195 Nations committed to reduce emissions

Between 30 November and 12 December Paris hosted the 21st session of UN's International Conference on Climate Change (COP 21); at the end, the participants reached a collective agreement to limit the global warming of the planet.

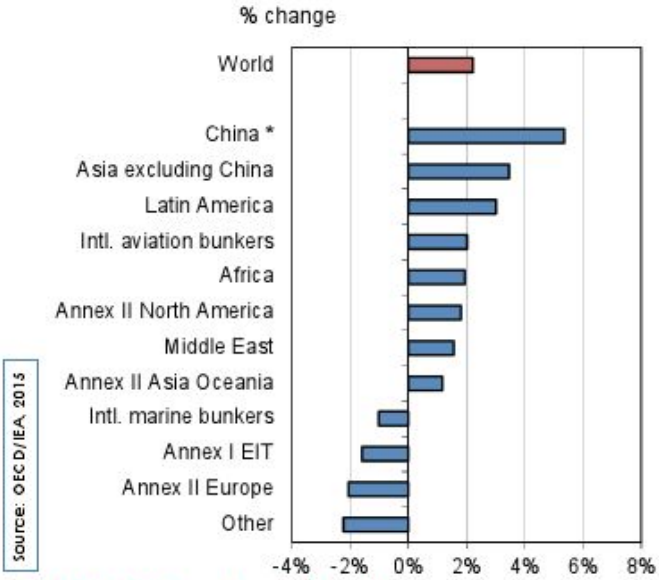
by Pamela Luica

Paris hosted a historic agreement on the fight against climate change, and for the adoption of certain necessary actions and the need for investments in a sustainable future, with low carbon levels. The agreement, signed by the 195 nations united for the first time all the countries for a common cause based on current and future responsibilities. "The Paris Agreement allows each delegation and group of countries to go back home with their heads held high. Our collective effort is worth more than the sum of our individual effort. Our responsibility to history is immense" Laurent Fabius, President of the COP 21 UN Climate change conference said.

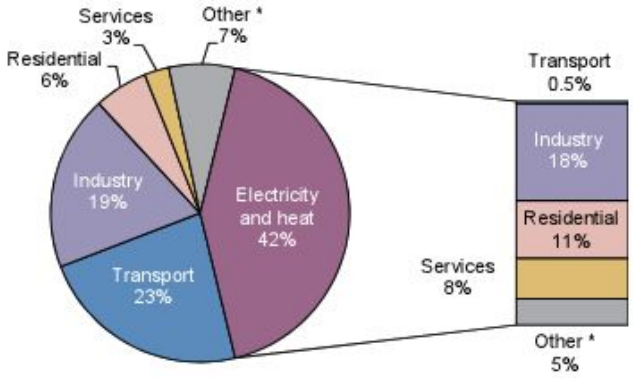
The general objective of the Agreement sets the limit of global warming at the end of this century "below the 2°C threshold", even at 1.5°C as compared to the preindustrial level. According to the Agreement, every 5 years governments must communicate their own contribution to the establishment of several ambitious objectives; they also accepted to report to each other and to the public on the way in which they fulfil the adopted measures. "We have entered a new era of global cooperation on one of the most complex issues ever to confront humanity. For the first time, every country in the world has pledged to reduce emissions, strengthen resilience and join in common cause to take climate action. This is a resounding success for multilateralism," UN Secretary General Ban Ki-moon said.

The decision attached to the Draft Agreement sets an assistance "ceiling" of 100 billion dollars in the environmental sector; this financing will be given to developing countries after the entry into force of the document, in 2020; the decision also states that a new precise quantifiable objective should be defined by 2025 at the latest. "We have seen unparalleled announcements of financial support for both mitigation and adaptation from a multitude of sources both before and during COP. Under the Paris Agreement, the provision of finance from multiple sources will clearly be taken to a new level, which is of critical importance to the most vulnerable," Christiana Figueres, Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), said.

Change in CO2 emissions by region (2012-13)



World CO2 emissions by sector in 2013



Multi-billion climate funding

At COP21 the developed countries, development banks and multilateral climate funds all announced the allocation of funding to implement measures aimed at achieving the established objective. Thus, 24 countries and the European Commission announced their financial participation by 2020. Among the countries with the highest allocated funding are France (EUR 5 bn annually), the UK (EUR 7.85 bn, until 2021), Japan (EUR 10 bn until 2020), USA (USD 800 mln annually) and the European Commission (EUR 2 bn annually).

To fight against climate change, the climate funds will get financing amounting to USD 10.42 bn; the developed countries allocated USD 10.1 bn for the Green Climate Fund, an 11 states group allocated USD 248 mln. to the Least Developed Countries Fund and the Adaptation Fund will get USD 75 mln. from Germany, Sweden, Italy and the Wallonia Region (Belgium). Besides these states, 6 development banks committed to allocate funds to achieve the objectives set by COP21. The African Development Bank announced that it would triple its financing, the amount provided until 2020 amounting to USD 5 bn/year. The Inter-American Development Bank will double its financing which will mean an annual increase of its commitments from 14% to 25-30%. The Asian Development Bank will double its financing, as well with over USD 6 bn until 2020, of which USD 4 bn are destined to mitigation and USD 2 bn to adaptation. The European Union and its Member States are world leaders when it comes to climate financing with the total amount of EURO 14.5 bn in 2014. Also, the European Investment Bank is one of the big multilateral development banks allocating considerable funding for the fight against climate change. The EIB estimates that in the next 5 years it will allocate over EUR 100 bn while also increasing the percentage of loans supporting related projects from 25% to 35% in the developed countries by 2020. "The EIB has a very strong track record of deploying products and instruments to overcome barriers to financing climate action. Because we operate right across Europe and in all the other parts of the world where the EU has relations, we are uniquely placed to transfer knowledge and experience between our operations within and outside the EU," EIB Vice-President Jonathan Taylor said.

The European Reconstruction and Development Bank >

Developed countries climate finance announcements

- Austria will provide at least EUR 500 mln between 2015 and 2020
- Belgium-EUR 50 mln annually until 2020
- Canada will provide EUR 1.74 bn (CAD 2.65 bn) over the next five years
- The Czech Republic – a total of USD 7.3 mln
- Denmark - USD 38 mln in 2016
- Estonia - EUR 6 mln between 2015 and 2020
- European Commission - EUR 2 bn per year on average
- Finland - over EUR 500 mln
- France –EUR 5 bn annually
- Hungary - USD 3.5 mln from 2016 to latest 2020
- Germany will double its international climate finance by 2020 compared to 2014
- Iceland - USD 10 mln annually
- Ireland - EUR 175 mln
- Italy – more than USD 4 bln
- Japan – EUR 10 bn (Yen 1.3 trillion)
- Lithuania will provide additional private sector investments
- Luxembourg-EUR 365 mln over the 2014-2020
- The Netherlands – EUR 550 mln in 2016
- New Zealand – EUR 125.8 mln
- Norway - USD 400 mln per year, until 2020
- Poland - USD 8 mln until 2020
- The three regions that make up Belgium - EUR 11 mln
- Slovenia - to increase its climate finance support by 50 per cent in 2016 and will strive to maintain this level until 2020
- Sweden -to double multilateral climate support in 2016 compared to 2015
- Spain –EUR 900 million by 2020
- United Kingdom – EUR 7.85 bn (GBP 5.8 billion)
- USA - USD 800 mln annually by 2020

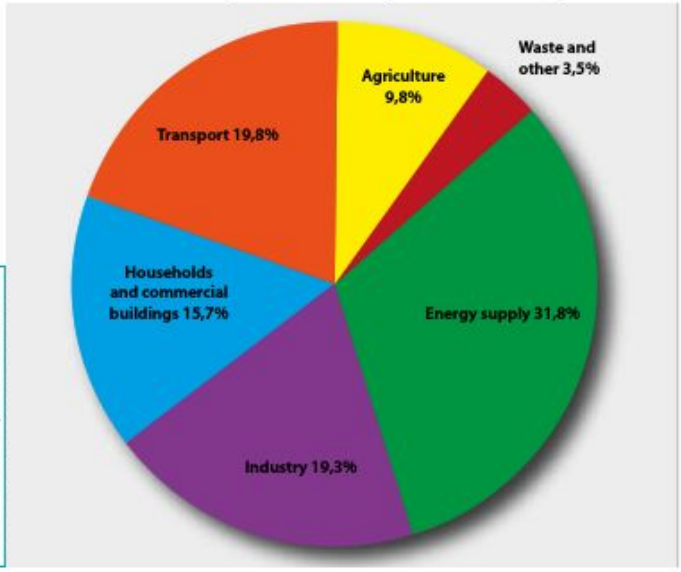
GEF Climate Finance Private Sector Mobilization

	Total Project Financing (US$ million)				Leverage ($ co-financing per $ GEF Grant)		
	GEF Grant	Total co-financing	Private Sector co-financing	Other co-financing	Total	Private Sector	Other
Climate Finance	1,426	11,292	795	10,497	7.9	0.6	7.4
Of which Mitigation	514	5,286	660	4,626	10.3	1.3	9.0
Of which Adaptation	415	2,649	63	2,585	6.4	0.2	6.2
GEF Blended Climate Finance	175	1,603	1,098	505	9.2	6.3	2.9

Source: Global Environment Facility

> announced its strong commitment to the achievement of the Paris Agreement. Through its Green Economy Transition (GET) the bank will increase "climate" funding to EURO 18 bn for the next 5 years, which means that it will raise the financing share from 25% (in the previous years) to 40% per year. "The Paris accord is a major achievement. Now we face the challenge of turning the agreement into concrete steps. The EBRD is well equipped and willing to make a strong contribution," EBRD President Sir Suma Chakrabarti said.

Sources of EU greenhouse gas emissions, 2013



Source: EEA/European Commission

The World Bank Group announced that it would increase its financing for the sector by one third from 21% to 28% per year by 2020. In real terms the financial capacity has remained at USD 16 bn per year and the group will continue to mobilise a financing level which will mean an additional USD 13 bn provided in 2020. The total volume of direct financing and co-financing amounts to USD 29 billion.

The private sector plays an extremely important role in financing "climate" related projects and according to the Climate Policy Initiative's Global Landscape of Climate Finance 2015, in 2014 the total investments amounted to USD 243 bn, i.e., an increase of USD 50 bn.

Low-carbon transport must be a priority

At the COP21 negotiations, the transports sector was in the spotlight due to the activities carried out in the previous years by the stakeholders, especially due to the Lima-Paris Action Agenda (LPAA) which included 15 initiatives of the transport sector such as 'Low Carbon Rail Transport Challenge' (UIC), Global Green Freight Action Plan, Paris Declaration on Electro-Mobility, MobiliseYourCity etc.

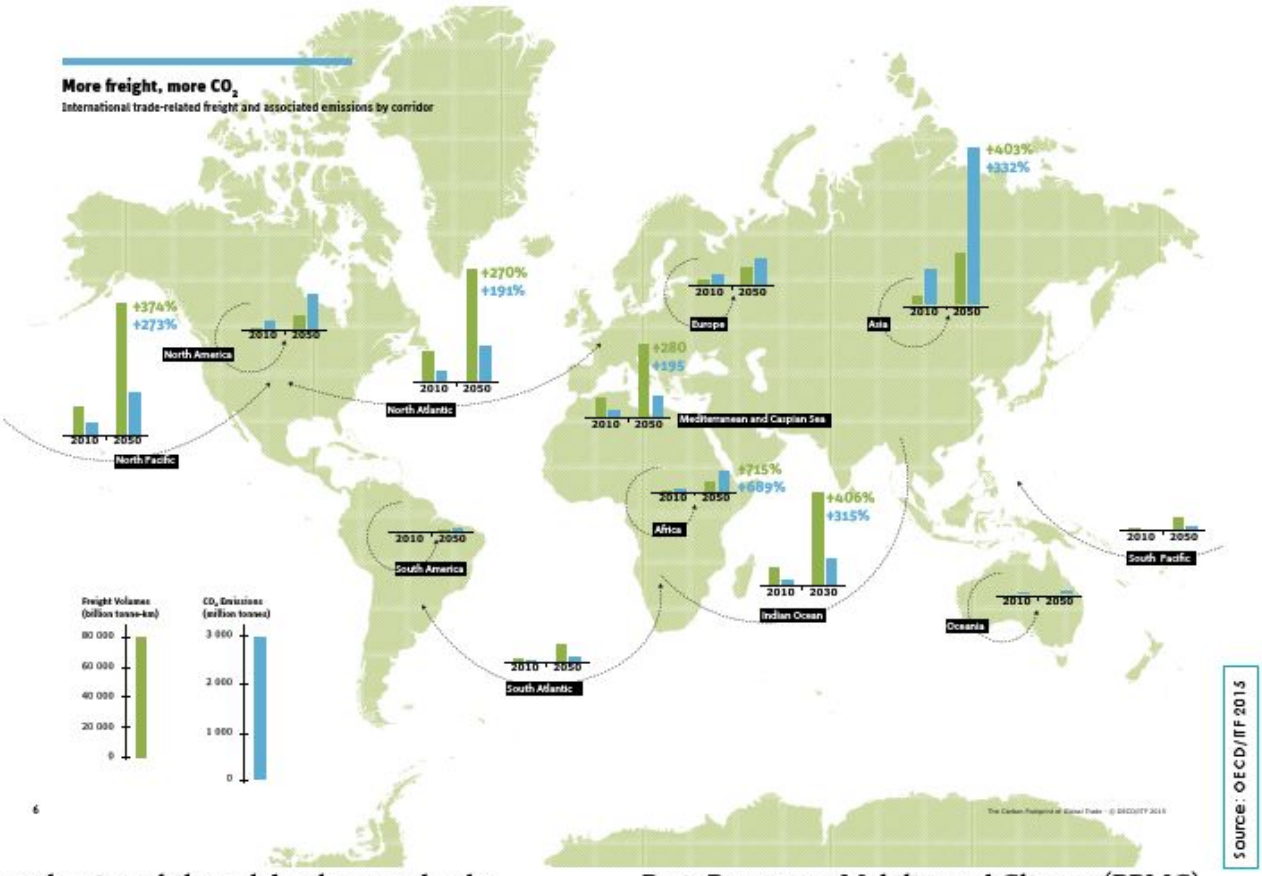
To limit global warming without including the transport sector is unrealistic since, at the global scale, transport is one of the fastest growing sources of CO2 emissions and the largest energy consumer in 40% of the world's countries.

Transports make up 23% of the global GHG emissions and is overwhelmingly (96%) dependent on fossil fuels (it represents 60% of the oil used). According to the estimates, the level of emissions will continue to grow in the following decades from 23% to 33% (in 2050) as a result of the increased mobility need, especially in the developed countries. This premise cannot be compatible with the "2°C" scenario.

GEF projects on climate change mitigation by region (1991–2015)

	Projects		*GEF Amount* [a]		*Co-financing*		*Co-financing*
Region	*Number*	*Per cent*	*$ millions*	*Per cent*	*$ millions*	*Per cent*	*ratio*
Africa	192	24.3%	920.2	19.0%	5,666.0	17.0%	1:6.1
Asia	252	31.9%	1,749.4	36.1%	15,358.1	47.4%	1:8.8
Eastern Europe and Central Asia	144	18.2%	735.0	15.2%	4,882.2	15.1%	1:6.6
Latin America and the Caribbean	150	19.0%	915.4	18.9%	5,450.5	16.8%	1:6.0
Global	48	6.1%	484.4	10.0%	773.9	2.4%	1:1.6
Regional	4	0.5%	38.0	0.8%	396.8	1.2%	1:10.4
Total	790	100%	4,842.3	100.0%	32,527.5	100.0%	**1:6.7**

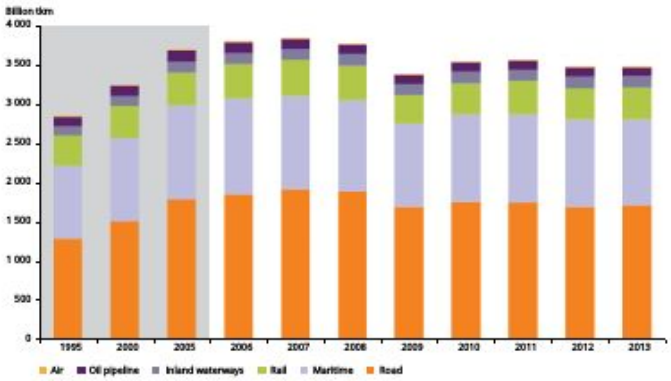
Source: Global Environment Facility



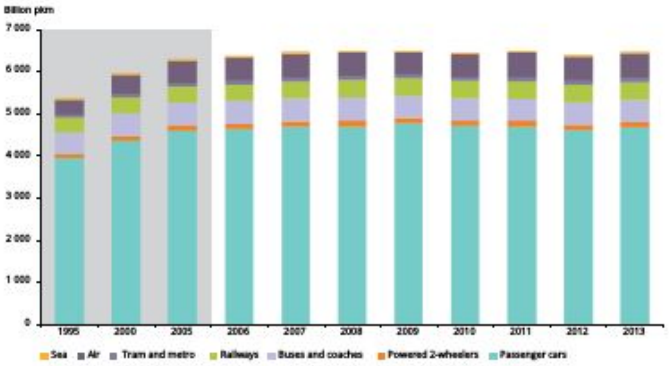
In December 8, multilateral development banks announced the adoption of a commitment to support the countries to implement sustainable transport solutions by providing technical and financial support. Even in 2012 at the United Nations Rio+20 Conference on Sustainable Development, the 8 banks declared that they would allocate significant financing to this sector. 'We are on track to meet our pledge of USD 175 billion of loans and grants for more sustainable transport in developing countries by 2022—with USD 65 billion committed so far. We have also developed common arrangements for measuring and monitoring our support for sustainable transport," the eight MDBs say in a joint statement.
On a global level, countries invest massively in the transport infrastructure with an estimated amount of 1.4-1.2 trillion per year but what's needed is to form transport systems that take into account decarbonisation, innovation, adaptation to climate, connectivity and accessibility.

Paris Process on Mobility and Climate (PPMC), Partnership on Sustainable Low Carbon Transport (SLoCaT) and the UIC Train to Paris initiative are among most important initiatives that promote sustainable transport and recognise that railway transport is the backbone of a low-carbon transport system.
Through COP21, SLoCaT underlined 6 areas of the 'We Are Transport' campaign structure, i.e., decarbonisation, transports' adaptation and resilience to climate change, urgency and timeliness of action on transport and climate change, connectivity and accessibility, innovation and the financing of sustainable transport. 'SLoCaT is highly optimistic on the topic of post-2020 ambition, based on the overall spirit of the Agreement and the overall structure of mechanisms being put in place to ensure that ambition has the potential to be scaled upward as we near a new 2020 starting line. SLoCaT notes however that a transformational change in transport is >

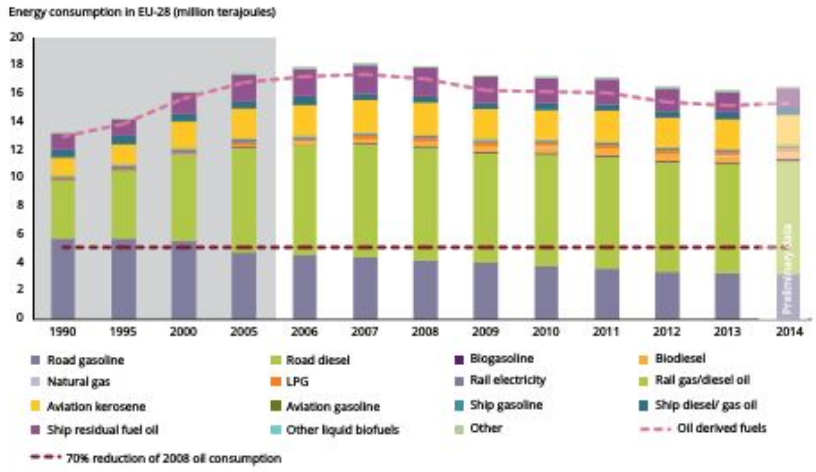
Freight transport volume (tkm) and modal split in the EU-28



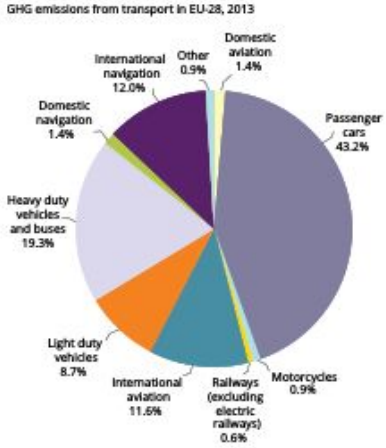
Passenger transport volume (pkm) and modal split in the EU-28



Transport energy consumption in the EU 28



Contributions of the different modes of transport to EU transport GHG emissions in 2013



Source: European Environment Agency

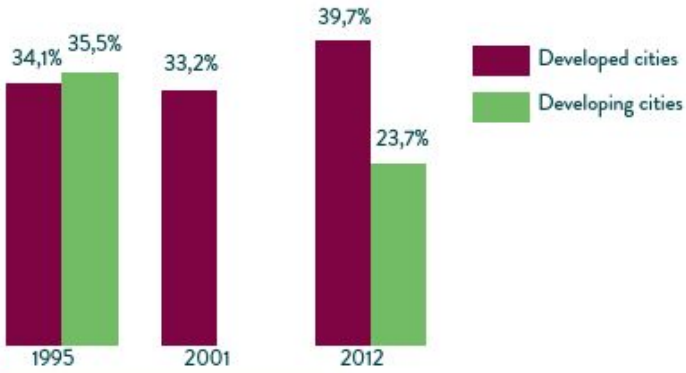
> not likely to happen purely on a basis of climate change goals, and is more likely to be driven by sustainable development concerns (e.g. as a co-benefit of reducing urban air pollution as a primary policy thrust). For this reason, the transport sector could benefit from a stronger linkage between the post-2015 development agenda and the climate change agenda to improve the chances of translating mitigation and adaptation ambition into implementation.'

At COP21 the International Transport Forum launched 6 analysis of the transport decarbonisation issues which include 'A new paradigm for urban mobility', 'Low-Carbon Mobility for Mega Cities', 'The Carbon Footprint of Global Trade', 'Reducing CO2 Emissions from International Aviation', 'Carbon Valuation for Transport Policy', 'Adapting Transport Infrastructure to Climate Change'.

Railways meet the CO_2 reduction targets

Railway transport is the only means of transport that can respond to mobility needs and to the new environmental policies at the same time. Although it covers 9% of world traffic (passenger km/freight ton km), it accounts for only 0.7% of the CO2 emissions while other means of transport, especially by road, account for 22% of the global CO2 emissions.

Modal share evolution



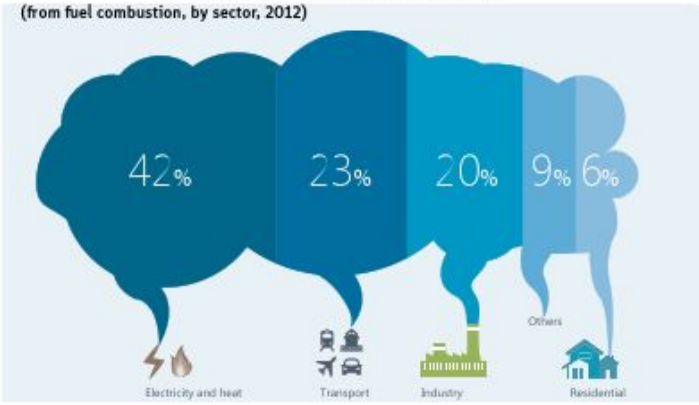
Source: European Environment Agency

UIC organised and coordinated transport to Paris by railway from all over Europe, Asia and Russia as part of the "Train to Paris" campaign, an international commitment of the UIC for the fight against climate change and for setting up of a sustainable system on a global scale. UIC's 'Low Carbon Rail Transport Challenge' initiative underlines the key role of railroad transport among the solutions on climate change and therefore UIC comes with a challenge for the transport system which sets ambitious targets to optimise the energy consumption of the railway system, the reduction of the GHG emissions and the achievement of a sustainable balance between means of transport. Thus, based on the 1990 figures, the 'low carbon rail transport' challenge set the objectives for 2030 and 2050 and aims at reducing by half the energy consumption and GHG emissions of trains (until 2030); the second pillar aims at shifting the transport to the railway sector which would double the market share of railroad passenger transport by 2050.

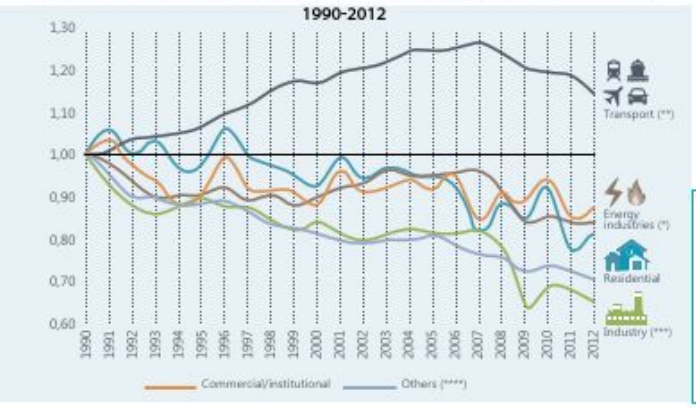
Obviously through its participation at COP21 UNIFE, the European association representing 80 companies active in the railway sector, underlined the importance of railroad transport in reaching the primary objective on climate change and shifting the traffic to railroad is a sensible step in this direction. 'A modal shift to rail (as the most sustainable mode of transport) should be at the backbone of any transport sector strategy to reduce CO_2 emissions. The European rail industry is constantly investing in innovation to make the transport mode more and more attractive to users in order to increase the demand for this carbon-conscious transport mode. (...) Despite overall emissions of transport increasing, the emissions of the rail sector have decreased significantly in the past three decades and continue to do so,' UNIFE says.

Besides, UNIFE believes that sustainable transport policies should recognise the central role of the funding allocated by the governments, the MDBs, NDBs and institutional investors; the adoption of proper financial mechanisms is necessary to ensure coherent sustainable transport development policies and to extend the action

Global CO2 emission shares



Greenhouse gas emissions in the European Union



Source: OECD/IFF 2015

on mobility and climate change.
With a 46% presence on the rail market, the European rail industry is an example regarding the sustainability concept: in the 1990-2010 period it reduced its energy consumption by 20% in vehicles or even by 50% for some units. And this is not the final result because the rail industry is constantly innovating. Certainly, public transport plays a vital role in the fight against climate change; cities and regions are the economic centre of every country and they generate the biggest share of the global GDP. According to the Intergovernmental Panel on Climate Change (IPCC) urban areas are responsible for 49% of the GHG emissions. Hence for the UITP, COP21 was a new opportunity to introduce its initiatives about the close connection between climate change and transport. As a consequence, the UITP Declaration on Climate Leadership was officially recognised by the UN as representing an important effort for the fight against climate changes. The Declaration proves this sector's support for doubling of the public transport market share by 2025 and its commitment to support cities to optimise, ensure and accelerate their urban mobility efficiency. UITP also presented its Central and Eastern Europe Declaration on climate leadership signed by 25 public transport leaders from CEEC showing their willingness to contribute to taking action on climate change. The LPAA (Lima Paris Action Agenda) sent a clear signal to UNFCCC (United Nations Framework Convention on Climate Change) Parties on the public transport sector's commitment to a low carbon future and demonstrated the achievements of major initiatives made by UITP members linked to the Declaration.
The 'UITP's goal of doubling the modal share of public transport by 2025 would mean that the urban transport emissions will be in line with the 2 degree goal but would also foster economic growth, social inclusion and mobility solutions that benefit everyone.'

Source: UITP