# Railsponsible Position Paper on Climate:

## Engaging Our Business Partners on Climate

# Executive Summary

The **members of Railsponsible support the Paris Agreement** adopted at COP21, and its goal of limiting the increase in global average temperature to well below 2°C.

This position paper is designed to help our business partners and railway companies in general to set related targets and act upon them. The paper is intended to set out Railsponsible's expectations of its members, its business partners, and the wider industry, and to provide guidance and suggestions for how all companies in our industry can take climate action.

We have identified **three key climate commitments that are relevant to and supported or adopted by most Railsponsible members.** We consider that these commitments constitute good practice and we therefore recommend that they be incorporated into railway sector companies' climate strategies and sustainable sourcing approaches.

The members of Railsponsible encourage every company and business partner in the sector to adopt the following climate commitments and to design a climate strategy around them:

- **Commit to Ambitious Renewable Energy Target**
- **Commit to Ambitious Energy Productivity Target**
- **Commit to Make Available Climate Change Information**

In designing their strategies, companies should consider their size and position in the rail supply chain. **Where relevant, Railsponsible members may wish to translate these commitments into award criteria for tenders in their individual procurement processes, if applicable.**

This Paper provides some initial guidance on putting in place a climate program, i.e. developing the Climate Strategy, setting Climate Targets, and putting in place the right Governance, Management & Procurement. It also provides an overview of tools that can help railway companies and our business partners with those steps.

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# I. Introduction & key climate commitments for the rail industry and our business partners

**Climate Change.** The members of Railsponsible support the Paris Agreement adopted at COP21 and its goal of limiting the increase in global average temperature to well below 2°C, while pursuing efforts to limit the increase to below 1.5°C. Businesses need to transition from an often defensive role to a role in which they actively drive solutions.

The transport sector as a whole must acknowledge its responsibility: it is one of the few sectors where greenhouse gas emissions are still rising. Although the picture varies significantly by transport mode and geography, the direction for rail as one of the cleanest modes of transport is clear: **railway operators, system houses, and organizations within the vast rail supply chain need to contribute more towards climate change mitigation.**

**Why this Paper?** This paper is designed to help railway companies and their suppliers to set targets and act upon them. By disclosing the individual commitments made by Railsponsible's members in terms of climate change mitigation, we hope to show what good climate practice for the rail sector, including the rail supply chain, might look like. This paper aims to set out Railsponsible's expectations of its members, its business partners, and the wider industry, and to provide guidance and suggestions for how all companies in our industry can take climate action.

**Key Climate Commitments.** Based on our analysis, we have identified **three key climate commitments that are relevant to and supported or adopted by most Railsponsible members. We recommend that these commitments be incorporated into railway sector companies' climate strategies and sustainable sourcing approaches.**

> **What is Railsponsible?**
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> Railsponsible is an initiative focused on sustainable procurement, with the aim of continuously improving sustainability practices within the railway industry supply chain. Railsponsible was launched in 2015 and kicked off its priority activity: driving common supplier assessment campaigns.
>
> Since then, around 800 suppliers have been assessed and scored, and results have been shared among the members of Railsponsible.
>
> Other strategic activities are:
>
> 1) Empower Staff and Executives: Raise awareness on the importance of sustainable procurement through training tools and awareness raising materials
>
> 2) Build common programs: Develop joint programs with suppliers to address some of the sectors' main sustainability issues.
>
> Current members are: **Alstom, Bombardier, Deutsche Bahn, Knorr-Bremse, Nederlandse Spoorwegen, RFI, SBB, SKF, and SNCF.**

The three key climate commitments that we have identified cover both manufacturing and transportation (following the life cycle of rail sector products). Possible commitments on product end-of-life are not addressed.

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- **Commit to Ambitious Energy Productivity Target**
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In designing their strategies, companies should consider their size and position in the rail supply chain. **Where relevant, Railsponsible members may wish to translate these commitments into award criteria for tenders in their individual procurement processes.**

**We acknowledge that smaller suppliers or companies with limited climate impacts set different priorities. However, developing a climate strategy is a journey. Every company can begin with select commitments and widen the scope based on progress made.** For additional types of climate targets companies should consider--for example, emission reduction targets--see Appendix 1.

**Rail Supply Chain.** The three commitments outlined above (on Renewable Energy, Energy Productivity, and Reporting) are good indicators of any company's climate performance.Railsponsible members may therefore wish to translate these commitments into award criteria for purchasing decisions and tenders in their individual procurement processes. Members may also use these commitments to individually set targets for their business partners, such as suppliers.

In addition to the three main commitments presented above, there are a number of ways that companies can act. This paper provides some initial guidance on Climate Strategy, Climate Targets, and Governance & Management, in dedicated boxes such as the one below:

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### Climate Strategy – Railsponsible Recommendations for Business Partners.

Based on your size and position in the supply chain, consider the following actions:

- Commit to ambitious targets in line with the Paris Agreement and develop corresponding improvement plans.
- Embed targets into a long-term, ambitious "climate strategy" and develop a governance and management structure around the strategy.
- Develop products and change or improve raw material input in line with the expected implications of a stricter climate policy in the future, e.g. requirements regarding energy/weight reduction, predictive maintenance, or remanufacturing.

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# II. Setting climate targets in the rail sector

**Absolute Targets.** "Absolute reduction" refers to decreasing the total quantity of greenhouse gas emissions being emitted. As shown in Appendix 1, Railsponsible members use absolute targets mainly for "Emissions reduction targets" and "Renewable energy consumption or production targets". Absolute targets set by Railsponsible members include:

- Zero emissions for mobility (train, bus, car) and buildings by 2020 (Nederlandse Spoorwegen)
- 100% renewable energy by 2050 (Deutsche Bahn)
- Transparent reporting on emission performance data and targets (All members)

**Relative Targets.** "Relative reduction" refers to the amount of emissions per unit of economic output. In this case, emissions might be reduced relative to the company's total profits, units of a good produced (for suppliers), or passenger kilometers (for railway operators). Relative targets allow for a comparison between the emissions of companies of different sizes. For the growing freight and passenger transport sector, relative targets come with an important "advantage": they allow a business to grow while focusing on efficiency. In the end, however, it is only the absolute targets that will help to protect the climate. Relative targets set by Railsponsible members include:

- Reduction of products' energy consumption by 20% by 2020 compared to 2014 [Wh/passage km] (Alstom)
- No increase of carbon emissions until 2020 compared to 2015, while increasing production (Knorr-Bremse)
- 40% reduction in $CO_2$ emissions from manufacturing per tonne of products sold (SKF)

For a detailed overview of Railsponsible members' climate targets, see Appendix 1.

**Scope of Targets.** Scoping helps to delineate direct and indirect emission sources. Scope 1 emissions relate to direct emissions from a company's own operations, e.g. heat generated at own facilities, or car fleet. Scope 2 emissions are indirect emissions mainly from procured energy, e.g. electricity, district heating, steam. Scope 3 is more challenging as it includes categories such as travel, purchased goods & services, and product use-related emissions.

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### Climate Targets – Railsponsible Recommendations for Business Partners.

Based on your size and position in the supply chain, consider the following actions:

- Develop concrete and measurable targets. For the three key commitments, this could translate to:
    - Renewable Energy Target, e.g. 100% Renewables by 2025.
    - Energy Productivity Target, e.g. Doubling Energy Productivity by 2025.
    - Climate Change Information, e.g. include $CO_2$ emissions and energy consumption information in mainstream reports.
- Develop absolute emissions reduction targets, while providing some flexibility through relative targets on energy reduction.
- Start setting targets for Scope 1 and 2 emissions and work towards including the more challenging Scope 3 emissions. For more on emission scope see for example the Greenhouse Gas Protocol.
- To complement the three main commitments (Renewable Energy, Energy Productivity, and Reporting), develop further targets tailored to your respective business, e.g. putting a price on carbon or reducing short-lived climate pollutants. For more details see for example the We Mean Business Coalition.
- Consider using the ambitious Science Based Targets approach, especially once Scope 1 & 2 emissions are tracked and Scope 3 emissions are understood. To learn more about such targets, see Appendix II - Practical Tools For Companies Starting the Climate Journey, or directly access the Science Based Targets Initiative's Transport Sector Guidance Document.

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# III. The supply chain & climate-friendly purchasing

When measured by the emissions generated during the "use phase" (Scope 3), rail is one of the most climate friendly modes of transport. However, the rail industry supply chain includes energy intensive raw materials, infrastructure development, manufacturing, and maintenance/overhaul, as well as end of life/recycling, all of which have significant impacts. Serious effort is needed to address the full impacts of the rail supply chain.

**Members assess supply chain practices.** Railsponsible members consider climate change as it relates to a number of business areas, from investment decisions to R&D. However, the most prominent example of adding climate change as a criterion for decision making is "procurement". The majority of Railsponsible member companies have integrated climate considerations into their procurement process.

Railsponsible members committed to assessing suppliers' sustainability performance, for example through the EcoVadis platform. Through the online platform, suppliers answer a set of questions on environmental, social, and ethical issues – including climate change. Suppliers receive feedback on their sustainability performance, as well as a benchmarking. Through the EcoVadis platform, Railsponsible members and other buyers are able to evaluate and engage with business partners on sustainability, e.g. climate management and actions. All Railsponsible members set a target to cover 60% of procurement spend with a comprehensive sustainability assessment, and support suppliers in improving their environmental, social, and ethical practices.

Beyond supplier assessments, Railsponsible members incorporate climate considerations into purchasing decisions through actions that include:

- Setting general minimum sustainability requirements for suppliers (all members)
- Setting ISO 50001 certification requirements for energy intensive major suppliers (SKF)
- Introducing a GHG assessment clause into each transport and logistic contract (SNCF)
- Including sustainability criteria in all relevant commodity group strategies (SBB)

For more information see Appendix 1.

**Railsponsible Suppliers' Practices.** Railsponsible members' business partners who are seeking to reduce their greenhouse gas emissions have a variety of possible actions available, depending on their sector. However, the top performers have consistently acted in relation to the three main commitments laid out above: Renewable Energy, Energy Productivity, and Reporting.

By reviewing Railsponsible's EcoVadis data, we selected three supplier groups that exemplify good supplier performance:

- The main actions that companies in **manufacturing railway locomotives and rolling stock** can take are internal energy assessments and the routine monitoring of both direct and indirect greenhouse gas emissions. Internal energy audits allow manufacturers to identify the specific activities that are responsible for the largest portion of their energy consumption. Monitoring emissions helps them to set goals, track their progress, and adjust goals and actions if needed.
- Top performing companies involved in **general purpose manufacturing activities for rail** demonstrate similar climate actions coupled with "employee campaigns". For example, training sessions on energy saving that encourage actions as basic as powering down systems when they are not needed are widespread. These actions can have a large cumulative (financial) effect but also help to change company culture. Similarly, climate leaders publish official policies on these issues and involve all employees in the climate journey. The companies that most effectively deal with their carbon footprints invest in energy-efficient equipment, purchase/produce renewable energy, or offset a portion of their emissions.

- Climate leaders in the sector of **rail-related computer programming and consultancy** also monitor emissions and train employees on efficiency. They also develop very specific actions based on their activities. For example, companies operating data centers make efficient cooling practices a priority to keep costs low and reduce their greenhouse gas emissions. Companies engaged in engineering activities often focus on reducing emissions related to employee travel, as this makes up a large portion of their emissions.

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## Governance, Management & Procurement– Railsponsible Recommendations for Business Partners.

Based on your size and position in the supply chain, consider the following actions:

- Develop a governance and management structure for your company's "climate strategy":
  - Integrate the "climate strategy" into the overall business strategy. Climate change considerations may feature in merger & acquisition and investment decisions, research & development, training & development.
  - Perform regular risk assessment and management with a time horizon of 5+ years.
  - Make the board (or top management) directly and ultimately responsible for the "climate strategy".
  - Provide incentives for management of climate issues, including attainment of targets.
  - If the size of your organization permits, have dedicated staff to work on climate issues to develop internal expertise.

- Assess your energy and climate impact
  - Understand $CO_2$ emissions related to own activities (initial assessment).
  - Manage and measure emission performance (ongoing monitoring).
  - Find a channels to communicate climate practices and progress to your business partners / buyers (see Appendix II - Practical Tools For Companies Starting the Climate Journey, *EcoVadis* and *CDP*).

- Incorporate climate into procurement and supply chain management:
  - Assess and analyze the climate performance and management of your supply chain.
  - Set minimum and quality requirements on climate change and incorporate them into purchasing considerations / supplier selection.
  - Take a deliberate decision on how to proceed with suppliers not performing against those standards.
  - Reward good sustainability performance and impactful climate change actions of your business partners.

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# Appendix I - Overview on Railsponsible Members' Specific Climate Targets

**Table: Overview on Railsponsible members' specific climate targets**

| | | Example Targets from Railsponsible Members |
|---|---|---|
| **Key climate change targets** | Renewable energy consumption or production target | *Absolute targets:*<br>• 100% green energy consumption achieved. Renewable energy production target is in planning (NS)<br>• 70% renewable energy for railway electricity by 2030; 100% renewable energy by 2050 (Deutsche Bahn)<br>• 100% renewable energy for buildings by 2019 and trains by 2025 (SBB)<br>• 40% of renewable energy in the SNCF energy mix by 2025 [20% by Power Purchase Agreements] (SNCF) |
| | Energy efficiency & reduction target | *Absolute target:*<br>• Reduce energy consumption by 20% from the bases case for 2025 [or save 600GWh] (SBB)<br>*Relative targets:*<br>• +10% energy efficiency by 2020 compared to 2015 (Knorr-Bremse)<br>• +20% energy efficiency by 2025 compared to 2015 [passenger and freight traffic] (SNCF)<br>• Minimum of +2% total energy efficient per year and 62Wh/passenger kilometer by 2020 (NS)<br>• Reduce energy intensity by 10% in 2020 compared to 2014 [intensity in kWh/hours worked] (Alstom)<br>• Reduction of products' energy consumption by 20% in 2020 compared to 2014 [Wh/passage km] (Alstom) |
| | Target to report climate change information | • All members report climate-related information in their Annual Reports, Annual Sustainability Reports or have developed specific Climate Change Reports. |
| **Other important climate change targets** | Emissions reduction target | *Absolute targets:*<br>• Zero emissions for mobility (train, bus, car) and buildings by 2020 (NS)<br>• -50% in 2030 compared to 2006 [CO2 equiv.]; Zero emissions by 2050 for railway in Germany (Deutsche Bahn)<br>• -50% in 2025 compared to 1990 (SBB)<br>*Relative targets:*<br>• Reduce GHG attributable to energy usage by 10% in 2020 compared to 2014 [intensity in kg CO2eq./hours worked] (Alstom)<br>• -40% CO2 emissions from manufacturing per tonne of products sold, as well as -40% CO2 emissions from goods' transportation per tonne of shipped products to customers (SKF)<br>• Climate-neutral growth: no increase of carbon emissions until 2020 compared to 2015, while largely increasing production capacity (Knorr-Bremse)<br>• +25% carbon efficiency by 2025 compared to 2015 (SNCF) |
| | Behavior change related target | *Absolute target:*<br>• 95% of employees contribute to climate targets; and increase in people choosing train over car [in % and passenger kilometer] (NS)<br>*Other:*<br>• Aim to issue at least one Green Bond ('Climate Bond') per year (SNCF Réseau) |
| | Supply chain target | *Absolute targets:*<br>• Target to integrate sustainability considerations in all tenders (NS)<br>• ISO 50001 certification requirement for energy intensive major suppliers (SKF)<br>• GHG assessment clause is introduced in each transport and logistic contract (SNCF)<br>• Integrate sustainability criteria into purchasing decisions and supplier processes / tools (Knorr-Bremse)<br>*Other:*<br>• Include sustainability criteria into all relevant commodity group strategies (SBB) |

*Note: Bombardier is currently working on its climate targets for the period 2018 to 2020 and RFI is in the process of developing its climate strategy where long term specific targets will be defined.*

# Appendix II - Practical Tools For Companies Starting the Climate Journey

The below overview should help business partners in the railway industry to discover tools and organizations that provide support for supplier assessments, emissions measurement, and target setting. While this collection of resources is not exhaustive – it does not cover all aspects of setting up a climate strategy and is not meant as an endorsement of certain tools above others – it might help business partners to:

- Focus on the most impactful actions
- Set the right boundaries to their climate strategy
- Set the right level of ambition compared to their peers

## Table: Overview of tools helping you to set up a climate strategy

| Tool | What to use it for? | Why use it? | How to use it? | Link |
|------|---------------------|-------------|----------------|------|
| Target Setting: <br><br> **Science Based Targets Initiative** | Although more and more companies are adopting climate targets, not all are ambitious enough to help keep global temperature increase below 2 degrees Celsius – the single most important goal of climate policy. <br><br> Science Based Targets help companies to align to the 2-degree goal. | Science based targets are a way for companies to prove that their targets are scientifically sound and ambitious. <br><br> Get on track for low-carbon and future growth by setting a science based target to: Increase innovation, reduce regulatory uncertainty, or strengthen investor confidence. | The initiative has developed a well-structured four step process for adopting science based targets, including extensive guidance and necessary tools. <br><br> For the transport sector, the initiative has developed guidance documents. | ↗ ↗ |
| Climate Legislation: <br><br> **WMB Climate Policy Tracker** | Climate action plans that governments have developed to realize the Paris Agreement (COP21) are currently being implemented, transforming the regulatory landscape that businesses operate in, sector by sector. <br><br> With this tool, businesses can identify regulations relevant to their operations and supply chains and recognize differences between geographies and sectors. | As the scale and ambition of climate policies increase, forward-looking companies can utilize the "Tracker" to stay ahead of the curve. <br><br> By acting on climate policy, businesses are demonstrating their abilities to future-proof their operations. Businesses that prepare for new policies and sustainable investment opportunities will be able to seize the benefits of the transition. | The tool can simplify a potentially complex process of identifying regulations relevant to their operations and supply chains. <br><br> The Tracker currently includes 120 policies from nine geographies. | ↗ |
| Emission calculation: <br><br> **GHG Protocol** Or **ADEME Carbon footprint** | The GHG Protocol's tools enable companies to develop comprehensive and reliable inventories of their GHG emissions. <br><br> While the ADEME tool is designed for the same purpose, it is specifically developed for France. | The tools enable companies to develop comprehensive and reliable inventories of their GHG emissions and help track progress toward their climate goals. | For the GHG Protocol tool, there are different, tailored sector-specific and cross sector tools of interest to the rail industry, for example: Iron and Steel, Aluminium, Transport, Purchased Electricity or Stationary Combustion. You can download the Excel-based tools for free from the website. <br><br> The ADEME tool offers a little less sector-specific guidance. | ↗ ↗ |
| Estimating Freight Emissions: <br><br> **EcoTransIT World** | The "Ecological Transport Information Tool Worldwide" can be used to assess the climate impact of transportation (e.g. in supply chains). <br><br> It compares the energy consumption, $CO_2$ and exhaust atmospheric emissions for planes, cars/trucks and trains. The calculations' methodology is scientifically sound, focusing on a life cycle approach to the energy involved. | EcoTransIT not only calculates the energy or the fuel it takes to run the train, car, or plane; it includes the emissions from the cumulative energy consumption, including the energy used to produce the electricity or the fuel. <br><br> The tool helps to identify possibilities for reducing impacts and options for improvements. | EcoTransIT is an easy to handle web-based tool for assessing the environmental impact of transportation by various transport modes worldwide. <br><br> The tool is designed for companies of all sizes. It supports them in analyzing comprehensive logistical solutions as well as in studying single transportation routes or shipments. | ↗ |

| Tool | What to use it for? | Why use it? | How to use it? | Link |
|------|---------------------|-------------|-----------------|------|
| | The tool was developed by a consortium of European railways. | EcoTransIT makes a company's achievements transparent. | | |
| Supplier Assessment:<br><br>CDP | CDP is a well-known sustainability rating platform on topics such as climate change, water, forests, etc.<br><br>The platform satisfies the demands of customers, investors and stakeholders for transparency and accountability, and provides support for further improvement. | The main advantage of reporting through CDP is that it helps companies (suppliers) to minimize the disclosing burden by aligning the climate change questionnaires of CDP, GRI and the Dow Jones Sustainability Index. The Bloomberg terminal also feature CDP data.<br><br>Suppliers responding to CDP can get free recommendations on emission-reduction opportunities.<br><br>An analytics tool is available for benchmarking and trend analysis. | Typically, buyers/customers invite their suppliers to participate in CDP's supply chain program.<br><br>Through the "Supply Chain Program" companies only need to provide one response via CDP's single data collection platform to meet customer requests for climate change and water information. A shortened questionnaire for smaller suppliers is available.<br><br>Reporting needs to be completed between April and July. | ↱ |
| Supplier Assessment:<br><br>EcoVadis | EcoVadis is a sustainability rating platform for global supply chains.<br><br>More than 40,000 companies use EcoVadis to reduce risk, drive innovation and foster transparency between trading partners. | While the assessment of climate practices is just one of several aspects assessed, the assessment gives suppliers (and buyers) a broad understanding of their performance and how it compares to peers.<br><br>The Railsponsible supplier assessment also makes use of EcoVadis. | The CSR Scorecards make it easy for procurement teams and their suppliers to understand, track and improve environmental, social and ethical performance in 150 spend categories, and 120 countries. | ↱ |

**About BSR**

BSR is a global nonprofit organization that works with its network of more than 250 member companies and other partners to build a just and sustainable world. From its offices in Asia, Europe, and North America, BSR develops sustainable business strategies and solutions through consulting, research, and cross-sector collaboration.

Visit www.bsr.org for more information about BSR's 25 years of leadership in sustainability.

**To get the latest on the Railsponsible initiative, please visit: http://railsponsible.org/**