

Europe's Climate Bank

Six steps to transform the EIB into the world's leading bank for zero-emission transport

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Summary

Transport is Europe's biggest climate problem, accounting for about 28% of the EU's greenhouse gas emissions. Transport is the single largest sector in which the European Investment Bank (EIB) is active, accounting for about 25% of the investments made by the bank. The EIB is in the process of revising its Transport Lending Policy in 2021.

This paper details six changes needed for the bank to radically change its approach to transport lending in order to play a leading role in the decarbonisation of the sector:

- 1. Aviation and airports:** The bank's financial support to the aviation sector should focus on airport and airplane safety and security, as well as pursuing zero-emission airports and aircrafts (i.e. sustainable synthetic electrofuels produced from additional renewable electricity, with zero or near zero GHG emissions).
- 2. Vehicles and road transport:** The EIB should align its Transport Lending Policy so that only zero-emission vehicle technology is made eligible for financial support (including the manufacturing of such vehicles). The expansion of road capacity is currently also eligible for EIB support and this should be reviewed so that it is conditional on zero-emission infrastructure being made available along such routes.
- 3. Shipping:** Research shows how liquefied natural gas (LNG) has negligible climate benefits and this should be reflected in the EIB's Transport Lending Policy. Maritime and inland waterway investment should focus on zero-emission technologies, i.e. battery-electric and renewable hydrogen/ammonia-based propulsion systems (both vessels and infrastructure, as well as R&I).
- 4. Energy:** The EIB invests in infrastructure and vehicles using any alternative fuels, regardless of their climate impact. This is despite the fact that liquid and gaseous biofuels can be as harmful to the climate and environment as diesel, petrol, and heavy fuel oil. The bank must stop investment in such projects. Instead, the EIB should focus on boosting zero-emission mobility (both infrastructure and vehicles).
- 5. Research and innovation:** The EIB offers R&I loans for companies. Such R&I should be limited to zero-emission technologies and new mobility concepts that are aligned with the EU's 2050 net-zero target. Incremental research in fossil fuel technologies needs to be stopped immediately.
- 6. Taxonomy Alignment:** The Commission will publish a Delegated Act by mid 2021 that defines criteria to determine economic activities that have a positive impact on climate change mitigation and adaptation (the criteria for the other four environmental objectives will be published before the end of 2021). The EIB should use this criteria for its target to have 50% of investments dedicated to climate action and environmental sustainability by 2025.

1. Context

The European Investment Bank (EIB) provides about €60bn in loans every year to projects both in Europe and across the world¹. The EIB has supported transport projects since its foundation and the sector account for about 1 in every 4 euro lent by the bank². Transport is by far the single largest sector of EIB activity, accounting for €325 billion in signed contracts up to the end of 2019³.

The current EIB Transport Tending Policy was issued in 2011. The EIB is set to update this in early 2021. The existing 2011 transport policy is largely based on the Commission's 2011 White Paper on transport. Unfortunately, this EIB policy is outdated and has led to billions being invested in projects that are not conducive to the EU's 2050 climate-neutral target. A full revision of the EIB's policy will be needed in order for investments to be aligned with Europe's climate objectives. It is possible that the EIB will update its transport policy in accordance with the Commission's Smart and Sustainable Mobility Strategy that was published in December 2020 and is considered to replace the 2011 White Paper on transport.

In 2020, the EIB has been working on operationalising its new level of commitment towards climate action and environmental sustainability. The EIB wants 50% of investments to be dedicated to climate action and environmental sustainability by 2025 and beyond. Furthermore, the EIB intends to ensure that all of the bank's financing activity is aligned with the Paris Agreement by the end of 2020⁴. These climate targets will have an impact on the EIB's approach to transport investment independent from the 2021 update of the bank's Transport Lending Policy.

2. Reforming the EIB's approach to transport

The transport sector receives more financial support from the EIB than any other economic sector⁵. This means that the sector will be an important feature of the bank's climate targets. The six sections below provide a summary of the revisions necessary to ensure that transport investment is positively contributing to climate action and environmental sustainability.

2.1. Aviation

CO2 emissions from flights have doubled in the last 20 years, growing by over a quarter since only 2013⁶. Today, aviation accounts for 3.7% of total EU emissions⁷. That has been the result of passenger growth outstripping efficiency improvements, and a failure to adopt emission-reducing fuels or technologies in the sector. Unchecked, such growth in emissions will undermine efforts made by other sectors to decarbonise, and imperil Europe's objective of achieving net zero emissions by 2050.

The Covid-19 pandemic has caused a severe, but most likely temporary, fall in demand and therefore emissions. Directly, it does nothing to resolve the aviation's underlying climate problem which is its reliance on fossil fuels, and past experience has shown that the sector can quickly bounce back from crisis to resume growth in demand and therefore emissions.

¹ https://www.eib.org/en/investor_relations/press/2019/fi-2019-21-eib-funding-announcement.htm

² https://www.eib.org/attachments/thematic/transport_overview_2020_en.pdf

³ Ibid 2

⁴ <https://www.eib.org/en/press/all/2019-313-eu-bank-launches-ambitious-new-climate-strategy-and-energy-lending-policy>

⁵ Ibid 2

⁶ <https://www.transportenvironment.org/what-we-do/aviation-and-eu-ets>

⁷ <https://www.transportenvironment.org/what-we-do/aviation-and-eu-ets>

If the EIB is to meet its climate objectives and be considered as the EU's climate bank, then it must stop its investment in traditional aircraft technology. Such investments only serve to boost aviation emissions and do little to mitigate the climate or environmental impact of the sector. The bank's financial support to the aviation sector should instead focus on airport and airplane safety and security, as well as pursuing zero-emission airport infrastructure and sustainable synthetic electrofuels for aircrafts.

2.2. Automotive and road transport

The EIB restricts its lending in automotive manufacturing to “those projects that support the transformation of the road sector into a more sustainable mode by contributing to meeting emission reduction targets”⁸. However, the criteria are very vague and allows for automotive companies to access loans for the production of internal combustion engines.

To achieve full decarbonisation of the road transport sector, a fleet of entirely zero-emission vehicles (ZEVs) will be needed by 2050. This will necessitate selling 100% zero emission passenger cars and vans by 2035 at the very latest⁹. For heavy-duty vehicles (HDVs), sales phase-out dates in the second half of the 2030s will be needed.

Incremental improvements to existing internal combustion engine vehicles (ICEVs) will not achieve the required emissions reductions as there is a limit to the efficiency improvements possible and it is not possible to produce synthetic electrofuels cost-effectively, sustainably and in the quantities required for road transport. By 2030, advanced biofuels are expected to contribute only 3% of all transport fuels (including cars, trucks, aviation) and their growth beyond this date is constrained due to limited sustainable feedstock availability and competing sectors. To produce sufficient synthetic electrofuels to power all passenger cars in 2050 in the baseline scenario would require clean electricity production equivalent to the size of the current EU electricity production, due to the inefficiency of both the well-to-tank production process and tank-to-wheel energy consumption¹⁰. Similarly, the gas industry equally cannot produce sufficient biomethane sustainably from wastes and residues to power a European car fleet, while it should be prioritised in sectors currently using fossil gas, and fossil gas is not an option if cars and trucks are to be decarbonised.

The future vehicle fleet will need to be powered with renewable electricity. This will most probably largely be directly, through battery electric vehicles (BEVs), but could also be achieved indirectly through fuel cell electric vehicles (FCEVs) using renewable hydrogen from electrolysis. The electricity industry has committed to decarbonising the electricity grid and the price of renewables is falling. Electric cars could help balance smart, zero emission grids by serving as storage capacity. Plug-in hybrids or range extended variants are not fully zero emission and are a transition technology. T&E analysis¹¹ shows that the optimal solution from an electricity generation, cost, and efficiency point of view for cars and trucks is battery electrification. FCEVs are an alternative but, compared to BEVs, face greater hurdles in regards to vehicle and fuel costs, market availability, energy efficiency and scale than BEVs. With the performance and price of batteries allowing ever longer ranges in combination with ultrafast charging in less than 15 minutes the benefits of fuel cell over battery technology are being eroded. If around only 20% of ZEV sales in 2050 were fuel cell cars, which would increase electricity demand to 525 TWh, or a fifth more¹².

⁸ https://www.eib.org/attachments/strategies/transport_lending_policy_en.pdf

⁹ <https://www.transportenvironment.org/publications/roadmap-decarbonising-european-cars>

¹⁰ Ibid 9

¹¹ https://www.transportenvironment.org/sites/te/files/publications/2050_strategy_cars_FINAL.pdf

¹² https://www.transportenvironment.org/sites/te/files/publications/2050_strategy_cars_FINAL.pdf

Given the fact that Europe's fleet will need to be entirely comprised of ZEVs by 2050 to achieve full decarbonisation, the EIB should update its lending policy for cars, vans and trucks so that the bank invests only in zero-emission technologies. Zero-emission road transport could have further benefits to both the digital and energy financial support provided by the EIB, creating so-called synergy projects that will help the EU to improve its industrial competitiveness and technological sovereignty.

2.3. Shipping

The EIB usually counts inland waterway projects towards its climate targets. This is justified by the modal shift targets that are central to the Commission's 2011 transport white paper¹³. The EIB notes that "alongside railways, [inland waterways] are the most energy efficient and least polluting inland transport mode, particularly for goods transport". Inland waterway vessels are usually powered by heavy fuel oil and highly emitting. It is important that the EIB considers this when moving forward and updating its transport ending policy, any support for inland waterways should not be considered automatically as contributing to the climate targets. Support should focus on the deployment of zero-emission vessels and infrastructure, i.e. battery-electric and renewable hydrogen/ammonia-based propulsion systems.

2.4. Energy

The EIB's Energy Lending Policy was updated in 2019 and made headlines for reducing the financial support made available for fossil gas. It is important to note that gas vehicles and transport infrastructure are still eligible under the Transport Lending Policy. The EIB should also phase-out investment in gas vehicles for transport and the associated production, transport, distribution and refuelling infrastructure. Furthermore, vehicles running on liquid biofuels can be supported via EIB loans. This must be ended in order for the bank's lending to be aligned with the EU's climate targets and the Paris Agreement.

Regarding biomethane, even if we assume the maximum sustainable potential from waste and residue feedstocks is produced and all of it is allocated to transport it could only cover 6.2-9.5% of energy needs¹⁴. This is also not a desirable option as it would mean no biomethane for other sectors. The sustainable biomethane potential would be better used in sectors that currently depend on methane (e.g. residential and industry) and where no new infrastructure deployment is needed.

Liquid biofuels are blended with standard diesel or petrol and are mostly produced from unsustainable feedstocks¹⁵. The sustainable sources of biofuels (i.e. "advanced biofuels") from waste and residues are limited and, therefore, should be reserved for modes of transport where no alternative exists. It is for this reason that we recommend that the EIB stops any investment in biofuels for road transport. There may be some scope for future biofuel investment for aviation but this must only focus on advanced, i.e. second generation biofuels. Furthermore, such modes of transport should be eligible (primarily) for investments relating to synthetic electrofuels from renewable hydrogen and CO₂ from direct-air-capture. For the purposes of road transport, only zero-emission technologies should be eligible and the energy efficiency of such technologies should be considered as a criterion when the EIB is selecting projects for funding.

¹³ https://ec.europa.eu/transport/themes/strategies/2011_white_paper_en

¹⁴ <https://www.transportenvironment.org/publications/natural-gas-powered-vehicles-and-ships-%E2%80%93-facts>

¹⁵ <https://www.transportenvironment.org/press/100-times-more-palm-oil-eu-diesel-all-oreo-cookies-world>

Therefore, we recommend the removal of unsustainable biofuels and biomethane from the EIB's Transport Lending Policy and to integrate energy efficiency considerations when selecting projects for EIB financing.

2.5. Research and innovation

The EIB's 2011 Transport Lending Policy has a section dedicated to research and development (herein referred to as "research & innovation", or R&I). The vague criteria for R&I projects that are eligible for transport lending allows for small incremental innovation to be eligible for EIB loans. The eligibility of transport R&I projects must be updated in order for the bank to streamline R&I loans to projects that are compatible with a net-zero economy. For example, the EIB's selection process for automotive R&I is based on the principles of "technology variety" and "technology neutrality". This allows for diesel and fossil gas R&I projects to be eligible for EIB support. Such investment is not conducive to the EU's climate targets and risks the bank's legitimacy if it is to be considered as "Europe's climate bank". Instead, transport R&I should focus on the development of zero-emission technology in the transport sector.

Similar vague criteria also exist for maritime ("clean technology") and aviation ("the development of alternative fuels and propulsion technologies"). As noted in the energy section above, R&I should focus only on advanced (waste/residues) biofuels and renewable synthetic fuels for aviation and renewable hydrogen and ammonia for shipping. Furthermore, any future R&I investment in air traffic management should not be justified as climate spending like it is today due to the potential reduction of emissions from "improved traffic flows and reduced holding times". This is not a credible definition of climate spending and must be drastically improved in the upcoming revision. Similar to the aviation section above, aviation R&I should focus on synthetic electrofuels as well as airport and airplane safety.

There is a full section in the EIB's 2011 Transport Lending Policy on R&I for biofuels. This is strikingly outdated when considering the updated Renewable Energy Directive (So-called "RED II"¹⁶) and the latest scientific evidence on the impact of biofuels¹⁷. In fact, RED II alignment is not sufficient for the purposes of R&I as such investment should be supporting only sustainable biofuel projects. The EIB must end R&I support for any crop-based biofuels and, instead, focus only on advanced, second generation fuels. Sustainability criteria should be adopted at the EIB and respected in feedstock selection relevant to biofuels. Furthermore, any investment in biofuels for transport must take into account competing uses by other industries for the same feedstock.

2.6. Taxonomy alignment

The Taxonomy Regulation defines environmentally sustainable economic activities according to six environmental objectives: (1) climate change mitigation, (2) climate change adaptation, (3) sustainable use and protection of water and marine resources, (4) transition to a circular economy, (5) pollution prevention and control, and (6) protection and restoration of biodiversity and ecosystems.

The Commission (with the help of the newly formed Platform on Sustainable Finance) will establish criteria for an increasing number of economic activities, screened under each of the six objectives, that can be used to identify economic activities that qualify as environmentally sustainable. It will not be enough to contribute to one of the objectives as an activity will additionally need to be shown to "do no significant harm" to the other objectives established in the Regulation. The criteria for the first two objectives (known as the "climate taxonomies") will be published in May-June 2021 and the other four objectives will have criteria defined in Delegated Acts before the end of 2021.

¹⁶ <https://ec.europa.eu/jrc/en/jec/renewable-energy-recast-2030-red-ii>

¹⁷ <https://www.transportenvironment.org/publications/globiom-basis-biofuel-policy-post-2020>

The EIB aims to have 50% of investments dedicated to climate action and environmental sustainability by 2025. It would make sense for this to mean 50% of investments will be aligned with the Taxonomy regulation. This alignment would be a strong signal to the private sector as there is no obligation on private investors to align their portfolio with the criteria defined in the taxonomy. The EIB could play a leading role here and show the success that can be achieved when investing in truly sustainable projects.

3. Conclusions

The current EIB Transport Lending Policy was issued in 2011. This policy is outdated given the update to both the EU and the EIB's climate ambitions since that date. A revision of the bank's transport policy is badly needed to ensure alignment of EIB loans with the objectives of the EU.

If the EIB is sincere in its objective to become Europe's climate bank then it must pursue zero-emission mobility and lend exclusively to transport projects whose technologies are aligned with climate objectives. The motto of the EIB is "The EU's bank" and, with 25% of its lending capacity going to transport, it's only right that the investments made by the bank today are helping to build a more sustainable and healthy future.

Further information

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