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Berlin, September 2020

GREEN RECOVERYDELIVERING THE GREEN DEAL

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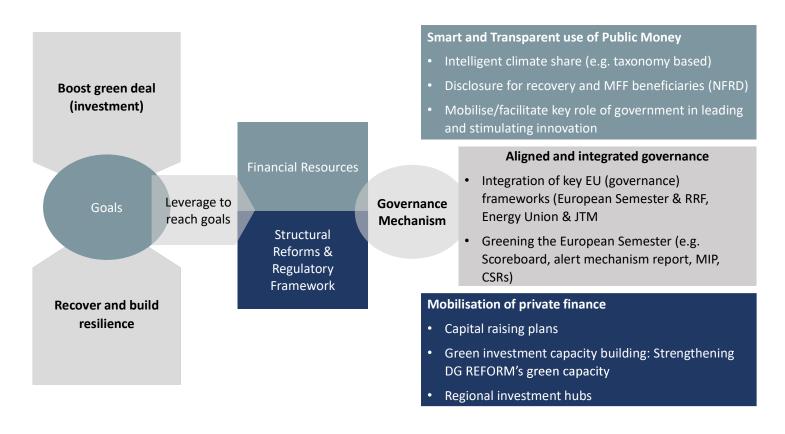
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Delivering the Green Deal

CLIMATE COMPANY

| Goal |
|--|
| Climate neutrality and just transition |
| Resilient recovery and competitiveness |
| |

| Financing | | Capacity building | | Regulation & Structural Reforms |
|---|------|--|------|---|
| MFF and RRF | | DG REFORM | | European Semester: CSRs, AMR, MIP Energy Union |
| Integ | rate | d governance for policy | / co | herence |
| 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 |



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





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



| | Operationalization | of the do no harr | n principle | Taxonomy for carbon accounting in the EU budget |
|---|--|--|--|---|
| neutr clima gener Agree 21) "[] objec | rality by 2050 and co- te targets, which will ral principle, all EU er ement objectives." (So EU expenditure sho | ntribute to achieving be updated by the spenditure should be burce: EUCO conclusual be consistent tharm" principle of the spenditure of th | be consistent with Paris ions; I Next Gen EU, Art with Paris Agreement ne European Green Deal aragraph 18) | "[] An effective methodology for monitoring climate-spending an 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 Par Agreement. []" (Source: EUCO conclusions; Annex I, paragraph 18) |
| Ap | ply do no significant | | all budget lines. (I) | Use Taxonomy as a science-based tracking tool. (II) |
| | NECPs Recovery and Resilience Plans | National Reform Plans Just Transition Plans | | Policy coherence requires integrated governance! (III) |

In-depth discussion and illustrative examples

| ■ Do no harm | |
|--------------|--|
| ■ Taxonomy | |
| ■ Governance | |
| | |
| | |
| | |
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| | |
| | |

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



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 **Energy Supply Transport Buildings** Agriculture / Forestry 20% of EU emissions, high 30% of EU emissions, key to 22% of EU emissions 13% of EU emissions 12% of EU emissions risks of lock in electrify processes Production of fluorinated Nuclear, fossil fuels, gas1 Fossil-fuel based heating Production of agricultural Expansion of aviation GHG with a Global capacity and motorways² appliances3 products on land obtained Crop-based biofuels and Warming Potential (GWP) as a result of deforestation unsustainable bioenergy² Internal combustion DNSH criteria from the EU of >1501 of primary forest [...] after engine vehicles² Taxonomy (e.g. new the year 20001 No activity can have Chemical manufacturers building must comply with emissions intensity above LNG and diesel maritime unless for safe and all applicable mandatory Livestock farming, unless vessels (except substantial the average emissions sustainable chemicals² national/regional organic or extensive (<0.7 (regional)4 GHG improvements)2 regulations regarding LSU/ha)2 No support for coal/heavyenergy & carbon Fossil gas (LNG/CNG) [....] fuel oil/ fossil gas as fuel or Timber production unless performance)4 infrastructure for feedstock³ operator demonstrates transport² [....] that harvest is covered by No support for electricityvalid licences and not from All DNSH criteria from the intensive processes primary forest with high EU Taxonomy (e.g. without a plan to green biodiversity value & carbon Emissions performance power sources by 20303 stock.1 threshold of > 95g CO2 e GHG emissions are higher /pkm for passenger cars)4 DNSH criteria from EU than the average global Taxonomy.4 emissions for that activity

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).





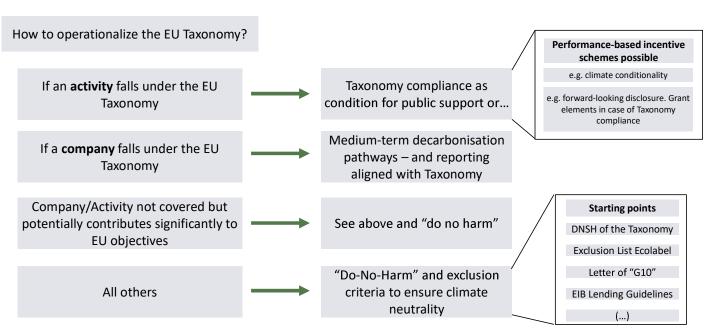
| Example | Current methodology ¹ | "Tracking via Taxonomy" | |
|---|--|--|--|
| Energy efficient renovation of the existing building stock ¹ | Classified as "significant"; 100% contribution (no matter how much the energy efficiency increased!) | Only counts as a climate spending if primary energy demand 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).

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Applying the Taxonomy – time pressure asks for pragmatic solutions







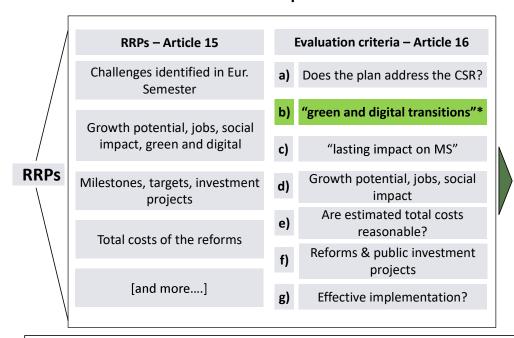
The scope of the EU Taxonomy for EU-27 firms¹: only 28% of market value COMP of publicly listed EU firms is exposed to a "Taxonomy evaluation"

| | 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





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



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.







Berlin, September 2020

THANK YOU!

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Additional Slides



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



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 develope |
| Private investment, jobs and gross value added related to low-carbon and circular economy sectors | to be develope |
| 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 develope |
| Absolute decoupling indicators | to be develope |
| Additional indicators measuring also the human, social and financial/physical capitals | to be develope |
| 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 develope |
| 4 Green incentives, taxes and subsidies 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 (IEEPossil fuel subsidies | Environmental Policy IMF |
| Environmental tax revenues | Eurostat |
| | |



Environmental Scoreboard proposed by IEEP (2020)

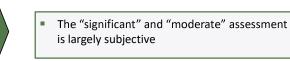
| Eco-innovation index | DG-ENV |
|---|---------------------------------------|
| Number of patents related to recycling and secondary raw materials | Eurostat |
| ustainable Industry | |
| Industrial emissions intensity | Eurostat |
| Greenhouse gas emissions from transport | Eurostat |
| Greenhouse 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 develope |
| Greenhouse gas emissions of the digital sector | to be develope |
| Greenhouse gas emissions of the chemical sector | to be develope |
| Level of take-up in corporate sustainability schemes (such as EMAS) | to be develope |
| limate 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 develope |
| Public funding for just transition | to be develope |
| Indicators for Integrating climate-related risks into financial stability monitoring and microsupervision | to be develope |
| મ્દિરમાંત્રહાના કાર્યા કાર્યકાર કાર્યકાર કારણ કારણ કારણ કારણ કારણ કારણ કારણ ક | ite for European Environmental Policy |

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



An adaptation of the Rio Markers is currently used¹

| 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%) | - |



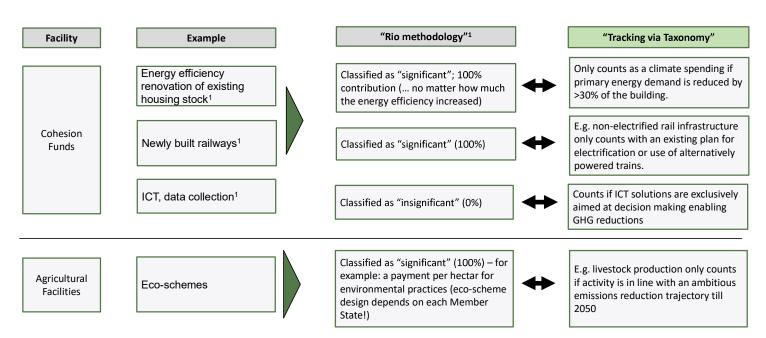
2 Agriculture as a negative example¹

| Facility | Volume | Climat Share | ~ | Climate Spending |
|------------------------------|--------|-----------------|-----|---------------------|
| | bn EU | 'R | % | bn EUR |
| Europ. Agric. Guarantee Fund | | | | |
| (EAGF) | 258 | .3 | 40% | 103 |
| Europ. Agric. Fund Rural | | | | |
| Development (EAFRD) | 9 | 0 | 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!

Taxonomy vs. Rio markers in practice



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

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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. | Austria | Differentiating between national / EU / private Investment & green finance for different subsectors |
| Comprehen sive analyse | 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) |
| | Croatia | Sources: ESIF, EFSI, Modernization Fund, Innovation Fund, EU Allowance auctioning. EIB and EBRD mentioned. No analysis of amounts. |
| 2. Incomplete | Czech Republic | Comprehensive analyse of EU budgets. Multiannual Financial Framework, Selling Allocations. Private sector unclear. |
| Approach, e.g. "Brussels | Estonia | Financing under the EU long-term budget framework 2021-2027 (Multiannual Financial Framework) |
| pays all" approach | 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. |
| | Finland | No information provided. |
| 3.No | Italy | No information provided. |
| 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. |