Delivering the European Green Deal

The revision of the Renewable Energy (REDII) Directive

Energy Community Gas Forum
22 September 2021
The context for the REDII revision
A fast-changing policy context

19.7% Current renewables share (in 2019)
32% Current EU 2030 target
40% New EU 2030 target

- Climate neutrality 2050
- -55% GHG 40% RES
- Biodiversity Strategy
- Offshore RES Strategy
- Energy System Integration & Hydrogen Strategies
- Renovation Wave: EE and RES in buildings
Transforming our energy system - the vision

1. A more efficient and circular energy system
2. Deep electrification, based on increased renewable electricity
3. Renewable and low-carbon fuels in harder-to-decarbonise sectors

The energy system today: linear and wasteful flows of energy, in one direction only.
Future EU integrated energy system: energy flows between users and producers, reducing wasted resources and money.
Current REDII implementation remains crucial

**RED II**

- Administrative procedures
- Support mechanisms
- Binding EU RE target of 32% by 2030
- Guarantees of Origin
- Self-consumption and renewable energy communities
- Cooperation mechanisms
- Sustainability criteria for bioenergy
- RE in H&C and transport

REDII transposition deadline: June 2021

REDII revision is about targeted amendments to deliver the European Green Deal and mainstream renewables across the economy
Issues addressed in REDII revision

REDII is insufficient for renewables to cost-effectively and sustainably contribute to 55% GHG reduction.

- Insufficient ambition in targets and measures to reach 38-40% RES in 2030 and corresponding shares in transport and heating and cooling.
- Lack of energy system integration provisions to deliver on RES-based electrification, system integration, RES fuels and hydrogen, circularity.
- Bioenergy sustainability criteria require strengthening in view of increased ambition.

European Commission
Overview of measures
Main elements of REDII revision

- Overall ambition – at least 40%, same governance structure
- Energy system integration: promotion of electrification, consumption of renewable hydrogen
- Sectoral ambition and targets: for heating and cooling, DHC, industry, transport (GHG target, e-mobility)
- Flanking measures: strengthened support to PPA, labelling of RES-based products, permitting, cross-border cooperation
- Bioenergy sustainability: strengthened criteria in line with EU Biodiversity strategy (no-go areas, cascading principle)
1. Overall ambition – the EU-level target

**REDII**

- **Overall RES share**
- **At least 32%**
  - EU binding
  - MS contributions + indicative formula

**REDII revision**

- **At least 40%**
  - EU binding
  - MS contributions + indicative formula

**Fit-for-55**

- **actual**
- 2010: 32% (REDII)
- 2019: 33% (MS plans)
- 2030 (Fit-for-55): 40%
2. Energy System Integration – Electrification

- Increased **transparency and real-time information** on RE electricity in the system, batteries:
- RES signals for EVs and smart charging
- Credit mechanism to reward RES-E in transport
- Countries to tackle remaining barriers
2. Energy System Integration – RES hydrogen

- **specific sub-targets** for the consumption of renewable H2 for hard-to-decarbonise applications in:
  - the industry: 50% by 2030
  - transport sector: 2.6% by 2030

- changes the framework for **accounting renewable hydrogen** towards the national contribution by Member State

- extends the **certification framework** to all renewable fuels, including renewable hydrogen
3. Sectoral targets - summary

**REDII**

- **Transport**: 14% target for renewables in transport
- **Heating & Cooling**: 3.5% sub-target for advanced biofuels (double counting)
- **Buildings**: 1.1 pp annual increase, *indicative*
  
  - 1.0 pp in district H&C, indicative
- **Industry**: 49% RES share in buildings *indicative*

**REDII revision**

- **Transport**: -13% reduction of the GHG intensity of transport fuels (equiv. to 28% energy based)
  
  - 2.2% sub-target for advanced biofuels
  - 2.6% sub-target for RFNBOs
- **Heating & Cooling**: 1.1 pp annual increase, *binding*
  
  - Indicative top-ups for each MS
  - 2.1 pp in district heating, indicative
- **Buildings**: 49% RES share in buildings *indicative*
- **Industry**: 1.1 pp annual increase in industry RES share *indicative*
  
  - 50% sub-target for RFNBOs

*NEW*
3. Sectoral measures – heating and cooling

Target Design

- Remaining gap to align to CTP levels
- Proposed revised REDII (binding baseline of 1.1%)
- Current REDII

Extended list of measures

Carbon pricing

Complementary measures

REDII:
- District H&C
- Renewable benchmarks and measures in Industry and Buildings

EED, EPBD, Ecodesign and energy labelling for HC products

2015
2020
2030
4. Flanking measures to enable cost-effective RES deployment

- **Permitting**
  Guidance to MS in 2022, review clause (one year after entry into force), remove barriers through enabling framework and enhanced reporting through EU Governance

- **Offshore**
  Joint planning of offshore RES generation (complementing TEN-E)

- **Power Purchase Agreements**
  Additional facilitative elements

- **Guarantees of Origin**
  Removing exemptions for the issuance of GOs for supported electricity

- **Cross-border cooperation**
  Cross-border pilot project (including use of RES Financing Mechanism)

- **Industrial products**
  Common EU methodology for claiming / labelling the renewable quality of industrial products
5. Bioenergy sustainability: targeted strengthening EU criteria

**REDII**
(enhanced sustainability criteria being implemented)

- Sustainability criteria (no-go areas)
- Land criteria for agricultural biomass
  Biodiversity/climate criteria for forest biomass (risk-based approach)
- Application of EU bioenergy & GHG saving criteria
  Only applicable to heat and power installations equal or above 20 MW
  GHG saving criteria only for new installations
- Cascading principle
  MS required to design support schemes with the aim of avoiding undue distortions of the raw material market

**REDII revision**
(targeted strengthening)

- New land criteria for forest biomass:
  no sourcing from primary and highly biodiverse forests, peatland and wetland
  Minimise large clear-cuts
- Application also to small-scale installations equal or above e.g. 5 MW
  GHG saving criteria apply also to existing installations
- MS to minimise distortions of biomass market
  No support for saw & veneer logs, stumps/roots
  Delegated Act on cascading use of biomass
  From 2026, no support for installations producing electricity with forest biomass*

Revised LULUCF Regulation (2030 EU and national targets, national land use plans)
Revised ETS (zero rating for biomass/biogas only if REDII compliant)
3. Sectoral measures – district heating and buildings

**District Heating and Cooling:**
- Increased indicative target to 2.1 percentage point
- Stronger consumer information and network access requirements
- Stronger coordination with other energy networks to facilitate system integration
- Coordination framework to harness the potential sources of waste heat and cold

**Buildings:**
- 49% renewable energy benchmark to monitor efforts and progress
- Training and skills
- Complementary to EED and EPBD
3. Sectoral ambition and targets – transport

- Target to reduce GHG emissions by 13% + credit mechanism to promote electrification and help to optimise emission savings of renewable fuels.
- Electrification helps to reduce energy consumption in transport.
- Sub-targets for RFNBOs (2.6%) and advanced biofuels (2.2%) ensure uptake of innovative renewable fuels.
- Refuel initiatives should create a pull effect for renewable fuels in the maritime and aviation sector.
3. Sectoral measures – industry

- Industrial investment decision in next decade are crucial
- Benchmark (1.1 percentage points increase per annum) allows for tracking progress
- Annual growth rate considers different starting points MS
- Renewables progress needed to enable post-2030 period
- RFNBOs sub-target of 50%
- Renewable hydrogen uptake in 2030 is still low
- Significant scope for other decarbonisation options

Industry - final consumption

- Renewable electricity
- Renewable hydrogen
- Direct use of renewables

Annual growth (*)

Renewables: 17%
2020: 28%
2025: 35%
2030: 48%
2035: 60%
2040: 63%
2045: 63%
2050: 63%

(*) Percentage points per annum