



Session IV. Updated renewable energy directive

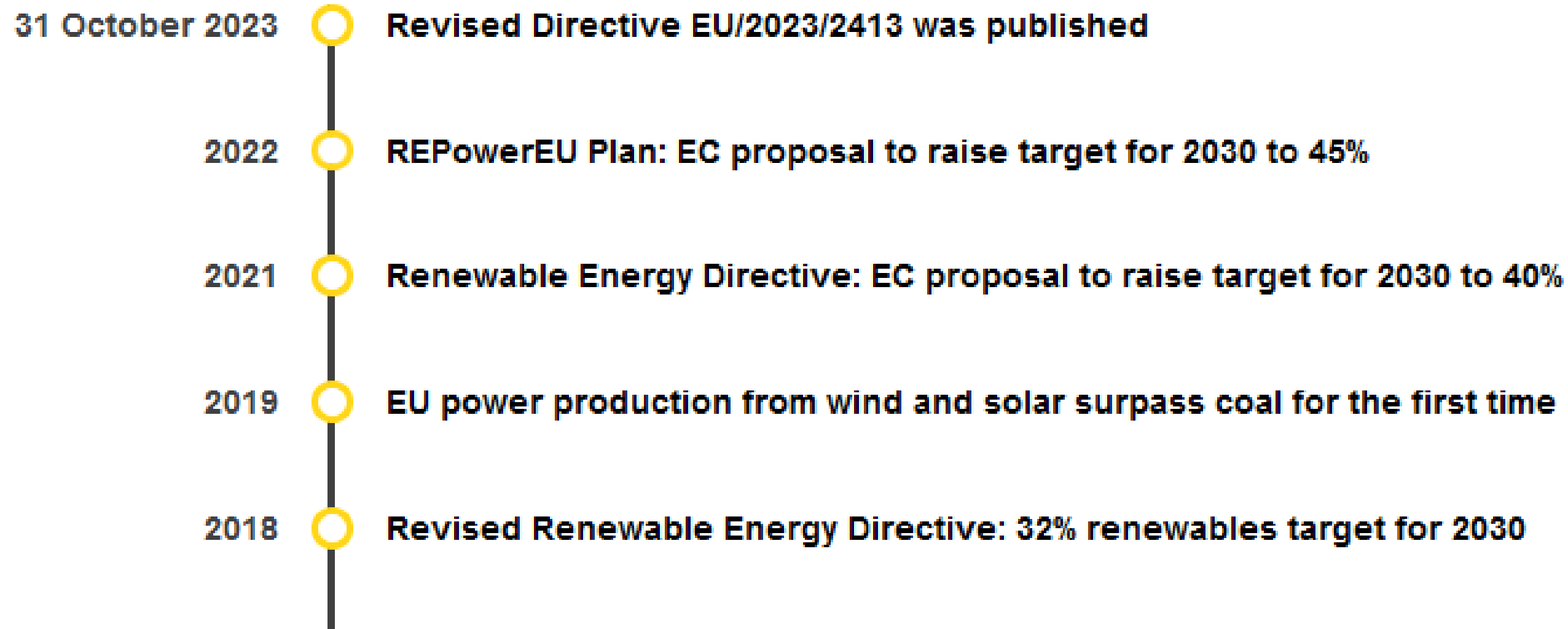
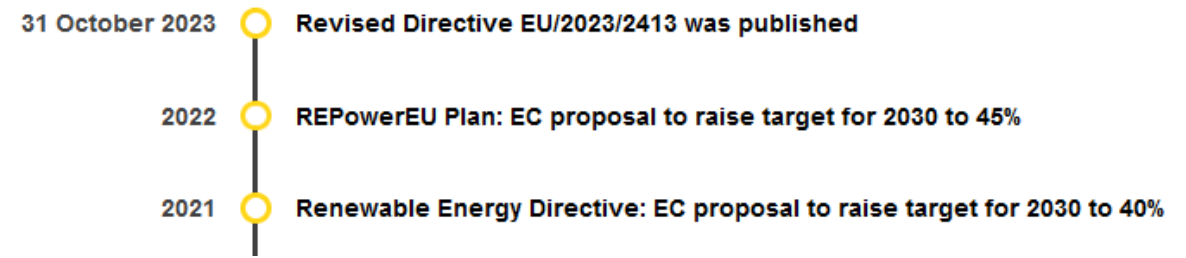
Overview of the European Green Deal and relevant EU directives, in particular, the updated RED

Tbilisi, Georgia

Matija Vajdić

21 November 2023

The RE timeline



Background

As part of the July 2021 “**Fit for 55**” package, the EC proposed a revision of the Renewable Energy Directive to adapt EU legislation to the new greenhouse gas emissions (GHG) reduction goal under the **European Green Deal** and the European Climate Law.

The EU will:



Become
climate-neutral
by 2050



Protect human life,
animals and plants,
by cutting pollution



Help companies
become world leaders
in clean products and
technologies



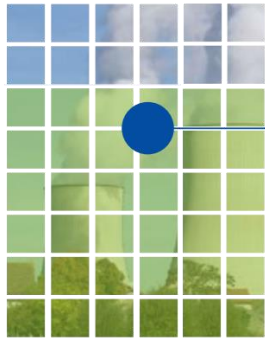
Help ensure a
just and inclusive
transition

What will EU do?

The EU will be **climate neutral in 2050**

ENERGY

Decarbonise the energy sector



INDUSTRY

Support industry to innovate and to become global leaders in the green economy



European industry only uses **12%** recycled materials

BUILDINGS

Renovate buildings, to help people cut their energy bills and energy use



40% of our energy consumption is by buildings

MOBILITY

Roll out cleaner, cheaper and healthier forms of private and public transport



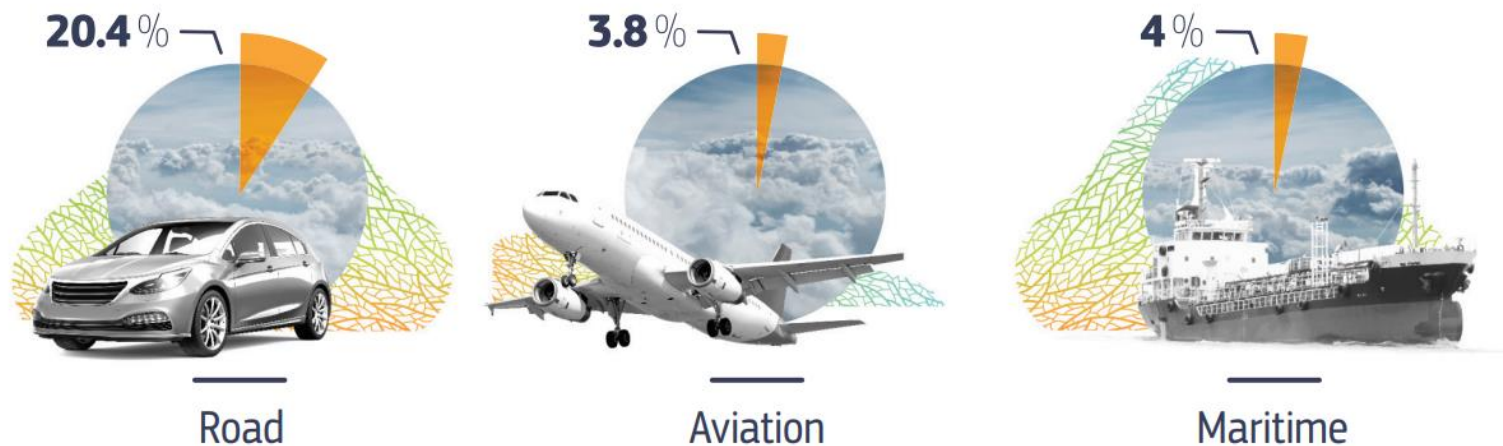
Transport represents **25%** of our emissions

#EUGreenDeal - transport

- Cut the climate-warming greenhouse gas emissions
- Reduce air and noise pollution and their negative impacts on our health
- Drive innovation

TRANSPORT NEEDS TO CUT EMISSIONS BY 90% BY 2050

Share of total EU Greenhouse Gas (GHG) emissions, per mode



#EUGreenDeal - transport

- Road
 - Extension of the Emission trading system (**ETS**) to **road transport and building fuels** from 2026
 - Focus on **upstream fuel suppliers** (rather than households and car drivers)
 - Revenues to be channeled to **support vulnerable households** and investments in **cleaner mobility**
- Aviation
 - **Tighter cap** on the number of allowances for **intra-EU flights**, starting from current levels and reduced by 4.2% annually
 - Full phase-out of free allowances by 2026
 - **Extra-European flights** to be subject to **offsetting** under the international CORSIA scheme
- Maritime
 - Gradual **extension of the ETS to maritime** starting in 2023 with a 3-year phase in period
 - Focus on **large ships** (above 50000 gross tonnage) accounting for 90% of CO₂ emissions
 - Intra-EU traffic and 50% of extra-EU voyages covered by the scheme

#EUGreenDeal - transport



Public charging and hydrogen refuelling stations will be widely available, interoperable and easy to use, including at fixed intervals along Europe's major transport corridors

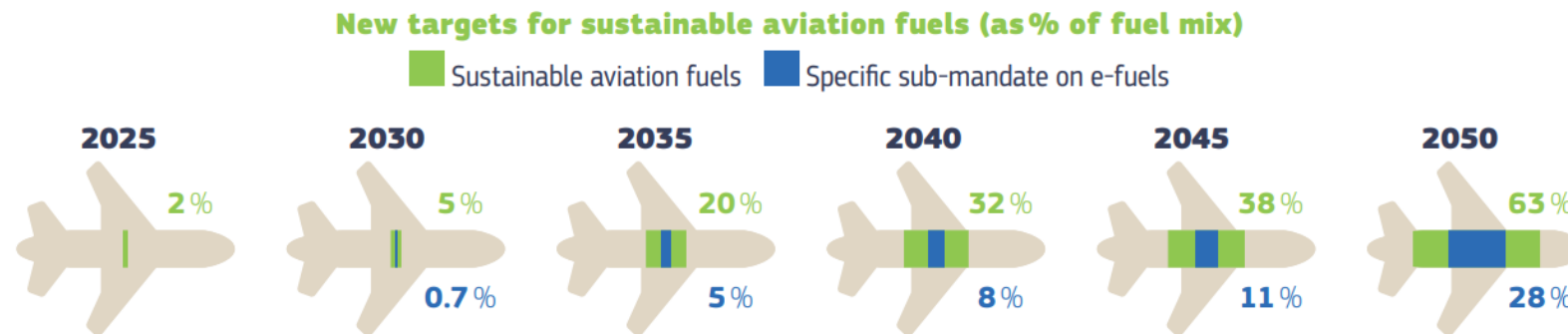
National fleet based targets for charging stations for cars and vans – those could lead to approximately*:



*according to Commission Impact Assessment of vehicle uptake following the 'Fit for 55' proposals and assuming an average power output of approx. 15 kW per recharging station

#EU Green Deal - transport

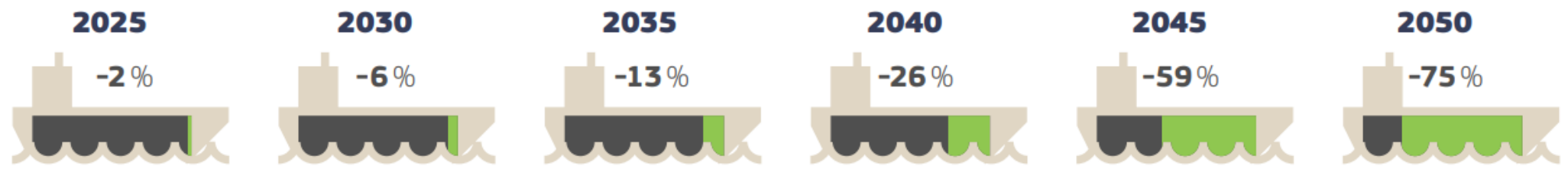
- ReFuelEU: Accelerating aviation's decarbonisation through sustainable aviation fuels (SAF)
 - Obligation on fuel suppliers to distribute **increasing levels of SAF at all EU airports**
 - Obligation on airlines to uplift SAF-blended fuel before each flight from an EU airport
 - Focus on the **most innovative and sustainable fuels**, e.g. advanced biofuels and synthetic fuels (also known as electro-fuels)
 - Ensure **electricity supply for stationary commercial aircraft** at all gates by 2025 and additionally at all outfield positions by 2030



#EUGreenDeal - transport

- FuelEU: Accelerating maritime's decarbonisation through renewable and low-carbon fuels and technologies
 - Introduction of a **fuel standard limiting the greenhouse gas intensity** of energy used on ships
 - Obligation for most polluting ships to connect to **onshore power supply or use zero-emission technologies** at berth
 - **Alignment with ETS on scope** (ships above 5,000 gross tonnage; intra-EU + 50% extra-EU) and on reporting and verification obligations

Maritime targets on the limits on greenhouse gas intensity of the energy used on-board compared to 2020



REPowerEU

- In response to the hardships and global energy market disruption **caused by Russia's invasion of Ukraine**, the European Commission is implementing its REPowerEU Plan
- It will help the EU to:
 - Save energy – reaching an agreement for **reducing gas demand** across the EU
 - Produce clean energy – promoting **massive investment in renewable energy**
 - Diversify its energy supplies – **finding alternative ways to ensure energy supply**
 - Secure affordable energy supplies – increasing the **gas storage**
- The European Parliament and the Council agreed to raise renewable targets, create “renewables acceleration areas”, and simplify permit-granting procedures, with renewable installations treated as over-riding public interest
- **Another revision of the RED** was proposed under the REPowerEU plan of May 2022

#EUGreenDeal – Delivering the EU’s 2030 Climate Targets



EU Emissions Trading System (ETS) reform



New EU Emissions Trading System for building and road transport fuels



Social Climate Fund



Adopted



Effort Sharing Regulation



Regulation on Land Use, Forestry and Agriculture (LULUCF)



CO2 emissions standards for cars and vans



Carbon Border Adjustment Mechanism (CBAM)



Renewable Energy Directive



Energy Efficiency Directive



Alternative Fuels Infrastructure Regulation (AFIR)



ReFuel EU Aviation Regulation



FuelEU Maritime Regulation

Renewable Energy Directive III

- Sets **42.5% target** for the share of RES in EU energy consumption by 2030 (MS must collectively meet the target)
- **Transport** - MS can choose between (by 2030)
 - 14.5% reduction in GHG intensity or
 - Ensuring a renewables share of at least 29%
- **Industry** – annual target has been set at 1.6% with additional targets for renewable hydrogen (42% by 2030 and 60% by 2035)
- **Heating and cooling** – national binding target
 - until 2026 - 0.8% annual RES share increase
 - until 2030 – 1.1% annual increase
- **Buildings** – indicative target for the RES share is 49% by 2030

Renewable Energy Directive III

- The directive envisages a coordinated mapping for the deployment of renewables (18 months after its entry into force)
 - To identify the domestic potential and the available land surface, sub-surface, sea or inland water for RE plants and related infrastructure (grid and storage)
 - Regional and local authorities have to integrate provisions of RE during spatial planning, designing, building and renovating urban infrastructure, industrial, commercial or residential areas and energy and transport infrastructure

Renewable Energy Directive: Implementation timeline



Renewable Energy Directive III

- Each MS sets a national contribution
- The National Energy and Climate Plans (NECPs) contain a section on renewables as part of the decarbonisation efforts reported under the energy union
- The regional and local levels play a key role in implementing renewable energy projects (integrating RE in regional development plans, granting permits for RE and channelling financial support)

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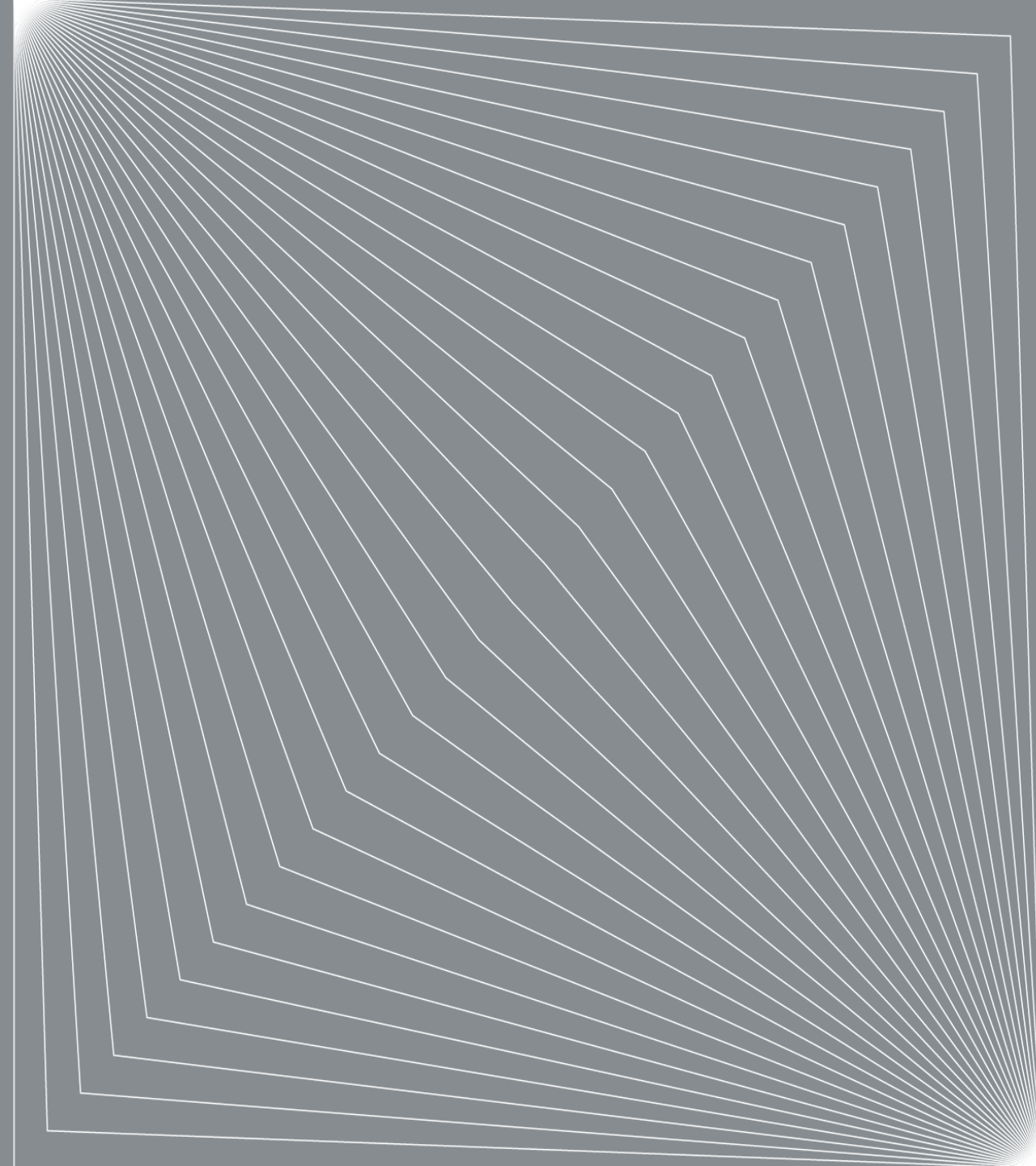
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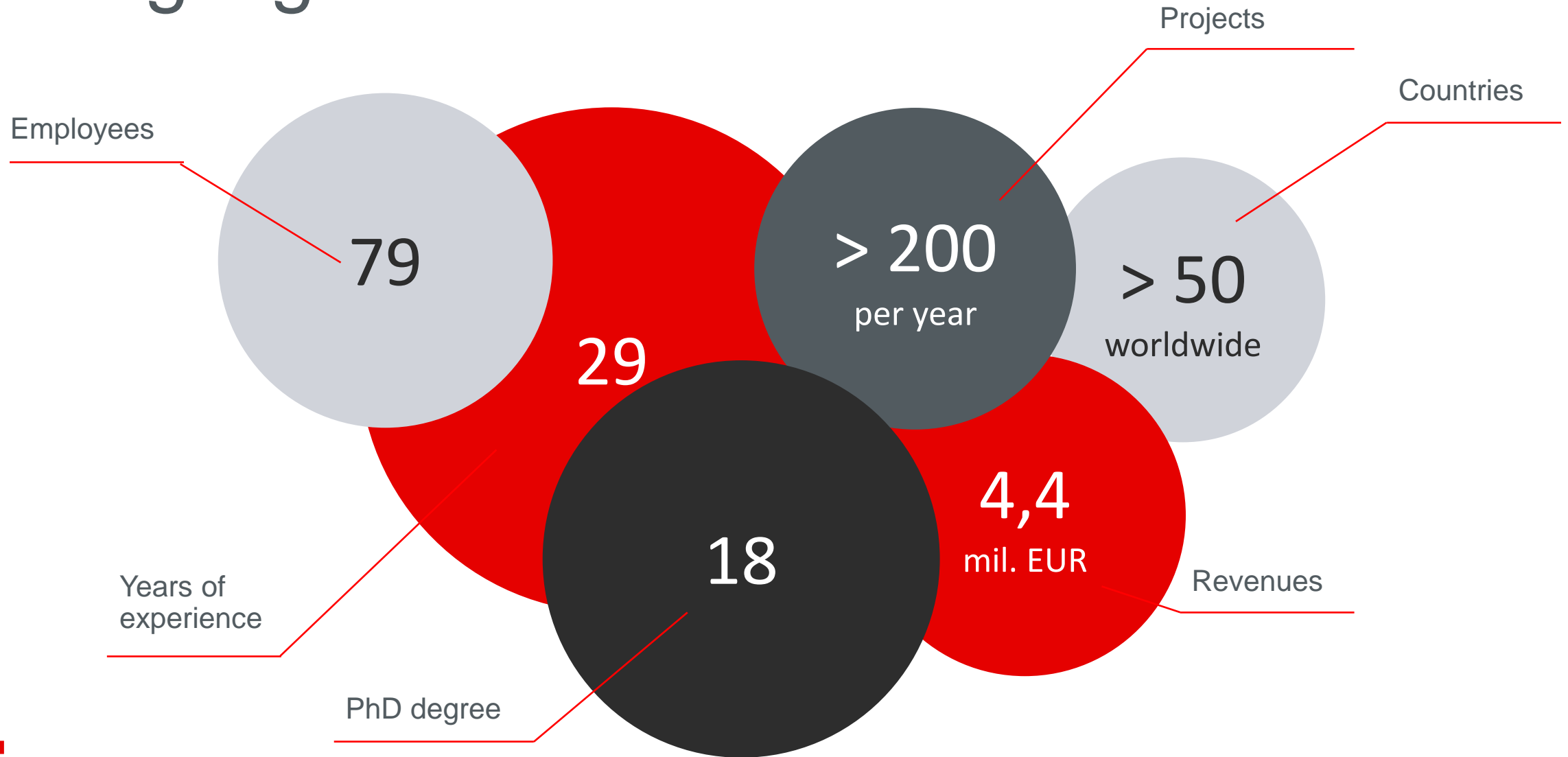


About us

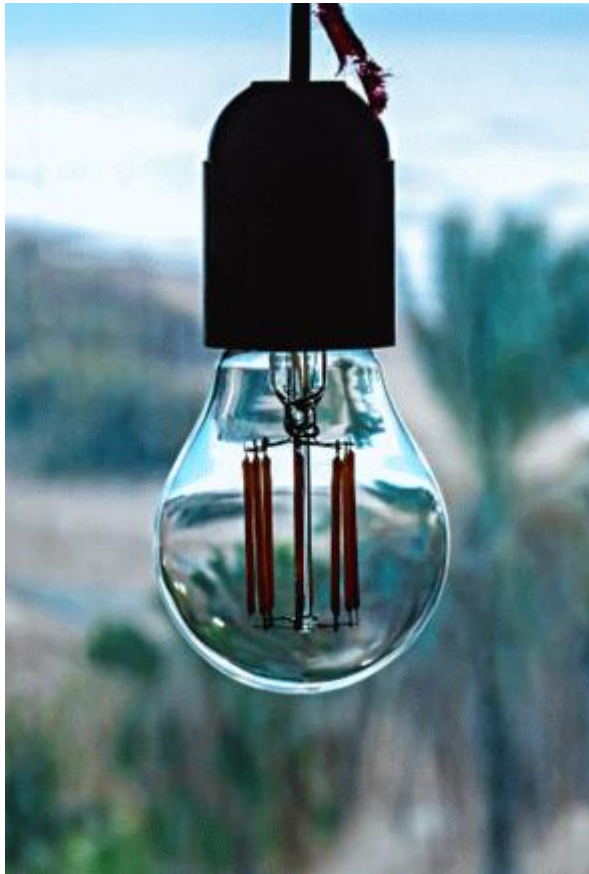
- Energy Institute Hrvoje Požar (EIHP) is an institution owned by the Republic of Croatia, self-financed by providing services to the public and business sectors.
- Our activities include:
 - Implementing scientific research in the energy field
 - Providing professional support to public authorities
 - Providing advisory services in the domestic and international markets



Highlights



Areas of Activity



Energy balance and statistics

Energy production and markets

Renewable energy, climate and environmental protection

E-mobility

Energy and climate planning

Power grid planning and development

Energy regulations and economics

Energy efficiency

Global Clients



Energy Companies

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