers to the power grid in 2019-2022



Source: URE

- Today: key obstacle for RES producers
- Tomorrow: major barrier for e-mobility and electrified heating?

Grid management: do we need evolution or revolution?

Evolution	Revolution
Medium-term planning (10-15 years) in response to existing EU targets	Planning national net zero targets by 2050 + ongoing course corrections
Corrections of tariff components	Dynamic tariffs
Higher subsidies for grid investments	Targeted subsidies for innovations/problematic areas
Correction of centralised, top-down network management procedures	Digitization and expansion of market mechanisms at the level of distribution system
Dedicated solutions at the edge / outside the system (clusters, direct line ...)	Common mechanisms restructuring the entire market (whole Poland as an "energy cluster")

- Or do we need a step-by-step or a hybrid approach?

Permitting in Poland – high-level overview of structural barriers

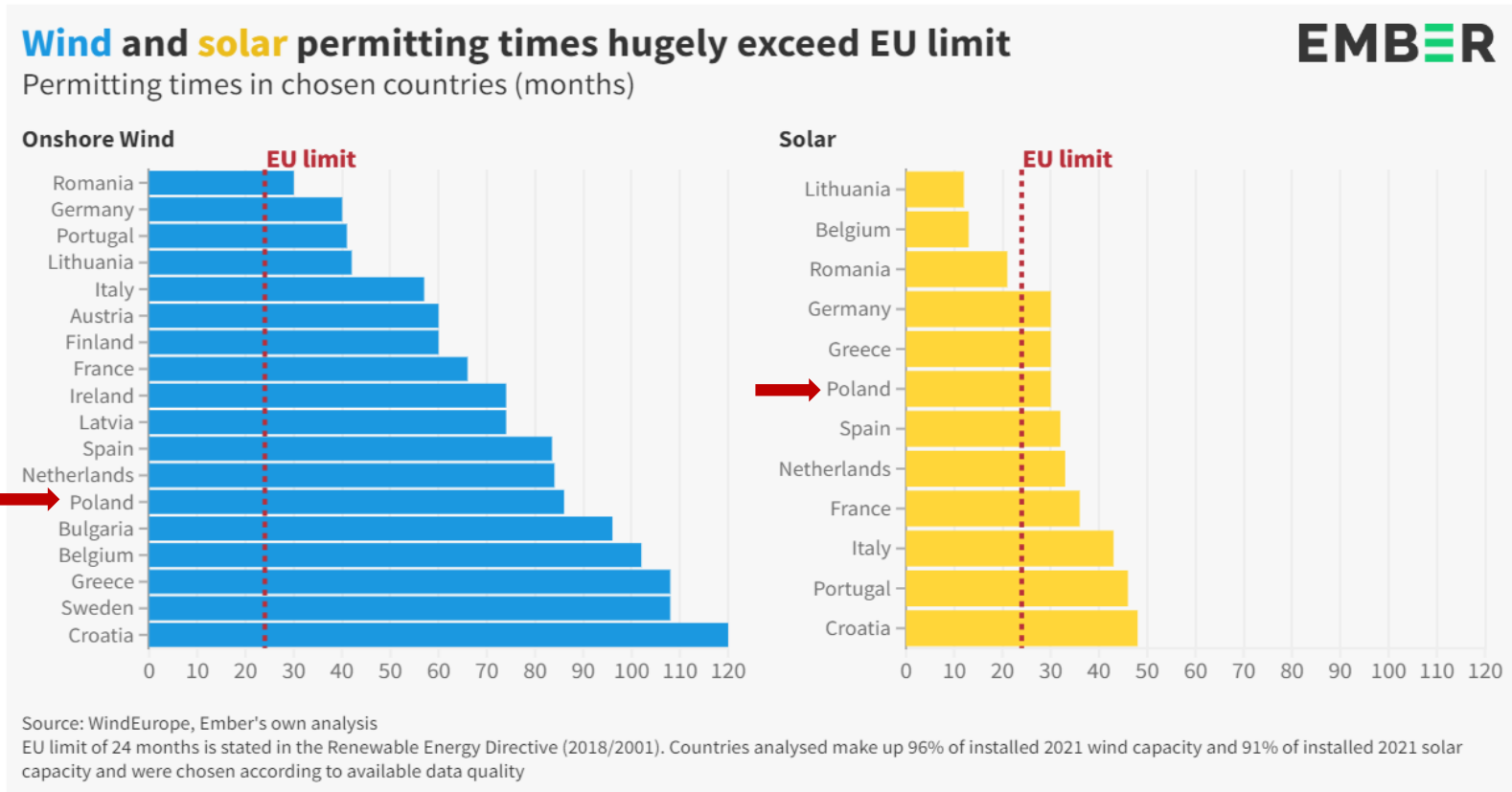
	Small PV	Large PV	Onshore wind
Inclusion of the installation in the local zoning plan		+ + after zoning reform	+
Obtaining a decision on building conditions		+	
Environmental decision		+	+
Grid connection conditions	+	+	+
Building permit	+ (more than 50 kW)	+	+ (more than 50 kW)
Concession for electricity generation	-	+	+

Areas where a given requirement applies are marked with pluses

- No barriers identified in the process
- Minor barriers identified in the process
- Significant barriers identified in the process

Source: Reform Institute

Existing EU regulations vs current realities



- Renewable Energy Directive sets specific limits for the RES permitting times since 2018, but its implementation is still a challenge
- Even more focus on permitting in the current revision of RED: introduction of **renewables go-to areas**, RES expansion treated as a matter of **overriding public interest**

Good practices are available across Europe

No decision within
deadline = positive
decision (Spain)

One-stop-shop
(Netherlands)

Parallel obtaining
of individual
permits (Austria)

Shortening the
appeal path
(Netherlands,
France)

Flexibility in final
installation
parameters
(Sweden)

Simplified
procedure for
repowering (Italy,
Germany)

- More examples and national assessments: [RES Simplify](#) project and European Commission [recommendations](#) based on it published in 2022, [latest RES Simplify report](#) published in 2023



Key recommendations

Grids

Long-term grid planning based on the climate neutrality target by 2050

Clear and transparent rules for connecting energy sources and consumers to the power grid

Shift from the top-down network management rules to performance-based flexible mechanisms

Adaptation of the tariff structure to reflect the actual costs of grid expansion and management, and to promote the adjustment of the production and consumption profiles to the actual situation in the energy system
Effective use of public funds to support grid investments via transparent and strategic selection of priority areas for intervention

Inclusion of stakeholders from all sectors in the reform preparation, both energy producers and consumers.



Key recommendations

Permits

Setting a clear pathway to achieving the EU requirements for the duration of the permitting procedure

Accelerated procedures for repowering

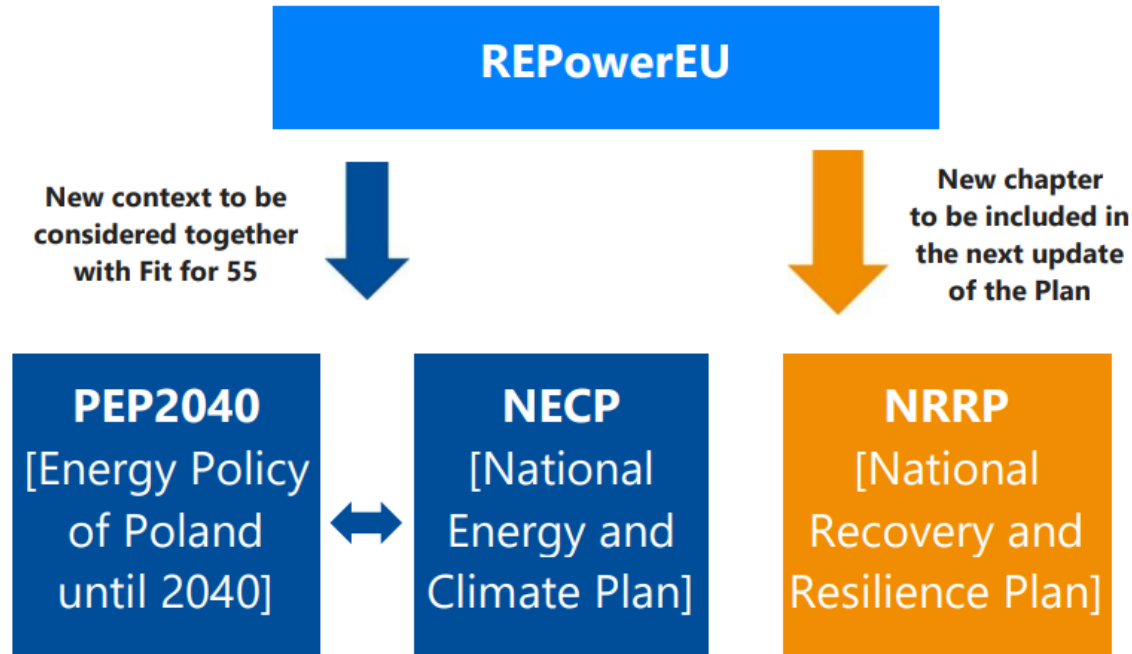
Investments in digitization and strengthening capacities in the institutions responsible for permitting processes

Implementation of go-to areas for RES

Monitoring of the impact of other reforms (e.g. spatial planning) on RES permitting timelines

Ongoing evaluation of policies and reforms based on quantitative measures (e.g. duration in months)

Why now?



- Increasing delays in the preparation of new Energy Policy and NECP update
- Strategic decisions after the 2023 elections (regardless of their outcome) – little time for starting from scratch (final NECP due in June 2024), broad evidence base and feedback from the stakeholders needed to build upon
- Key reforms require extensive preparation and stakeholder consultation. Thus high-level commitment from the government via strategic documents is important.

Next steps

Call to action – by
30.06 (NECP
preconsultation
deadline)

H2 2023/H1 2024 –
ongoing **stakeholder
exchanges** to raise
awareness and promote
solutions

RE:FORM

Thank you!

Aleksander Śniegocki
aleksander.sniegocki@ireform.eu

Reform Institute
office@ireform.eu