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GREEN RECOVERY

DELIVERING THE GREEN DEAL

Climate & Company
Climateandcompany.de

Frankfurt School
UNEP Centre for Climate
& Sustainable Energy Finance
fs-unep-centre.org

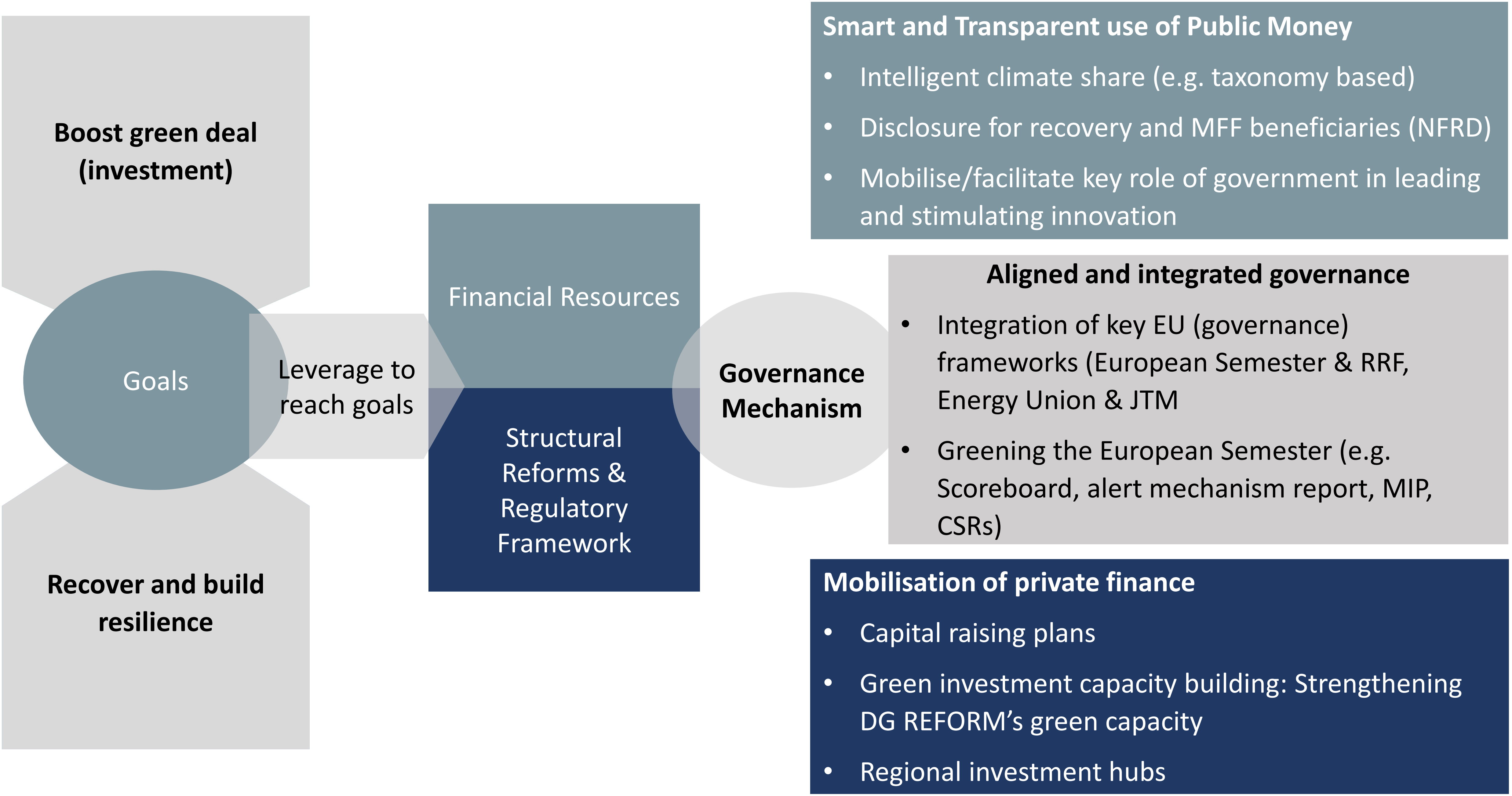
Germanwatch
Germanwatch.org

Delivering the Green Deal

Goal		Financing	Capacity building	Regulation & Structural Reforms
Climate neutrality and just transition Resilient recovery and competitiveness		MFF and RRF	DG REFORM	European Semester: CSRs, AMR, MIP Energy Union

Integrated governance for policy coherence

MFF and RRF aligned with the Green Deal	Mobilise DG Reform to support MS with green investment	Re-calibrate the European Semester for the Green Deal


Boost green deal (investment)
Goals
Recover and build resilience
Leverage to reach goals
Financial Resources
Structural Reforms & Regulatory Framework
Governance Mechanism
Smart and Transparent use of Public Money
• Intelligent climate share (e.g. taxonomy based)
• Disclosure for recovery and MFF beneficiaries (NFRD)
• Mobilise/facilitate key role of government in leading and stimulating innovation
Aligned and integrated governance
• Integration of key EU (governance) frameworks (European Semester & RRF, Energy Union & JTM
• Greening the European Semester (e.g. Scoreboard, alert mechanism report, MIP, CSRs)
Mobilisation of private finance
• Capital raising plans
• Green investment capacity building: Strengthening DG REFORM's green capacity
• Regional investment hubs

Analysis of "Next Generation EU" and the MFF 2021-27:
The 25% climate target is not sufficient … and governance is key!

Share of needed climate investment (totalling 2.4 trillion euros) covered by the proposed EU budget (all figures in bn EUR)

Figure 1

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How to mobilise MFF and RRF for the green deal: Do no harm principle, Taxonomy and effective governance

I Operationalization of the do no harm principle

“[The MFF and NGEU] **shall comply with the objective of EU climate neutrality by 2050** and contribute to achieving the Union's new 2030 climate targets, which will be updated by the end of the year. As a general principle, **all EU expenditure should be consistent with Paris Agreement objectives**.” (*Source: EUCO conclusions; I Next Gen EU, Art 21*)

“[…] EU expenditure should be consistent with Paris Agreement objectives and the "**do no harm**" principle of the European Green Deal […]” […]” *(Source: EUCO conclusions; Annex I, paragraph 18)*

Apply **do no significant harm principle** to all budget lines. **(I)**

II Taxonomy for carbon accounting in the EU budget

“[…] **An effective methodology for monitoring climate-spending and its performance**, including reporting and relevant measures in case of insufficient progress, should ensure that the next MFF as a whole contributes to the implementation of the Paris Agreement. […]” *(Source: EUCO conclusions; Annex I, paragraph 18)*

Use **Taxonomy** as a science-based tracking tool. ***(II)***

III Need for an effective governance

NECPs	National Reform Plans
Recovery and Resilience Plans	Just Transition Plans

Policy coherence requires integrated governance! **(III)**

In-depth discussion and illustrative examples

- Do no harm
- Taxonomy
- Governance

Do no harm principles exist already in MFF budget lines but are not comprehensive and inconsistent

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- **ERDF and Cohesion Fund [COM(2018)372]**
  - Article 6: nuclear, tobacco, airport infrastructure (except for outermost regions); disposal of waste in landfill; fossil fuels (exception of investment related to clean vehicles as stated in Art. 4, Directive 2009/33/EC)
- **Invest EU, Annex V [COM(2020) 403 final]**
  - Human rights, tobacco, gambling, sex trade, …
  - Investments related to fossil fuels and gas, except: a) projects with no viable alternative technology, b) projects related to pollution prevention and control; c) CCS/CCU and research projects leading to substantial GHG emission reduction
- **Just Transition Fund, Article 5 [COM(2020) 22 final]**
  - Nuclear, tobacco, fossil fuels, broadband infrastructure in areas with at least two networks of equivalent category

To ensure that an expense is “consistent with Paris Agreement objectives”, we need comprehensive sectoral exclusion criteria and for the rest technology neutral development

Industry

20% of EU emissions, high risks of lock in

- Production of fluorinated GHG with a Global Warming Potential (GWP) of >150[1]
- Chemical manufacturers unless for safe and sustainable chemicals[2]
- No support for coal/heavy-fuel oil/ fossil gas as fuel or feedstock[3]
- No support for electricity-intensive processes without a plan to green power sources by 2030[3]
- GHG emissions are higher than the average global emissions for that activity[4]

Energy Supply

30% of EU emissions, key to electrify processes

- Nuclear, fossil fuels, gas[1]
- Crop-based biofuels and unsustainable bioenergy[2]
- No activity can have emissions intensity above the average emissions (regional)[4]
- [….]

Transport

22% of EU emissions

- Expansion of aviation capacity and motorways[2]
- Internal combustion engine vehicles[2]
- LNG and diesel maritime vessels (except substantial GHG improvements)[2]
- Fossil gas (LNG/CNG) infrastructure for transport[2]
- All DNSH criteria from the EU Taxonomy (e.g. Emissions performance threshold of > 95g CO2 e /pkm for passenger cars)[4]

Buildings

13% of EU emissions

- Fossil-fuel based heating appliances[3]
- DNSH criteria from the EU Taxonomy (e.g. new building must comply with all applicable mandatory national/regional regulations regarding energy & carbon performance)[4]
- [….]

Agriculture / Forestry

12% of EU emissions

- Production of agricultural products on land obtained as a result of deforestation of primary forest […] after the year 2000[1]
- Livestock farming, unless organic or extensive (<0.7 LSU/ha)[2]
- Timber production unless operator demonstrates that harvest is covered by valid licences and not from primary forest with high biodiversity value & carbon stock.[1]
- DNSH criteria from EU Taxonomy.[4]

1) As stated in the Ecolabel exclusion criteria; 2) as suggested by the G-10; 3) Climate & Company (2020) – Study for Agora; 4) Taxonomy, DNSH to objective “mitigation” (part of the climate change adaptation Taxonomy)

Note: Plus, there are overall exclusion activities by the IFC World Bank Group (link) or the KfW (link).

Taxonomy vs. current climate finance accounting practice

Example	Current methodology [1]	"Tracking via Taxonomy"
Energy efficient renovation of the existing building stock[1]	**Classified as "significant"; 100% contribution (… no matter how much the energy efficiency increased!)**	**Only counts as a climate spending if primary energy demand is reduced by >30% of the building.**
Newly built railways[1]	Classified as "significant" (100%)	E.g. non-electrified rail infrastructure only counts with an existing plan for electrification or use of alternatively powered trains.
ICT, data collection[1]	Classified as "insignificant" (0%)	Counts if ICT solutions are exclusively aimed at decision making enabling GHG reductions

1) As specified in COM/2018/375 final - 2018/0196 (COD).

Applying the Taxonomy – time pressure asks for pragmatic solutions

How to operationalize the EU Taxonomy?

If an **activity** falls under the EU Taxonomy → Taxonomy compliance as condition for public support or…

Performance-based incentive schemes possible

e.g. climate conditionality

e.g. forward-looking disclosure. Grant elements in case of Taxonomy compliance

If a **company** falls under the EU Taxonomy → Medium-term decarbonisation pathways – and reporting aligned with Taxonomy

Company/Activity not covered but potentially contributes significantly to EU objectives → See above and "do no harm"

All others → "Do-No-Harm" and exclusion criteria to ensure climate neutrality

Starting points

DNSH of the Taxonomy

Exclusion List Ecolabel

Letter of "G10"

EIB Lending Guidelines

(…)

The scope of the EU Taxonomy for EU-27 firms[1]: only 28% of market value of publicly listed EU firms is exposed to a "Taxonomy evaluation"

	EU27		
NACE Makrosektor	**# Firmen**	**...davon in "Taxonomiesektoren" (absolut)**	**... davon in "Taxonomiesektoren" (Market Cap)**
A - Agriculture & Forestry	59	45	0.1%
C - Manufacturing	1929	407	11.4%
D - Electricity	110	91	4.3%
E - Water	47	42	0.3%
F - Construction	289	242	1.8%
H - Transportation and storage	124	62	1.5%
J - Information and Communication	754	325	5.4%
L - Real Estate	445	445	3.3%
	3757	**1659**	**28.1%**
K - Financial and insurance	660		19.5%
Other sectors (no Taxonomy relevance)	1354		10.7%
	5771		**30.2%**

1) Only publicly listed firms. Taxonomy mapping solely based on the primary activity classified via NACE codes. Other business segments are neglected.

The RRF and its firepower are at the heart of the next MFF: RRPs as the new "blank sheet" to direct public resource

RRPs

RRPs – Article 15
Challenges identified in Eur. Semester
Growth potential, jobs, social impact, green and digital
Milestones, targets, investment projects
Total costs of the reforms
[and more….]

	Evaluation criteria – Article 16
a)	Does the plan address the CSR?
b)	**"green and digital transitions"***
c)	"lasting impact on MS"
d)	Growth potential, jobs, social impact
e)	Are estimated total costs reasonable?
f)	Reforms & public investment projects
g)	Effective implementation?

Risk

- It is sufficient to address **either** "green" **or** "digital" criteria in the RRPs (see Annex II, COM proposal)
- Evaluation criteria are only vaguely defined

Example: "significantly contribute to establish climate- and environmental-friendly systems (…)"

*Draft Report by ECON-BUDG (01.09.20) has already proposed to split "green" and "digital" in separate criteria

Potential Elements of an Integrated Governance Mechanism for the Green Deal

- Policy coordination
- Monitoring and surveillance
- Country specific recommendations through established European Semester structure and support at national level

Monitoring: Capturing environmental factors through the ES

Proposing an **environmental scoreboard** in support of the European Semester's Macroeconomic imbalance procedure scoreboard (MIP) to strengthen the implementation of the Green Deal on the national level

MIP Scoreboard

In the ES cycle, the MIP scoreboard underpins the Alert Mechanism Report, which identifies whether MS are affected by imbalances and in need of policy action

ENV Scoreboard

Similarly, an environmental scoreboard is suitable to serve as an **early warning system** tracking whether MS are on track with the green transition and helping to identify whether additional policy action on the national level is needed

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Sustainable Finance Prioritäten 1

Nach der Verabschiedung der **EU Taxonomie-Verordnung** im Juli 2020 treibt die Bundesregierung die EU-Kommission an, den angestrebten Zeitplan für den **Erlass des delegierten Rechtsakts zur Implementierung der technischen Bewertungskriterien** der ersten beiden EU-Umweltziele („Klimaschutz“ und „Anpassung an den Klimawandel“) der EU-Taxonomie bis zum 31.12.2020 einzuhalten. Die Empfehlungen und technischen Bewertungskriterien des Abschlussberichts der TEG bilden die Basis des delegierten Rechtsaktes. Das von der TEG empfohlene Mindestambitionsniveau der technischen Bewertungskriterien wird aufrechterhalten, da sich dies aus aktuellen wissenschaftlichen Erkenntnissen ableitet.

Sustainable Finance Prioritäten 2

Während ihrer Ratspräsidentschaft drängt die Bundesregierung auf eine **ambitionierte Ausgestaltung der neuen Sustainable Finance Strategie der EU** und entsprechend den Gesetzesentwurf zur **Non-financial Reporting Directive** der EU Kommission, die in Q1/2021 veröffentlicht wird. Um den Transformationsgedanken zu stärken, treibt sie vor allem die Umsetzung der TCFD Empfehlungen und die Nutzung von Klimaszenarioanalysen mit der NFRD an. Ebenfalls bereitet sie den Weg für eine ambitionierte nationale Übersetzung mit einem erweitertem Anwendungsbereich für Unternehmen ab 250 Mitarbeitenden, großen nicht-kapitalmarktorientierten Unternehmen und kleineren Unternehmen in Sektoren mit einem hohen Klima-Impact.

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THANK YOU !

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Additional Slides

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The case for an Environmental Scoreboard in the ES

Delivering the EU Green Deal needs **structural reforms** and **targeted investments.**

Exactly matches the governance logic of the European Semester.

- Main topic of the ES in recent years has been the lack of investments, delivering the Green Deal requires the ES to re-gear to address the lack of *green* investments
- Covid-19 has put even more pressure on delivering the EU Green Deal, but has also led to increased public spending which limits the fiscal space in the future
    - Progress on the EU Green Deal needs to monitored closely and supported when necessary
    - EU needs to be able offer guidance and spot the need for additional policy action quickly
    - Early warning system allows for early corrective action
    - Environmental Scoreboard supports of the NECP implementation and review
- Climate tracking (e.g. with the Taxonomy) offers an ex-ante approach, the scoreboard supports it by working on a ex-post basis
- Increased transparency and accountability of Member States
- Increased future resilience through integrated governance regimes

The European Semester structure

Shortcomings

- Current MIP Scoreboard does not include any environmental sustainability or green transition related indicators
  - Tracking of environmental progress in ES structure generally limited (few and mostly energy-focused indicators)
- Green recovery is a declared priority in the EU – the European Semester needs to reflect that
- European Semester suited to mainstream climate action and monitor climate action as well green investment gap

Opportunities

- European Semester structure is a well-established governance regime and fosters a continuous dialogue between the European Commission and Member States
- Re-gearing monitoring system and the ES more broadly towards the Green Deal offers far-reaching effects

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Environmental Scoreboard

Indicators relevant for macroeconomic stability

→ A range of environmental indicators are relevant to macroeconomic stability

For example:

- Risk of stranded assets
- Flood risk
- Heat stress

→ More than 150 environmentally relevant indicators already tracked across different EU governance regimes

Indicators relevant for delivering the Green Deal

→ Indicators tracking size and investment of green economy

→ Alignment with goals and targets of NECPs

- Update due in 2024

→ Sector-relevant indicators tracking private and public (green) investment

→ Indicators chosen to reveal need for policy action

- E.g. lack of relevant (public) infrastructure investments, etc.

Environmental Scoreboard proposed by IEEP (2020)

1 Size of the green economy	
Private Investment, jobs and gross value added related to circular economy sectors	CE Action Plan
Environmental goods and service sector	Eurostat
Gross value added from market output of the EU environmental economy	Eurostat
Employment from market output of the EU environmental economy	Eurostat
Green gross fixed capital formation/GDP	to be developed
Private investment, jobs and gross value added related to low-carbon and circular economy sectors	to be developed
2 Long-term sustainability of the economy	
Natural capital accounting indicators:	
Share of forest area	Eurostat
Soil seal index	Eurostat
Water bodies in good ecological status (%)	Eurostat
Water exploitation index	Eurostat
Indicators for Good Environmental Status of Marine Waters	to be developed
Absolute decoupling indicators	to be developed
Additional indicators measuring also the human, social and financial/physical capitals	to be developed
3 Sustainable public finance	
Environmental protection expenditure of the public sector by type (environmental investments, environmental current expenditure and environmental subsidies/transfers)	Eurostat
Contribution to the international 100bn USD commitment on climate-related expending	Eurostat
Indicators of climate and biodiversity mainstreaming of public budgets at MS level based on an improved EU methodology for the MFF	to be developed
4 Green incentives, taxes and subsidies	
Fossil fuel subsidies	IMF
Environmental tax revenues	Eurostat

Source: Charveriat, C. and Bodin, E. (2020) Delivering the Green Deal: the role of a reformed Semester within a new sustainable growth strategy for the EU, the Institute for European Environmental Policy (IEEP)

Environmental Scoreboard proposed by IEEP (2020)

5 Measuring green R&D and Innovation		
	Eco-innovation index	DG-ENV
	Number of patents related to recycling and secondary raw materials	Eurostat
6 Sustainable Industry		
	Industrial emissions intensity	Eurostat
	Greenhouse gas emissions from transport	Eurostat
	Greenhouse gas emissions from agriculture	Eurostat
	Domestic material consumption per capita	Eurostat
	Energy consumption in households	Eurostat
	Generation of waste excluding major mineral waste	CE action plan
	Per capita waste generation	EEA
	Material footprint per capita	to be developed
	Greenhouse gas emissions of the digital sector	to be developed
	Greenhouse gas emissions of the chemical sector	to be developed
	Level of take-up in corporate sustainability schemes (such as EMAS)	to be developed
7 Climate Change Risk		
	Risks to human capital: Years of life lost due to exposure to particulate matter	Eurostat, EEA)
	Economic risks: Climate-related economic losses	Eurostat, SDGs
	Climate adaptation & DRR expenditures as a share of GDP	to be developed
	Public funding for just transition	to be developed
	Indicators for Integrating climate-related risks into financial stability monitoring and microsupervision	to be developed
8 Negative spill-over effects of Europe's economic and industrial policies on third countries' decarbonisation pathways		
	to be developed	

Source: Charveriat, C. and Bodin, E. (2020) Delivering the Green Deal: the role of a reformed Semester within a new sustainable growth strategy for the EU, the Institute for European Environmental Policy (IEEP).

If the climate spending is not measured accurately, the set climate share cannot be effective

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1 ***An adaptation of the Rio Markers is currently used*[1]**

Classification	Examples
Significant (100%)	Renewable energy projects, energy efficiency measures, cycling and footpaths, etc.
Moderate (40%)	Railway investments, air quality measures, multimodal transport, etc.
Insignificant (0%)	-

- The "significant" and "moderate" assessment is largely subjective

2 ***Agriculture as a negative example*[1]**

Facility	Volume	Climate Share	Climate Spending
	bn EUR	*%*	*bn EUR*
Europ. Agric. Guarantee Fund (EAGF)	258.3	40%	**103**
Europ. Agric. Fund Rural Development (EAFRD)	90	40%	**36**

- Given an EU budget of 1.1 trn EUR, and a climate share of 25% (=275 bn EUR)...
- … agriculture **makes up ~ 50% of climate spendings**. Even though agriculture plays a minor role!

Sources: 1) based on the current MFF 2021-27 and the documents published in 2018.

Taxonomy vs. Rio markers in practice

Facility	Example	"Rio methodology"[1]	"Tracking via Taxonomy"
Cohesion Funds	Energy efficiency renovation of existing housing stock[1]	Classified as "significant"; 100% contribution (… no matter how much the energy efficiency increased)	Only counts as a climate spending if primary energy demand is reduced by >30% of the building.
Cohesion Funds	Newly built railways[1]	Classified as "significant" (100%)	E.g. non-electrified rail infrastructure only counts with an existing plan for electrification or use of alternatively powered trains.
Cohesion Funds	ICT, data collection[1]	Classified as "insignificant" (0%)	Counts if ICT solutions are exclusively aimed at decision making enabling GHG reductions
Agricultural Facilities	Eco-schemes	Classified as "significant" (100%) – for example: a payment per hectar for environmental practices (eco-scheme design depends on each Member State!)	E.g. livestock production only counts if activity is in line with an ambitious emissions reduction trajectory till 2050

1) As specified in COM/2018/375 final - 2018/0196 (COD).

Without strong guidance and governance, national implementation can be rather „diverse“.
Example: Investment chapter of the National Energy and Climate Plans

Relevance

→ NECPs key document to reach climate targets

→ Analysis of final NECPs reveals low quality

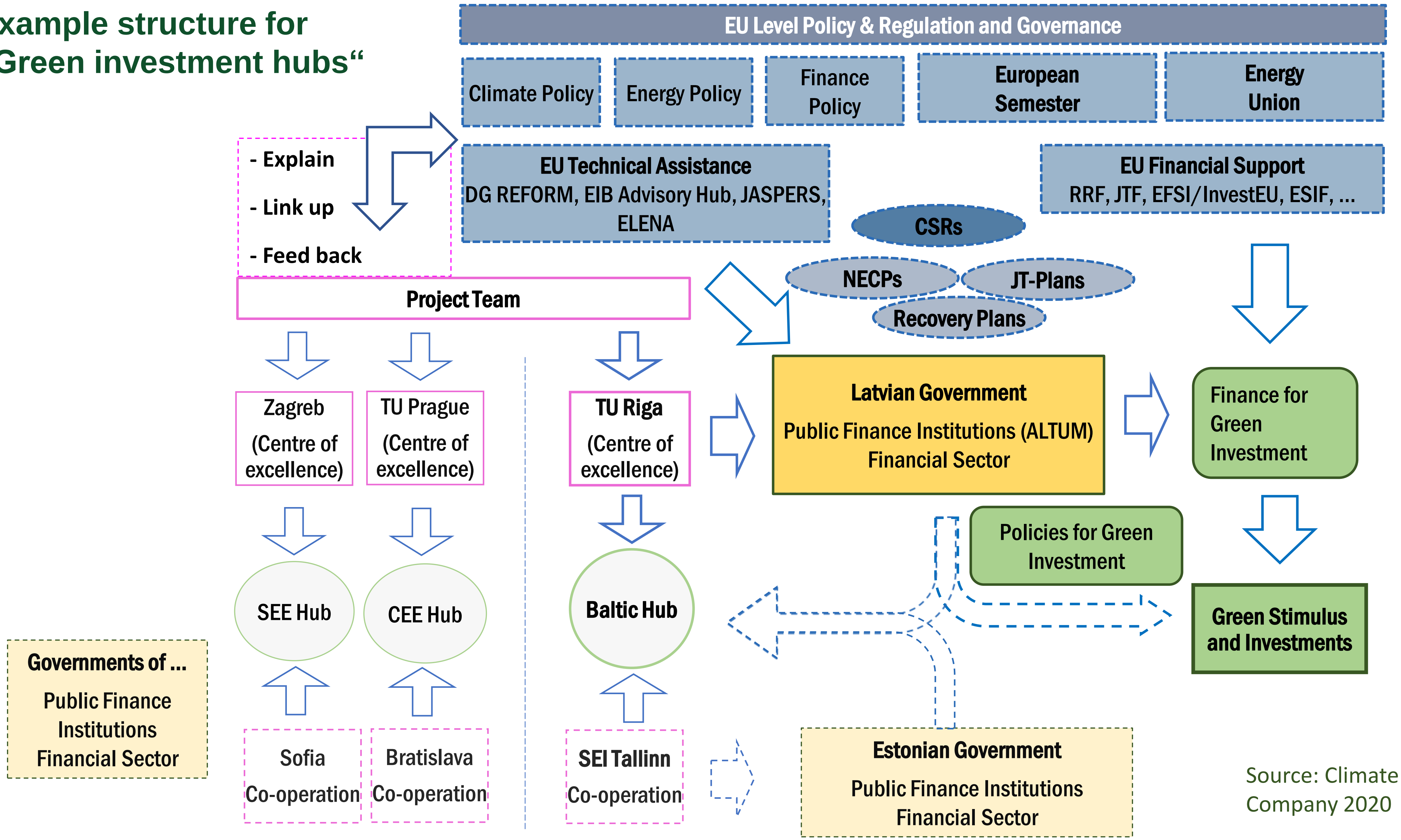
→ Inconsitencies between financing chapters of different countries

Course of Action

- Build connections between the European Semester, NECP-relevant ministries, scientific community and financial sector
- Capacity development: know-how to finance the NECPs and raise private capital

Quality degree	Countries Final NECPs	Remarks
1. Comprehensive analyse	Austria	Differentiating between national / EU / private Investment & green finance for different subsectors
	Denmark	Comprehensive strategy including Energy Agreement (0,5 billion EUR), Denmark's Green Future Fund (4 billion EUR) and including financing from Danish private pensions funds to support the green transition (50 billion EUR)
2. Incomplete Approach, e.g. "Brussels pays all" approach	Croatia	Sources: ESIF, EFSI, Modernization Fund, Innovation Fund, EU Allowance auctioning. EIB and EBRD mentioned. No analysis of amounts.
	Czech Republic	Comprehensive analyse of EU budgets. Multiannual Financial Framework, Selling Allocations. Private sector unclear.
	Estonia	Financing under the EU long-term budget framework 2021-2027 (Multiannual Financial Framework)
	Greece	Especially ERDP (10 billion EUR for Greece) and Cohesion Fund (3,6 billion EUR) under consideration of national co-financing requirements
	Latvia	EU-Funds, Eu-Allowances Auctioning, National budgets.
	Slovakia	ERDF, ESF+, Cohesion Fund, etc.
3.No information provided	Finland	No information provided.
	Italy	No information provided.
	Malta	Malta will reduce CO2-emissions in the transport sector with blending biofuels with diesel. Malta provides information on additional costs for car users.

Example structure for „Green investment hubs“



Source: Climate & Company 2020