

The EU Green Deal: challenges and opportunities

by Nicholas de Sadeleer, Univ. of 
St Louis, Jean Monnet Chair on a
Right to a Clean Environment

The Green Transition Soft Law Approach

Green Deal

- + **Industry:** Industrial; Chemicals strategy
- + **Transport:** Sustainable and smart mobility
- + **Finance:** Renewed sustainable finance
- + **Forest; Biodiversity; Agriculture**

=> 'Fit for 55'





Paradigmatic shift

- + the **sheer breath of the green transition** given that it ranges from the energy transition to the restoration of ecosystems,
- + the speed with which the green transition is unfolding given that a reduction of 55 % of GHG emissions must be achieved by 2030,
- + the **binding nature** of the legislative acts (directives and regulations) that flesh out the non-binding Commission's Strategies,
- + the emphasis placed on a '**net-gain principle**' underpinning a 'regenerative growth model' substituting the no net loss model that is insufficient to cope with the growing environmental pressures the EU is facing,
- + the **complementarity** of the internal and external action in order to reduce the EU's footprint.

I. Key Approaches

1. Climate change component of the 'Fit for 55'
2. Energy component of the 'Fit for 55' (Taxonomy)
3. Sustainable Transport
4. Methane and Industrial Plants
5. Carbon-free circular economy
6. Natural Heritage (CAP, Forest, Nature Protection)

II. Funds

III. Critical Remarks

1 Climate Neutrality Challenge

Climate law - Regulation (EU) 2021/1119 establishing the framework for achieving climate neutrality

Main narratives

- + Economic growth decoupled from resource use
- + Fair and inclusive transition
- + Protecting, preserving and enhancing the **natural heritage**
- + Protecting the **health and well-being** of citizens from environmental risks

1. CC component of the Fit for 55

Increases the EU's climate target for 2030 to up to **55%** compared to 1990 levels and attain **climate neutrality** by 2050.

- + Revision of the **Emissions Trading System (ETS)** Directive 2003/87,
- + Revision of the **Effort Sharing Regulation (ESR)**,
- + Revision of the Regulation on the inclusion of GHG emissions and removals from land use, land use change and forestry (**LULUCF**),
- + Adoption of a **Carbon Border Adjustment Mechanism (CBAM)**.

1.1. Emissions Trading System (ETS)

Revision of the EU Emissions Trading System (ETS) Directive 2003/87/EC. Overall GHG emissions reduction of **61%** by 2030 compared with 2005.

>> **Extension of ETS** to maritime transport, + cancelling free allocations for aviation and to sectors that will be covered by CBAM.

- + Intra-EU flights: ETS
- + Extra-EU flights: CORSIA

1.2. CBAM

Carbon border adjustment mechanism for selected sectors (steel, fertilizers, aluminium and cement), to reduce the risk of carbon leakage

1.3. Effort Sharing Regulation (ESR)

The ESR currently covers all GHG emissions which are covered

- + neither by the EU Emissions Trading System (ETS)
- + nor by the Regulation on Land-Use, Land-Use Change and Forestry (LULUCF).

Scope

1. transport (except aviation and non-domestic shipping),
2. buildings,
3. agriculture,
4. industrial installations and gases not covered by the EU ETS
5. waste as well as non-combustion related emissions from energy and product use.

1.3. Effort Sharing Regulation (ESR)

ESR legislation was adopted in 2018 to deliver a **30%** reduction in GHG emissions covered by 2030 compared to 2005. **Insufficient contribution** to an overall target of at least -55% compared to 1990 (European Climate Law). EC Proposal: EU-wide reduction of **40%** in the ESR sector by 2030 compared to 2005.

New self-standing CO₂ trading schemes for **buildings**
transport



1.4. LULUCF Regulation



1.4. LULUCF Regulation

The most readily available way to increase carbon sequestration is to protect and restore forests, peatlands, and other natural ecosystems.

“No debit” rule: EU Member States have to ensure that accounted GHG emissions (**debits**) from land use, land use change or forestry are **balanced** by at least an equivalent accounted removal of CO₂ from the atmosphere (**credits**) in the period 2021 to 2030.

-The **scope is extended** from only forests today to **all land uses** (including wetlands by 2026).

-Splitting the existing LULUCF flexibility for use in each of the 5 year compliance periods= 2 separate time periods



1.4. LULUCF Regulation

The current LULUCF Regulation fails to provide full transparency on how member states set their forest reference levels, which can lead to large amounts of unaccounted emissions.

The accounting rules for determining debits or credits still allow for significant loss of carbon sinks. The lands under LULUCF as a whole remain a net sink, currently (2019) removing 264 Mt annually.

Changes in forestry and land use practices can have either negative or positive consequences for biodiversity.

+ Flaw: Absence of individual targets at the national level.

2. Energy component of the Fit for 55' legislative package



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Energy Production:

- + **Energy Taxation Directive**
- + **Renewable Energy Directive** (2018/2001/EU): from 32% to 40% of renewables by 2030
- + **Energy Efficiency Directive** (2012/27/EU and 2018/2002/EU): 32,5% by 2030



2.1. Revision of the EED : Commission's proposals

The **annual energy savings** obligation for Member States is almost **doubled** for the period between 2024 and 2030 from 0.8% to 1.5%.

Higher target for reducing primary energy consumption (39%) and final consumption (36%) by 2030.

2.2. Renewable energy sources (REDII)

- + At least **32 %** of the EU's energy consumption must come from renewable energy sources (RES) by 2030.
- + **Revised RED II** = new EU target of a minimum **40 %** share of RES in final energy consumption by 2030.
- + Doubling the share of RES in the energy mix for 2021-2030.



2.3. Promotion of the use of energy from renewable sources

Directive 2009/28, Art. 3(1) and (3) share of energy from renewable sources in gross final consumption of energy meets the national overall target. MSt may reckon upon 'support schemes'.

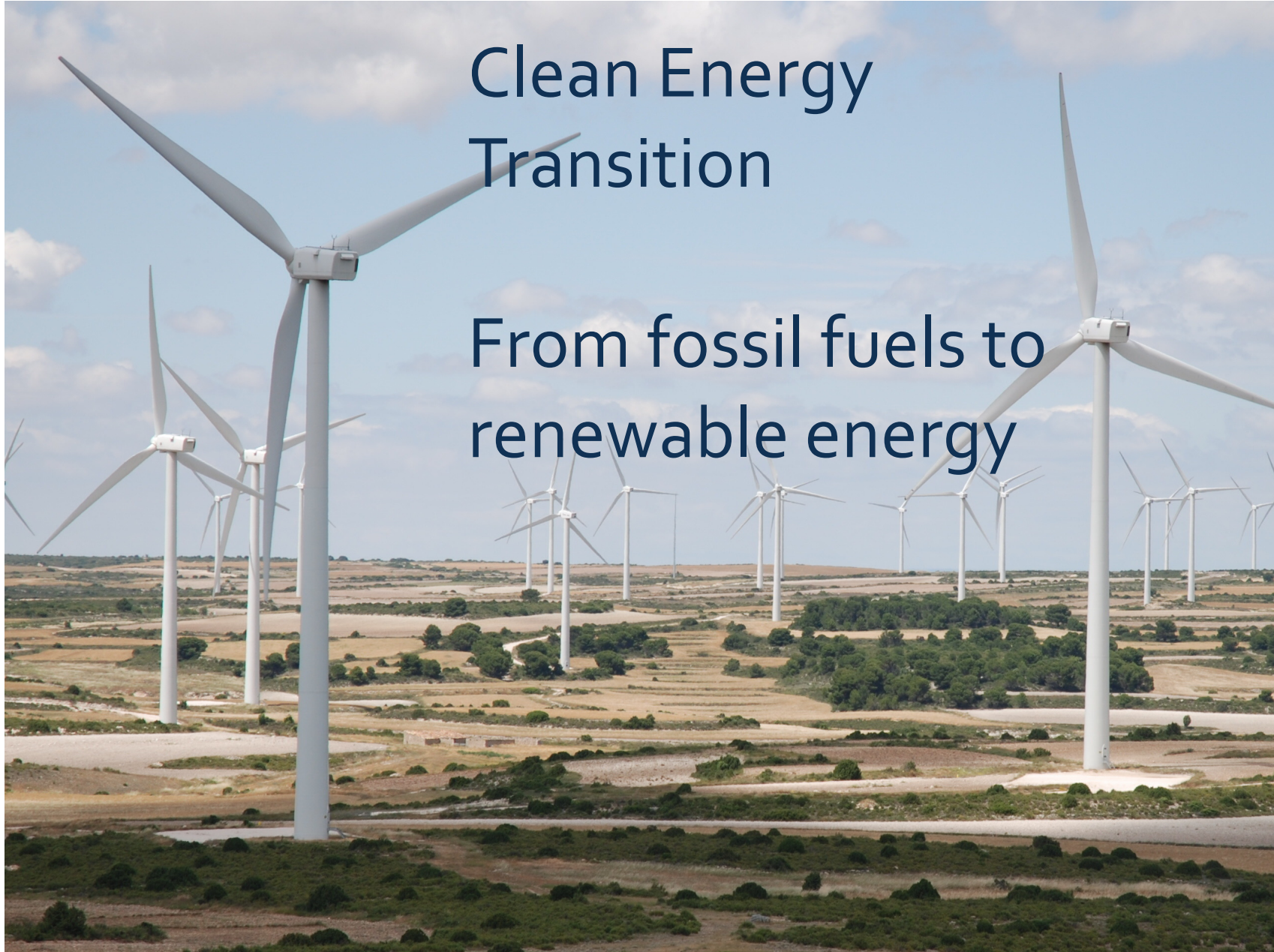
M St have discretion to adopt, alter or withdraw those provided that they don't breach Articles 16-17 EUCHR.

+ Cases C-798/18 and C-799/18, *Athesia Energy Srl*; Order 1st March 2022, Cases C-306/19, C-512/19, C-595/19, and C-608/18 to C-611/18, *Milis Energy*

Commission's State Aids Guidelines for environmental protection and energy

Clean Energy Transition

From fossil fuels to
renewable energy



2.4. Energy and resource-efficient buildings

40% of energy consumed: legislation related to the energy performance of buildings

2.4. Building and renovating in an energy and resource efficient way

- + foster a green “renovation wave” of public and private buildings
- + rigorously enforce legislation related to the energy performance of buildings
- + review the Union’s standards on construction products
- + work to lift national regulatory barriers to energy efficiency investments

2.5. Revision of the Energy Efficiency Directive: Commission's proposals

Member States shall ensure that at least 3% of buildings owned by public bodies shall be renovated each year to at least nearly zero-energy buildings.

2.6. Governance Regulation 2018/1999

National Integrated Climate and Energy Plan covering a 10 years period (2021-30)

- + > Energy efficiency, decarbonization,
 - + Planning the implementation of RED Directive 2018/2021;
Energy Efficiency Directive
- >> Binding national measures that are likely to boost investment in production of new fuels, renewables but could also jeopardize investors' rights.

2.7. Taxonomy Regulation

- + Regulation (EU) 2019/2088 (Regulation 2019/2088) established some sustainability-related disclosure obligations, as well as a number of definitions
- + supplemented and significantly amended by the Regulation (EU) 2020/852 of 18 June 2020
- + Unlike Regulation 2019/2088, Regulation (EU) 2020/852 is focused on environmental aspects of sustainability, while the social and governance aspects are addressed only marginally.

2.7. Taxonomy Regulation

- + Regulation (EU) 2020/852 establishes in Article 3 certain criteria which according to Article 4 shall be applied by Member States and the Union in order to determine whether an economic activity **qualifies as environmentally sustainable** for the purposes of any measure setting out requirements for financial market participants or issuers in respect of financial products or corporate bonds that are made available as environmentally sustainable.

2.7. Criteria for an economic activity to qualify as environmentally sustainable

- + a) **contributes substantially** to one or more of the **environmental objectives** set out in Article 9 in accordance with Articles 10 to 16;
- + b) **does not significantly harm** any of the environmental objectives set out in Article 9 in accordance with Article 17;
- + c) is carried out in compliance with the minimum safeguards laid down in Article 18;
- + d) complies with technical screening criteria that have been established by the Commission

2.7. Environmental objectives

The **environmental objectives** set out in Article 9 of Regulation 2020/852 are as follows:
Towards a new legal framework for sustainability under the European Green Deal

- + a) climate change **mitigation**;
- + b) climate change **adaptation**;
- + c) the sustainable use and protection of **water and marine resources**;
- + d) the transition to a **circular economy**;
- + e) **pollution** prevention and control;
- + f) the protection and restoration of **biodiversity** and ecosystems.

The detailed requirements that an activity must meet in order to determine whether it “contributes substantially” to each of the above environmental objectives are set out in Articles 10-15.

3. Sustainable Transport



3.1. Sustainable and Smart Mobility Strategy

Transport (1/4 of the EU's GHG; 90% reduction to achieve climate neutrality by 2050):

- + Development for **multimodal transport systems** (Review Combined Transport Directive)
- + Abolish subsidies
- + Increase prices for **fossil fuels**
- + Include shipping in the **ETS**
- + Tightening CO₂ pollutant emissions standards as well as CO₂ for **cars and vans**



3.2. Curbing CO₂ Emissions

- + Tightening CO₂ pollutant emissions standards as well as CO₂ for **cars and vans**
- + By 2030, 30 million zero-emission **cars** and 80 000 zero-emission **lorries** in operation.
- + By 2050, nearly all cars, vans, buses as well as new heavy-duty vehicles will be zero-emission.
- + Zero-emission new ocean-going **vessels** (2030)
- + Zero-emission new **aircrafts** (2035)

3.3. Fuels and Transport

- + **Alternative fuels infrastructure (AFIR) Regulation** = recharging and refuelling road vehicles and ships with alternative fuels
- + **FuelEU Maritime** = promotion of renewable and low-carbon fuels; targets for reducing the GHG intensity of energy used on boats; certification of fuels
- + **ReFuelEU Aviation**= promotion of sustainable aviation fuels (SAF) and synthetic fuels

4.1. A zero pollution vision for toxic free environment

- + Revision of the Union's **air quality standards**;
- + Measures to reduce pollution from urban runoff and particularly harmful sources such as **micro-plastics** and pharmaceuticals;
- + Review and upgrade of the Union's chemicals regulation with regard to the assessment and management of environmental risks



4.3. Methane

- + Direct methane emissions from the oil, gas and coal sectors and from biomethane once injected in the gas network.
- + Exploration, production, distribution, underground storage, of fossil fuel gases, LNG terminals, operated and closed coalmines
- + Reduction of emissions through mandatory leak detection and repair

4.2. Methane and Industrial Plants

Review the large industrial installations Directive
Commission is undertaking an impact assessment



5. A carbon-free circular economy

- + Double the **recycling rate** by 2030
- + Foster sustainable product design, reuse and recycling with a particular focus on resource-intensive sectors such as textiles, construction, electronics and plastic
- > “A New Industrial Strategy for Europe” (Industrial Strategy) and a “Circular Economy Action Plan” (Circular Action Plan)

5. A carbon-free circular economy

+ Products and Waste: reform of waste law



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6. Natural Heritage



+ 6.1. Farm to Fork Strategy

+ 6.2. Forest Strategy

+ 6.3. Biodiversity Strategy



6.1. Greening the CAP from farm to fork

- + At least 40% of the CAP's overall budget and at least 30% of the Maritime Fisheries Fund should clearly contribute to climate action
- + Reduce significantly the use and risk of chemical pesticides, fertilisers and antibiotics
- + Measures to enhance transparency about the ecologic performance of agricultural and food products

6. Natural Heritage



6.1. Greening the CAP from farm to fork



6.2. Forest Strategy

- + the EU's biodiversity objectives
- + GHG emission reduction target of at least 55% by 2030 and climate neutrality by 2050.



6.2. Objectives

- + Ensure resilient and multifunctional forest ecosystems role of forests
- + Adapt Europe's forests to the new conditions, weather extremes and high uncertainty brought about by climate change.
- + Support the socio-economic functions of forests
- + Boost forest-based bio-economy within sustainability boundaries.
- + Reverse biodiversity loss

6.3. Objectives

- + Protecting EU's last remaining primary and old-growth forests
- + Re- and afforestation of biodiverse forests
- + Providing financial incentives for forest owners and managers for improving the quantity and quality of EU forests

6.3. Biodiversity Strategy

Strictly protected Areas

Only 3% of land and less than 1% of marine areas are strictly protected in the EU.

+ 10% of EU land

+ 10% of EU sea – should be strictly protected



Strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests.

6.3. Biodiversity Strategy

A coherent network of protected areas

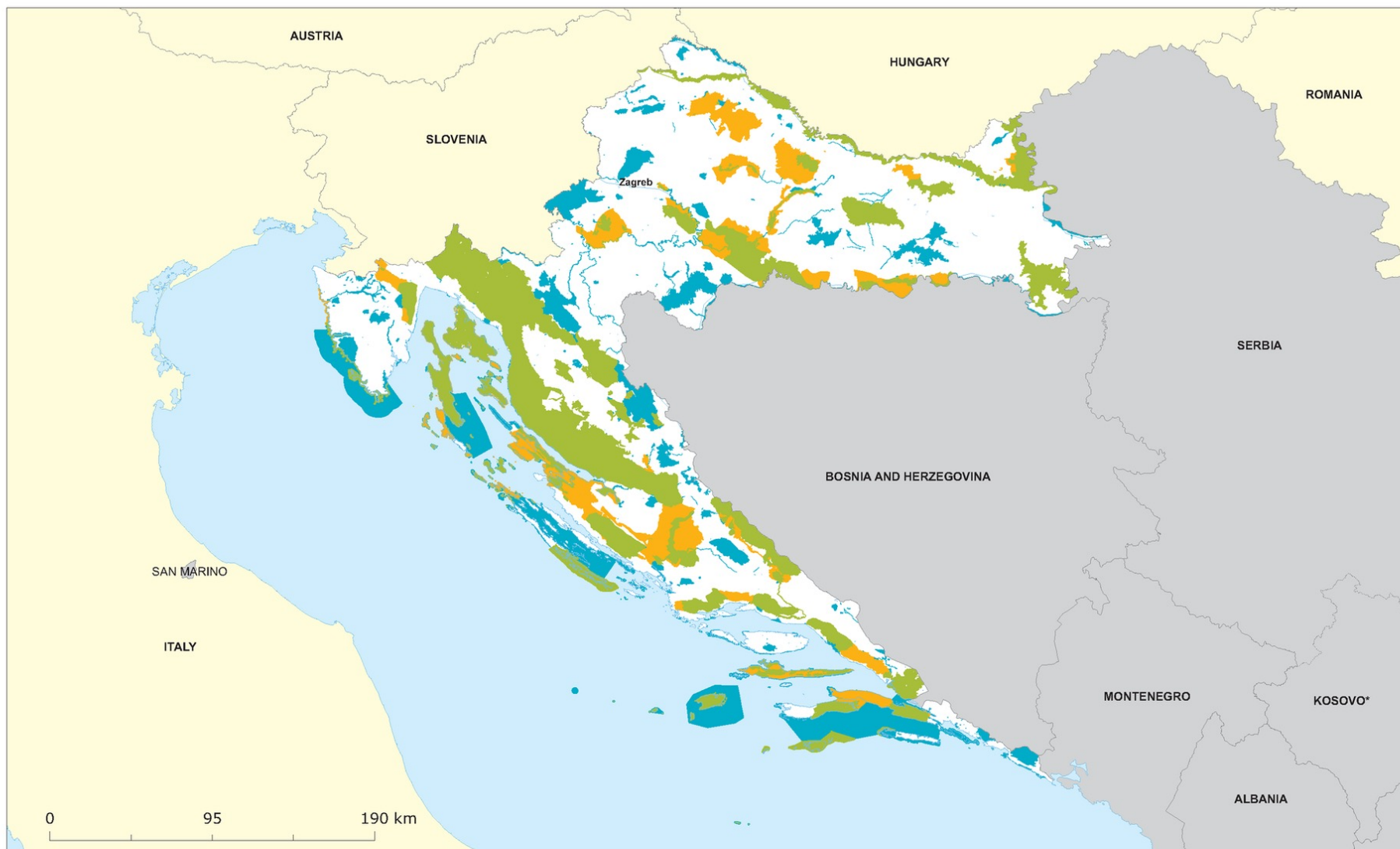
« the current network of legally protected areas, including those under strict protection, is **not sufficiently large** to safeguard biodiversity »
(§2.1)

« Global efforts are needed and the EU itself needs to do more and better for nature and build a truly coherent TransEuropean Nature Network »

+ 30% of the **land**

+ 30% of the **sea** should be protected in the EU

>> an extra 4% for land and 19% for sea areas as compared to today



Natura 2000 – Birds and Habitats Directives Croatia

Site type

- Birds Directive sites (SPA)
- Habitats Directive sites (pSCI, SCI, SAC)
- Sites – or parts of sites – proposed or designated under both Directives



European Environment Agency



Source :
 - NATURA 2000 – DG ENVI, compiled from databases from the Member States.
 - © EuroGlobalMap – eurogeographics.
 - Settlements – DG ESTAT.
 Validity of NATURA 2000 data for: Croatia. National dataset situation End 2018.
 Projection: Lambert Azimuthal Equal Area.

*Natura under UNDR 1244/99

6.3. An EU Nature Restoration Plan: restoring ecosystems across land and sea

Binding EU nature restoration targets in 2021 to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.



2nd Part Funding



8. Funding

INVESTMENT PLAN : 1 000 Billion €/10 Years

30% target for climate mainstreaming across all EU programmes.

Cohesion policy will contribute to climate expenditure with

- + 100% of the Just Transition Fund,
- + 37% of the Cohesion Fund
- + 30% of the European Regional Development Fund

Just Transition Mechanism (65-75 billion € over the period 2021-2027 for Regions most exposed to decarbonization)

European social fund (72.2 billion € in current prices for period 2025-2032)

Life fund (2 -billion €)

EU Emissions Trading System Innovation Fund (support large-scale innovative industrial projects)

8.Funding

The Green Deal Investment Plan and the Just Transition Mechanism, envisage to mobilise at least **€1 trillion /10 Years** in public and private investment.

The EU budget (MFF) 2021-2027 and the Next Generation EU package will ensure a 30% climate mainstreaming expenditure target.

In particular, the Resilience and Recovery Facility under Next Generation EU, each national recovery and resilience plan will have to include a minimum of 37% of expenditure related to climate investments.

50% target by 2025 for the European Investment Bank (EIB), thus becoming Europe's climate bank.

Recovery and Resilience Facility

- + EU recovery package (December 2020), the European Green Deal and post-Covid-19 recovery: two sides of the same coin

Transition Fund

- + Support for energy transition of regions (part of the cohesion policy)
- + The overall budget is **19.3 billion euros** for 2021-2027, of which 8.4 billion financed under the multiannual financial framework (MFF) and additional 10.9 billion under NGEU.
- + Financing projects that are climate-resilient, including through re-skilling programs, developing new jobs in green economic sectors and investing in energy efficient housing.
- + With the exception of Germany, the greatest beneficiaries of the fund are Member States of Eastern Europe (Poland, Romania, Czechia, Bulgaria).

Social Climate Fund

- + As the cap on emissions from road transport and building sectors decline yearly, it is expected that the price of the allowances under the new scheme will rise, and thus also energy bills
- + Specifically focused on vulnerable households, micro-businesses and transport users, most affected or at risk of energy or mobility poverty, especially in light of the rising energy prices.
- + **72.2 billion euros** in current prices for period 2025-2032 in EU budget, using 25% of additional revenues from the auctioning of emission allowances under the new ETS, combined with national contributions.
- + **Renovation wave:** Renovating and improving the EU's public and private buildings to pave the way for a decarbonised and clean energy system

Conclusion

An absolute reduction of environmental pressures and impacts would require **fundamental** transformations to a different type of economy and society — instead of **incremental** efficiency gains within established production and consumption systems.

EEA, *Growth without economic growth*, 2022

Ecological collapse



A new dawn?

