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& Innovation Awards

Transportation infrastructures in the EU taxonomy

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Introduction

- Taxonomy for dummies?
  - It is new.
  - It sounds tough!
  - It seems to change rapidly.
  - Although it sounds green (=good), it also sounds as creating difficulties…
- But it is necessary!
  - We need to know and to adapt.
  - STA concerns on this new topic: discussion paper released September 2023.

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Content

- What is the EU taxonomy?
- Why do we need an EU taxonomy?
- Framework – timeline.
- Main concepts.
- What is – what is not.
- Steps to assess the alignment with EU taxonomy.
- Activities in the EU taxonomy.
- Social taxonomy.
- Transport infrastructures in the EU taxonomy.
- Case-study - road infrastructures:
  - Objective “Climate change mitigation”.
  - Objective “Climate change adaptation”.
  - Objective “Transition to a circular economy”.
- STA vision.
- Conclusions.

What is the EU taxonomy?

- ✓ *The EU taxonomy is a classification system, establishing a list of environmentally sustainable economic activities.*
- ✓ *Translate EU environmental and climate objectives into criteria for specific economic activities to guide investments.*
- ✓ *It could play an important role helping the EU scale up sustainable investment and implement the European Green Deal.*

2050

The first climate-neutral continent

Fit for 55

At least 55% less net greenhouse gas emissions by 2030, compared to 1990 levels

Trees

3 billion additional trees to be planted in the EU by 2030

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Why do we need an EU taxonomy?

- *In order to meet the EU's climate and energy targets for 2030 Green Deal, it is vital that we direct investments towards sustainable projects and activities.*
- *The EU taxonomy would provide companies, investors and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable.*
- *In this way, it should create security for investors, protect private investors from greenwashing, help companies to become more climate-friendly, mitigate market fragmentation and help shift investments where they are most needed.*

Transportation infrastructure:

- Satisfy mobility demands, while securing the minimum emissions during its life-cycle.
- Long-term sustainable economic development.

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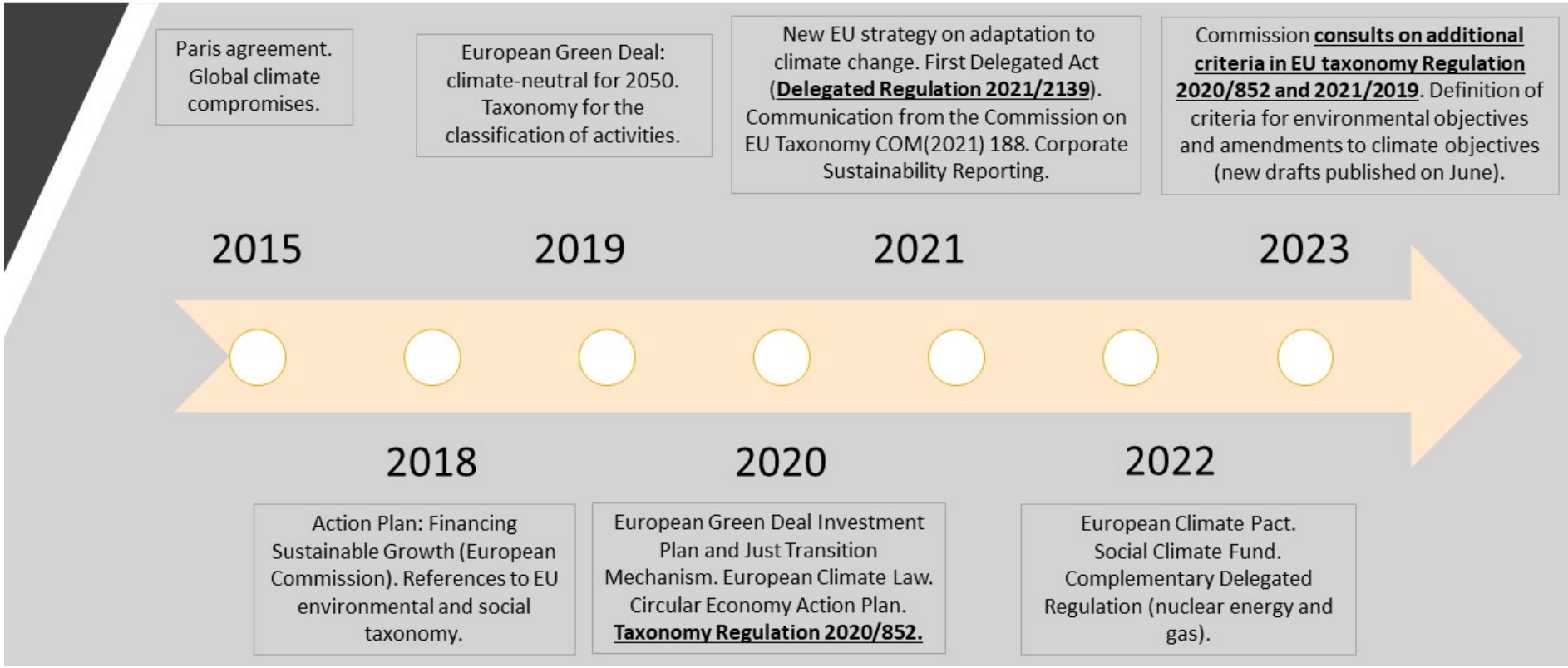
Timeline

SUSTAINABLE FINANCING FRAMEWORK



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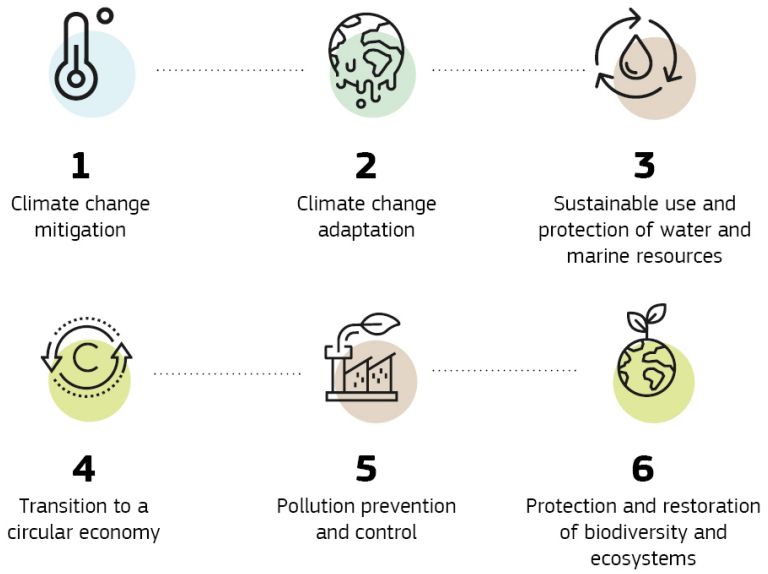
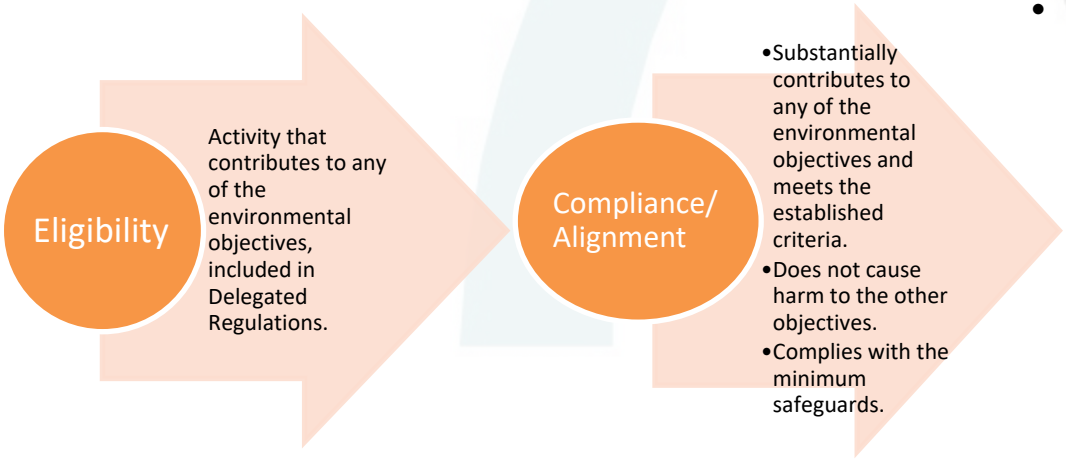
Main concepts

- Taxonomy translates EU environmental and climate objectives into criteria for specific economic activities to guide investments.
- It explains how an activity can make a substantial contribution to each of the six objectives.

6 objectives:





- An economic activity is considered environmentally sustainable if:
  - It substantially contributes to at least one of the climate and environmental objectives.
  - While not causing significant harm to any of the other objectives.
  - Meeting minimum social safeguards.
  - Complying with the technical criteria established for the specific objective.

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What is / what is not

What the EU Taxonomy is	What the EU Taxonomy is not
A classification system to establish clear definitions of what is an environmentally sustainable economic activity	It's not a mandatory list to invest in
Tool to help investors and companies to make informed investment decisions on environmentally sustainable activities for the purpose of determining the degree of sustainability of an investment	It's not a rating of the "greenness" of companies
Reflecting technological and policy developments: The Taxonomy will be updated regularly	It does not make any judgement on the financial performance of an investment
Facilitating transition of polluting sectors	What's not green is not necessarily brown. Activities that are not on the list, are not necessarily polluting activities. The focus is simply on activities that contribute substantially to environmental objectives.
Technology neutral	
Fostering Transparency by disclosures for financial market participants and large companies related to the Taxonomy	

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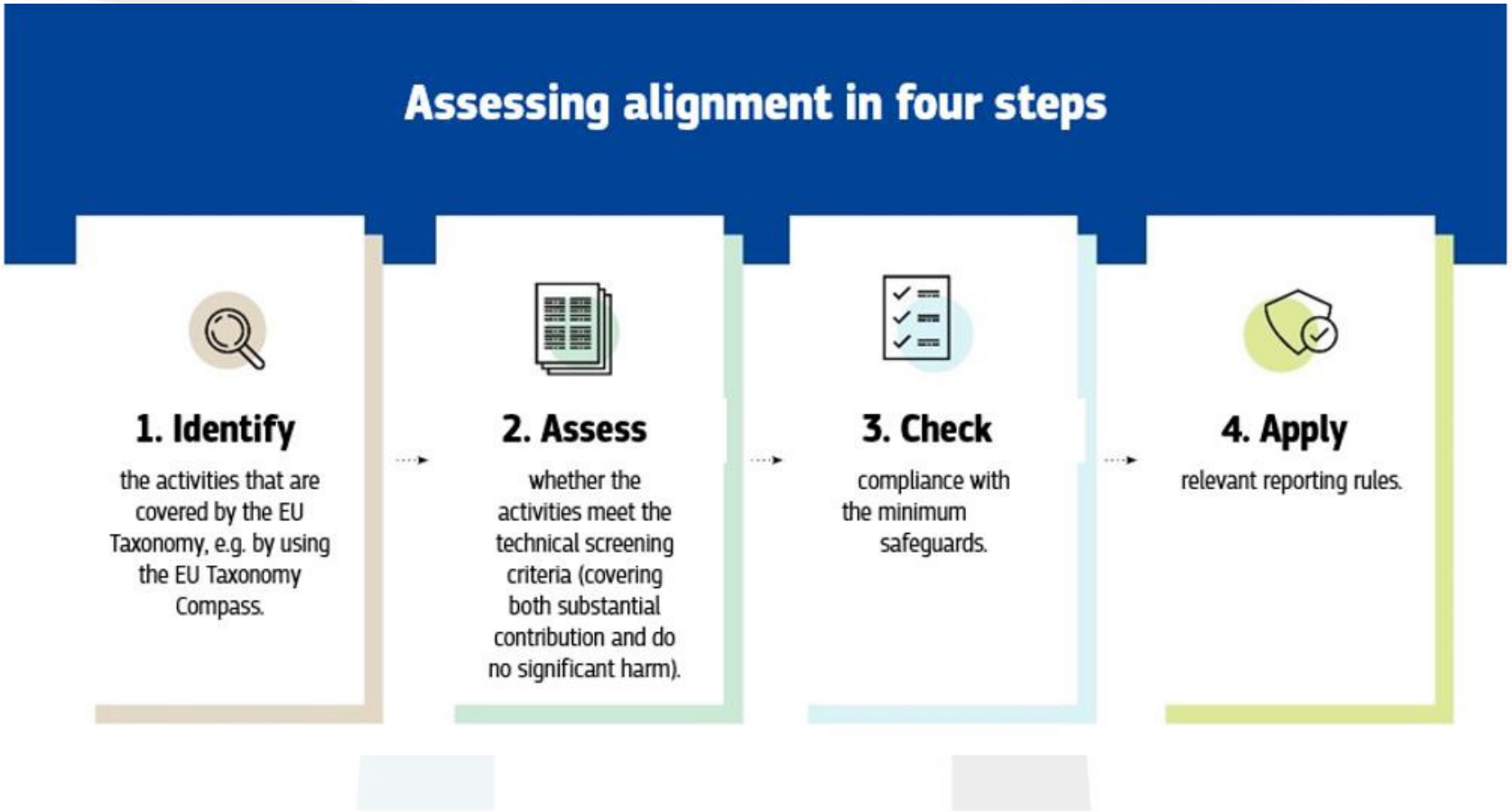
Steps to assess alignment with the EU taxonomy



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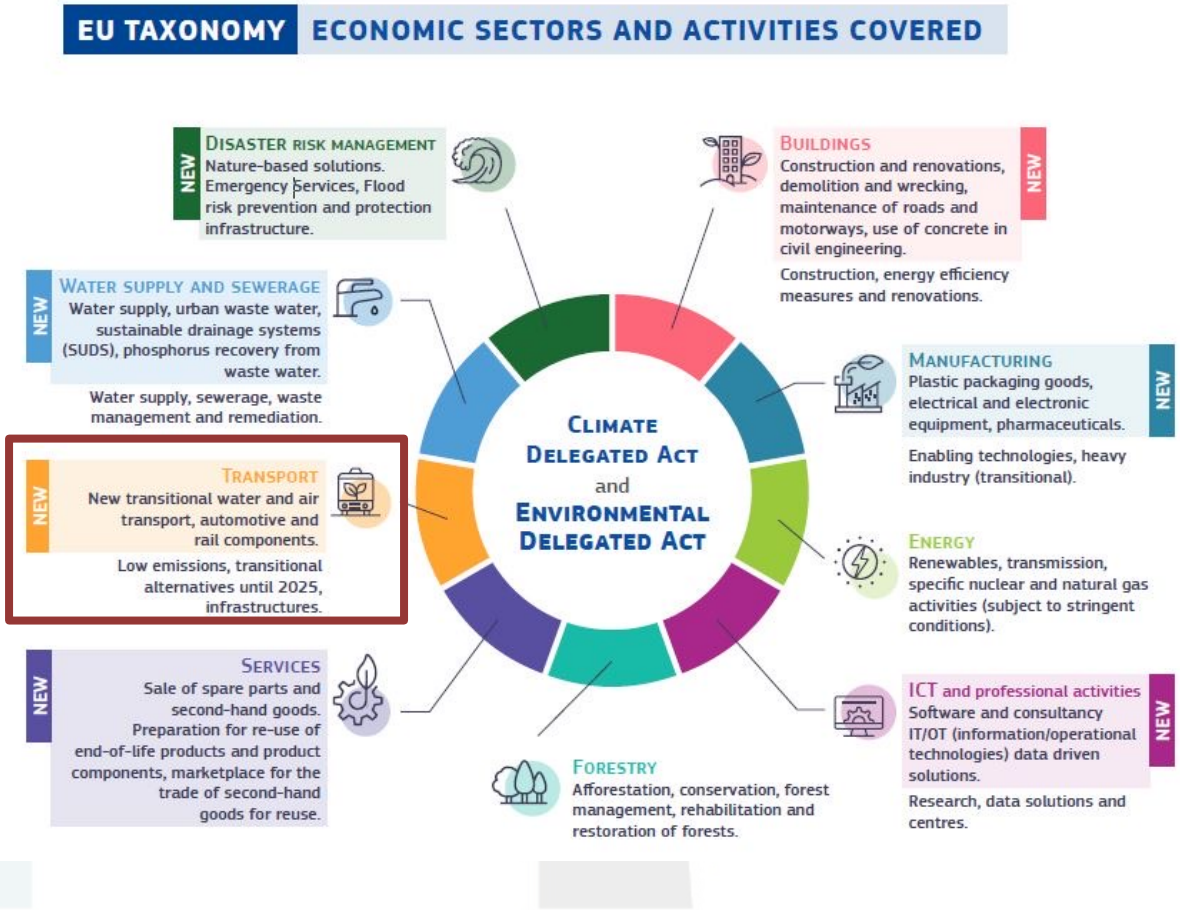
Activities in the EU taxonomy

- 40% of economic activities.
- Covering sectors responsible of about 80% of direct GHG emissions in EU.
- EU taxonomy to be developed gradually.



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Activities in the EU taxonomy

Elegible activities

- ✓ Those included in Delegated Acts.
- ✓ Most relevant and with more potential for transformation.
- ✓ 40% of companies - 80% emissions GHG.
- ✓ Criteria to be enlarged to include more activities.

Enabling activities

- ✓ Contribute (substantially) to one or more objectives by directly enabling other activities to make a substantial contribution to one or more objectives.

Transition activities

- ✓ Only defined for objective “climate change mitigation”.
- ✓ Economic activities for which there is no technologically or economically viable low-carbon alternative.
- ✓ Make a substantial contribution to climate change mitigation, as they support the transition to a climate-neutral economy.
- ✓ For example: cement production.

Aligned activities

- ✓ Substantially contributes to any of the environmental objectives and meets the established criteria.
- ✓ Does not cause harm to the other objectives.
- ✓ Complies with the minimum safeguards.

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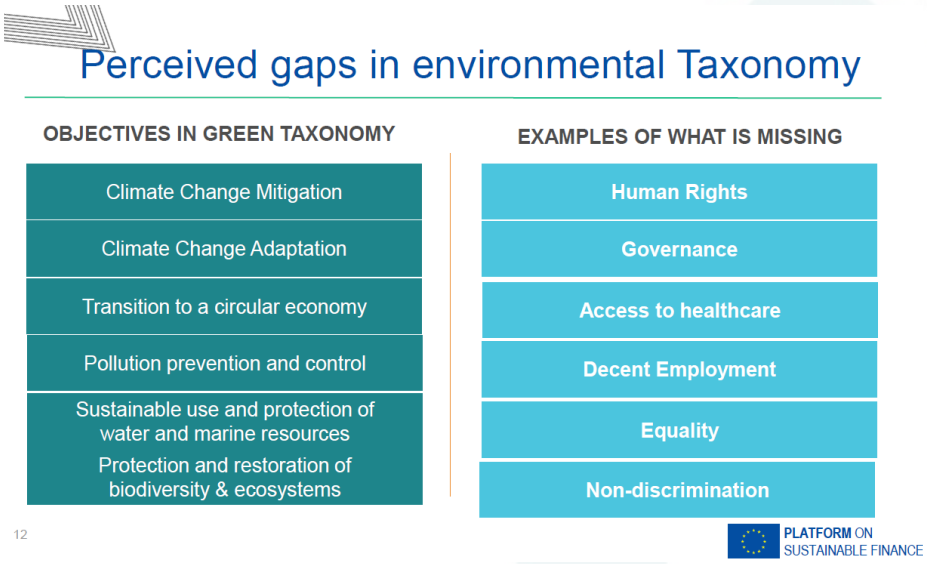
Social taxonomy

- The Platform on Sustainable Finance is also working on designing a **Social Taxonomy** for the European Union (XIV), based on three fundamental pillars:
  - Respect for human rights.
  - Governance.
  - Promote adequate living conditions for all.



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Transport infrastructures in the EU taxonomy

Climate change mitigation

6. Transport
- *6.13. Infrastructure for personal mobility, cycle logistics*
- *6.14. Infrastructure for rail transport*
- *6.15. Infrastructure enabling low-carbon road transport and public transport*
- *6.16. Infrastructure enabling low carbon water transport*
- *6.17. Low carbon airport infrastructure*

Climate change adaptation

6.Transport
- *6.13. Infrastructure for personal mobility, cycle logistics*
- *6.14. Infrastructure for rail transport*
- *6.15. Infrastructure enabling road transport and public transport*
- *6.16. Infrastructure for water transport*
- *6.17. Airport infrastructure*

Transition to a circular economy

- 3. Construction and real estate activities:
- 3.3. Demolition and wrecking of buildings and other structures.
- 3.4. Maintenance of roads and motorways.
- 3.5. Use of concrete in civil engineering.

Sustainable use and protection of water and maritime resources

- No references to transport infrastructure.

Pollution prevention and control

- No references to transport infrastructure.

Protection and restoration of biodiversity and ecosystems

- No references to transport infrastructure.

Case-study: road infrastructure. Highlights for objective "climate change mitigation"

Activity 6.15 "Infrastructure enabling low-carbon road transport and public transport" is described as "*Construction, modernisation, maintenance and operation of infrastructure that is required for zero tailpipe CO2 operation of zero-emissions road transport, as well as infrastructure dedicated to transshipment, and infrastructure required for operating urban transport*".

Substantial contribution to climate change mitigation

1. The activity complies with one or more of the following criteria:

(a) infrastructure dedicated to the operation of vehicles with zero tailpipe CO_2 emissions: electric charging points, electricity grid connection upgrades, hydrogen fuelling stations or electric road systems.

(b) infrastructure and installations are dedicated to transhipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods.

(c) infrastructure and installations are dedicated to urban and suburban public passenger transport.

2.The infrastructure is not dedicated to the transport or storage of fossil fuels.

Case-study: road infrastructure. Highlights for objective "climate change mitigation"

Activity 6.15 "Infrastructure enabling low-carbon road transport and public transport"

Do not significant harm (DNSH):

Climate change adaptation	Sustainable use and protection of water	Transition to a circular economy	Pollution and prevention and control	Protection and restoration of biodiversity and ecosystems
• Identification of climate risks and vulnerability assessment. • Implementation of adaptation solutions.	• Identification of risks and correct address of them.	• At least 70% of non-hazardous waste generated is prepared for reuse, recycling or recovery. • Limitation of waste generation.	• Mitigation of noise and vibration. • Measure for reduction of noise, dust and pollutant emissions during works.	• Environmental impact assessment and implementation of mitigation and compensation measures. • Special requisites for sensitive areas. • Maintenance of vegetation along roads to ensure invasive species do not spread. • Avoid wildlife collision.

Case-study: road infrastructure. Highlights for objective "climate change adaptation".

Activity 6.15 "Infrastructure enabling road transport and public transport", is described as "*Construction, modernisation, maintenance and operation of motorways, streets, roads, other vehicular and pedestrian ways, surface work on streets, roads, highways, bridges or tunnels and construction of airfield runways, including the provision of architectural services, engineering services, drafting services, building inspection services and surveying and mapping services and the like as well as the performance of physical, chemical and other analytical testing of all types of materials and products, and excludes the installation of street lighting and electrical signals*".

Substantial contribution to climate change adaptation

1. Has implemented physical and non-physical adaptation solutions to reduce climate risks.
2. Climate risks and vulnerability assessment has been properly developed, considering the lifespan of the activity.
3. Climate projections and assessments of impacts are based on best practices.
4. Adaptation solutions: do not adversely affects other adaptation efforts, favour nature-based solutions, are consistent with existing strategies, are monitored.

Case-study: road infrastructure. Highlights for objective “climate change adaptation”.

Activity 6.15 “Infrastructure enabling road transport and public transport”

Do not significant harm (DNSH):

Climate change mitigation	Sustainable use and protection of water	Transition to a circular economy	Pollution and prevention and control	Protection and restoration of biodiversity and ecosystems
• Infrastructure not dedicated to transportation or storage of fossil fuels. • Carbon footprint and demonstration that there are not additional emissions.	• Identification of risks and correct address of them.	• At least 70% of non-hazardous waste generated is prepared for reuse, recycling or recovery. • Limitation of waste generation.	• Mitigation of noise and vibration. • Measure for reduction of noise, dust and pollutant emissions during works.	• Environmental impact assessment and implementation of mitigation and compensation measures. • Special requisites for sensitive areas. • Maintenance of vegetation along roads to ensure invasive species do not spread. • Avoid wildlife collision.

Case-study: road infrastructure. Highlights for objective "transition to a circular economy".

Activity 3.4 "Maintenance of roads and motorways", is described as "*Maintenance of streets, roads and motorways, other vehicular and pedestrian ways, surface work on streets, roads, highways, bridges, tunnels, aerodrome runways, taxiways and aprons, defined as all actions undertaken to maintain and restore the serviceability and level of service of roads*.

Substantial contribution to transition to a circular economy

1. Where main road elements are demolished or removed: 100% for re-use or recycling.
2. Where the road elements (binder course, surface course and concrete slabs) are newly installed: at least 50% (mass) are re-used or recycled materials or non-hazardous industrial by-products.
3. The re-used or recycled materials are not moved over distances greater than 2.5 times the distance between the construction site and the nearest production facility for equivalent primary raw materials.
4. Where newly installed, the binder course has a service lifetime no shorter than 20 years.
5. The use of primary raw material for road furniture is minimised through the use of secondary raw materials. The operator of the activity ensures that for metals, such as steel restraint systems, a maximum of 30% of the material come from primary raw material.

Case-study: road infrastructure. Highlights for objective "transition to a circular economy".

Activity 3.4 "Maintenance of roads and motorways"

Do not significant harm (DNSH):

Climate change mitigation	Climate change adaptation	Sustainable use and protection of water	Pollution and prevention and control	Protection and restoration of biodiversity and ecosystems
• Traffic congestion mitigation plan during maintenance works.	• Identification of climate risks and vulnerability assessment. • Implementation of adaptation solutions.	• Identification of risks and correct address of them.	• Mitigation of noise and vibration. • When choosing road surface types, low noise surfaces are preferred.	• Environmental impact assessment and implementation of mitigation and compensation measures. • Special requisites for sensitive areas. • Maintenance of vegetation along roads to ensure invasive species do not spread.

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STA vision

- Congratulations to the EC and stakeholders for the launch of EU taxonomy.
- STA understand taxonomy as a common framework to achieve environmental and climate objectives.
- But….
  - ❑ How far are European transportation infrastructures from the EU taxonomy criteria?
    - ✓ Focus on existing infrastructure; important efforts to make infrastructure more sustainable.
  - ❑ Is it possible to develop a roadmap to achieve taxonomic infrastructures, defining intermediate milestones?
  - ❑ Best practices and positive experiences implemented in the European transport infrastructures; are they valid/useful for EU taxonomy, even if they do not fit exactly in the criteria defined in Regulations?
  - ❑ Best practices not aligned with EU Taxonomy, but contributing to Green Deal and decarbonization.

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STA vision – some examples

- “Traditional” road infrastructure (not including electric charger or hydrogen fuelling stations) are not considered as substantially contributing to climate change mitigation. But…
  - Good pavement condition can reduce vehicles’ CO_2 emissions up to 12%.
  - Significant reduction of temperature in production of specific asphalts.
  - Construction of solar farms close to transport infrastructures.
  - …
  - Aren’t they significant actions for climate change mitigation???

- For pollution and prevention: mobility should be considered as a whole (infrastructure + vehicle).
- Social taxonomy in emerging economies. Challenge to reduce the infrastructure gap.
- Materials and elements: cement, steel.

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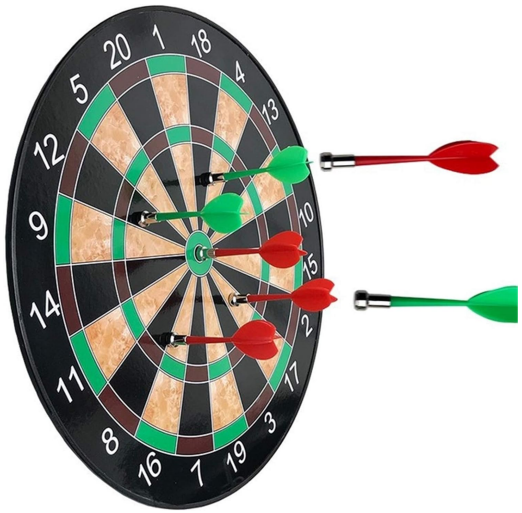
Conclusions



- EU taxonomy emerges to promote and drive the necessary capital to finance sustainable growth and decarbonisation of the European economy, in line with established climate objectives.
- It is essential to develop guidelines and practical examples for the application of taxonomy criteria.
- Uncertainties arising from delays.
- Concerns about the impact of the European taxonomy on SME, which may face difficulties accessing financing due to potential "labelling" of activities.
- Integration of social taxonomy into environmental taxonomy.
- Isolation in terms of sector consideration: “mobility ecosystem“.
- STA recognises taxonomy is a key matter which needs further analysis and development in future actions, so maximal sectoral impact is guaranteed in the medium- and long-run.

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