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Impact on employment in the EU-25 of climate change and climate change policies by 2030

Transport

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Conference on “Promoting Green Employment : a Major and Indispensable Driver behind a Successful Transition towards a Competitive Low Carbon and green Economy”, on 28 and 29 September 2010 (Brussels), Belgium.



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→ Main features

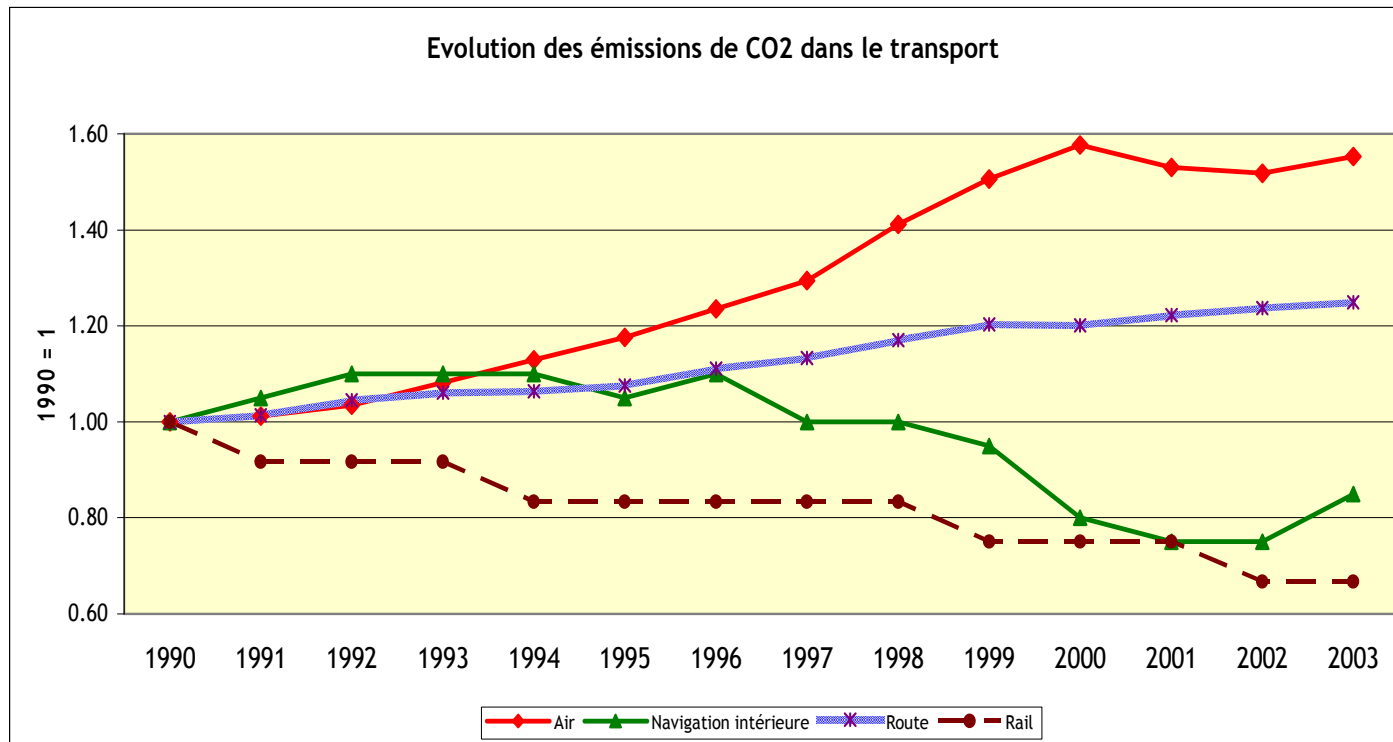
- ▶ Study carried out by ETUC / Syndex/ Istas / Wuppertal Institute (2007), funded by European commission and 6 governments.
- ▶ 3 parts:
 - Expected **impact of climate change** on activity and employment (agriculture, fisheries, tourisme, finance/insurance, health, infrastructure, energy)
 - Expected impact of measures to achieve CO₂ emissions reduction by **40% in 2030** in 5 sectors: energy production, steel, cement, transport, construction/housing
 - **Recommendations** for realising the double dividend of climate change mitigation and creating jobs.

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→ Transport is responsible for 26% of greenhouse gas emissions in 2003. These emissions increased by 26% between 1990 and 2003.



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→ Presentation of the scenarios

- ▶ Two scenarios have been selected starting from the projections carried out by the Commission's DG-TREN for the 2001 White Paper. These are the 2005 reference scenario ("Business As Usual", BAU) and the "Extended Policy" scenario, which is the one which, compared with the BAU scenario, leads to the greatest reduction in CO₂.
- ▶ In addition, two variants of the "Extended policy" scenario have been constructed to analyse the impact of lowered passenger and freight activity and road/rail rebalancing

<i>Indicateurs</i>	1990	2000	2010	2020	2030
Emissions de CO ₂ (Mt de CO ₂) Extended Policy	792,7	969,9	860,9	840,4	871,8
Emissions de CO ₂ (Mt de CO ₂) BAU	792,7	969,9	1038,8	1074,6	1087,0



→ A scenario entitled “**Extended policy - Lower freight activity**”

- ▶ For passenger transport: a lowering of private road transport activity by 25% in 2030 in comparison with the “Extended Policy” scenario, compensated by an increase in public road and rail transport.
- ▶ For freight transport: an overall lowering of freight activity by 15% in 2030, and a rebalancing of rail in relation to road taking the share of rail to 26% in 2030 as against 14% for the “Extended Policy” scenario. Thus the share of rail would be returned to its 1990 level.
- ▶ In this scenario, CO₂ emissions may be estimated at 845.5 Mt at the 2030 horizon, or an increase of 7% compared with 1990 (compared with 10% in the BAU scenario) and a decrease furthermore of - 3 % with regard to the scenario “ Extended policy ”.

	1990	2000	2010	2020	2030
Emissions de CO ₂ (Mt de CO ₂)	792,7	969,9	860,9	840,4	871,8
Emissions de CO ₂ (Mt de CO ₂)	792,7	969,9	852,2	829,0	845,5



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→ A scenario entitled **'Extended policy - Lower freight and passengers activity'**

- ▶ a lowering of passenger transport activity of 8% at the 2030 horizon compared with the "Extended Policy" scenario,
- ▶ in addition to the 15% reduction of freight activity in the preceding scenario.
- ▶ Emphasising policies that favour a reduction in private passenger transport, within the technological hypotheses of the "Extended Policy" scenario, leads to a reinforced reduction of CO₂ emissions, namely a 1,2% increase compared with the year 1990 and a 17% reduction of CO₂ emissions compared with the year 2000.

	1990	2000	2010	2020	2030
Emissions de CO ₂ (Mt de CO ₂) Extended policy	792,7	969,9	860,9	840,4	871,8
Emissions de CO ₂ (Mt de CO ₂) Extended policy lower activity passengers and freight	792,7	969,9	832,3	797,2	802,4

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→ General dynamics of the employment

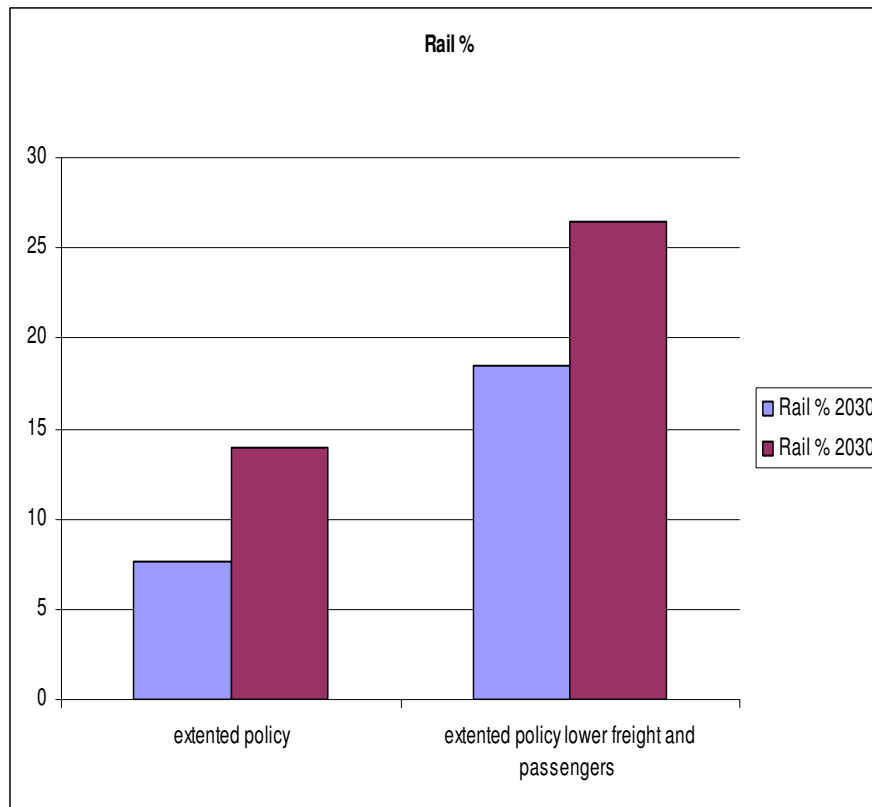
	Dynamics of employment			
	Base line	Extended policy	Lower freight activity	Lower freight activity and passengers
Passengers				
Public road transport	-0,09%	0,87%	3,68%	3,68%
Private cars and motorcycles	1,58%	1,59%	0,71%	0,16%
Rail	0,76%	1,61%	4,36%	4,36%
Total passengers	1,23%	1,49%	2,15%	1,92%
Freight				
Trucks	1,96%	2,34%	1,06%	1,06%
Rail	0,53%	1,36%	2,94%	2,94%
Total freight	1,86%	2,27%	1,25%	1,25%

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→ Main conclusions for railways



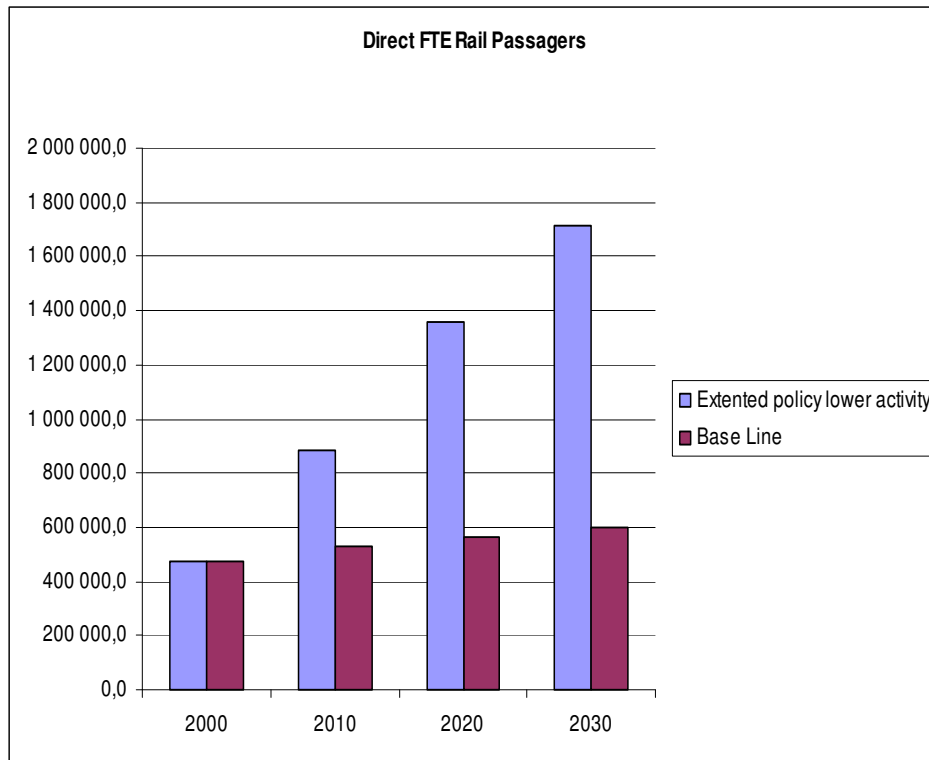
- ▶ The hypotheses of reduction of the activity which we retained in our scenario Extended policy lower Freight and Activity:
- ▶ - 8.4 % for the activity passengers transport and - 15 % for the freight on the horizon 2030 with regard to the scenario extended policy
- ▶ rebalancing for the benefit of the rail lead to an average growth of the direct employment in the 4.4 % rail for the passengers transport and 2.9 % for the freight

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→ An average growth of the direct workforce for the passengers transport of 4.7%



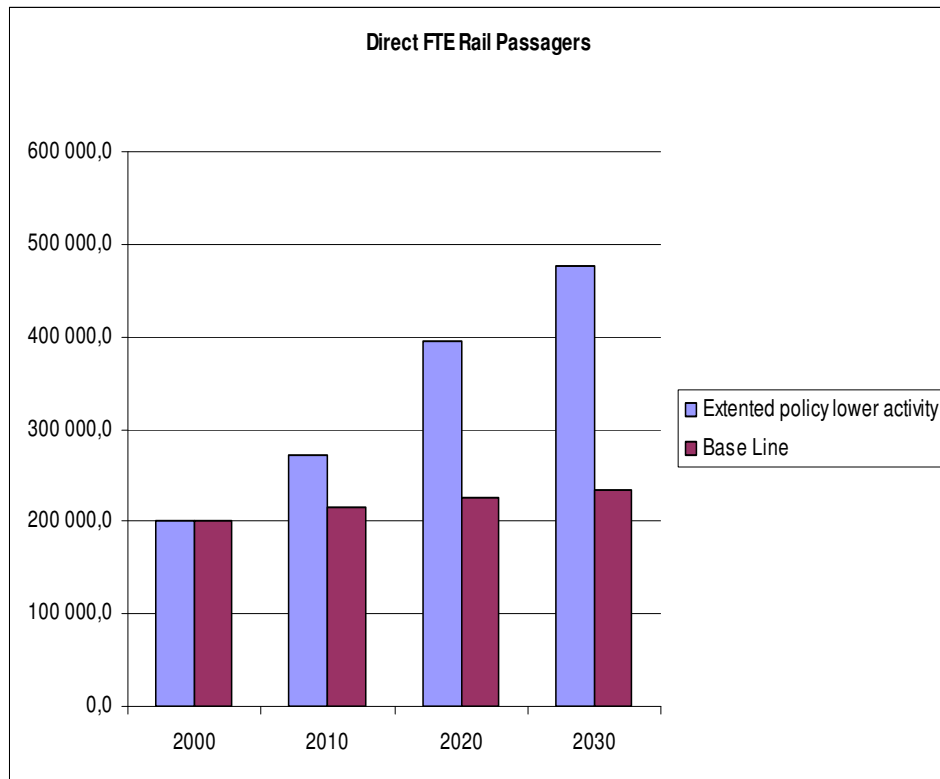
- ▶ The number of employees directly linked to rail passengers transport would so pass of about 500 thousand employees to 1,700 million employees on the horizon 2030
- ▶ against 600 thousand employees for the extended policy scenario

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→ An average growth of the direct workforce for the freight transport of 2.9%



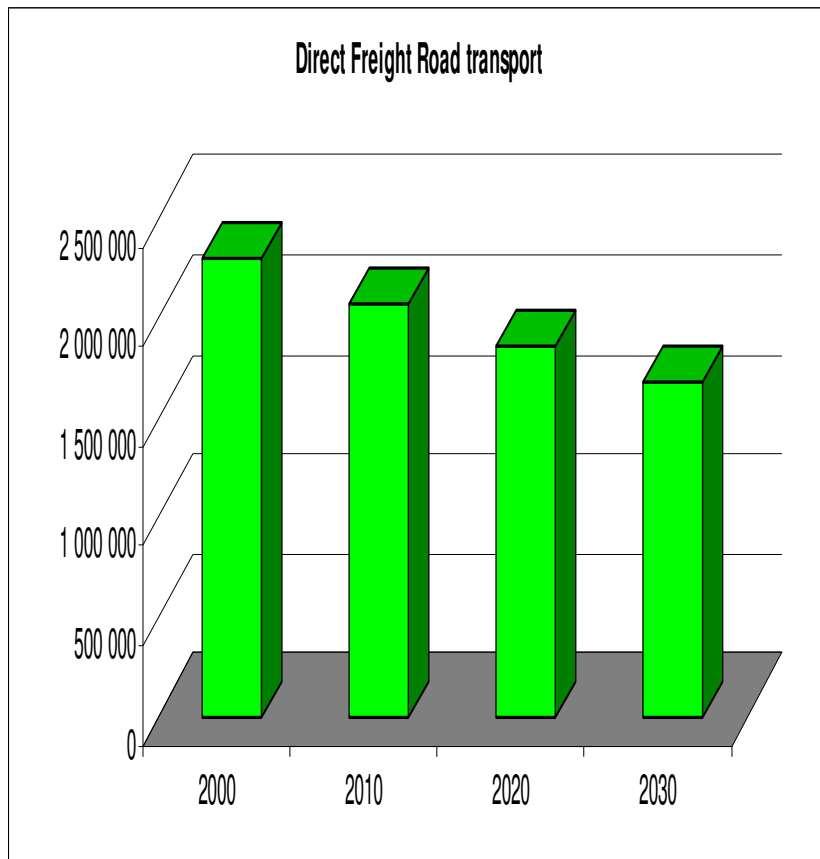
- ▶ The number of employees directly linked to rail freight transport would so pass of about 200 thousand employees to 477 thousand employees on the horizon 2030
- ▶ against 234 thousand employees for the extended policy scenario

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→ Reduction of the direct employments in the road freight ...



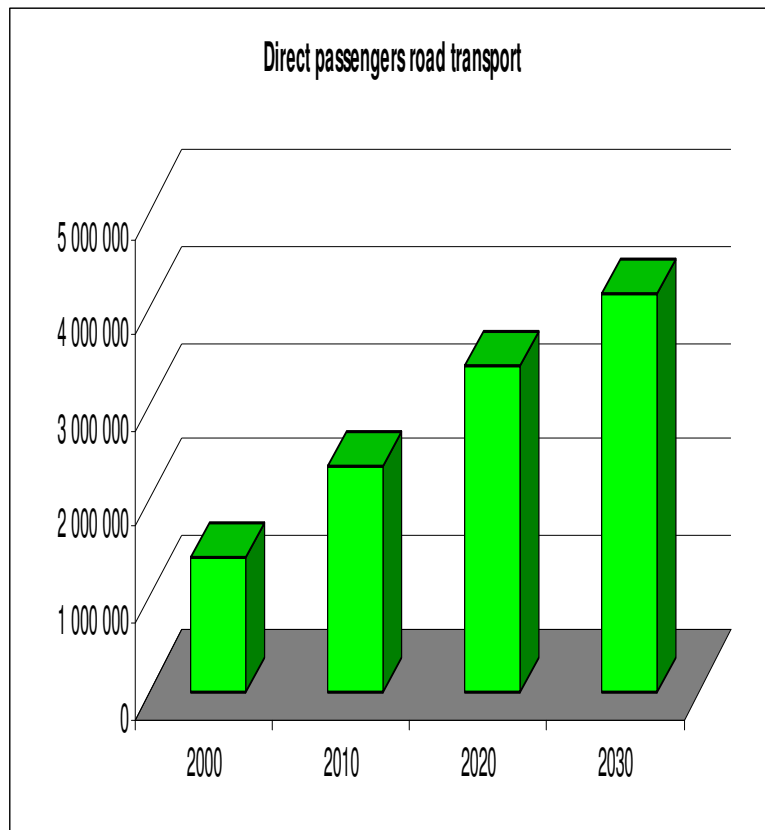
- ▶ On the basis of a hypothesis of a 10% per decade reduction in road freight transport activity over the period 2000/2030, the employment induced would post an average annual reduction of 1.05%.
- ▶ the number of employees directly linked to road freight transport would thus be brought down from 2.3 million in 2000 to 1.6 million in the Europe of 25, i.e. a reduction of 0.7 million employees (on average more than 25,000 employees per year).

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→ ... attenuated reduction by job growth in passenger transport



- ▶ In the context of the hypotheses of the “Lower Activity” scenario, rebalancing the lessening of private transport activity partly towards public road transport, would lead to a greater level of employment growth than the losses observed in road freight transport.
- ▶ Of course, to be sustainable, this scenario requires a partial conversion of motor technologies, depending on distance, to natural gas, hybrid, electric, while waiting for hydrogen, and also an urban and regional planning policy giving priority to clean public transport.

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→ Main conclusions

- ▶ Overall, policies aiming on the one hand to restrict transport activity and on the other hand to rebalance transport modes in favour of rail in particular for both freight and passenger transport, far from being unfavourable to employment, **these policies would lead to a growth in overall employment** of around 2% on average per year over the period 2000/2030 for passenger transport and 1.25% for freight transport.
- ▶ On the subject of employment within the **automobile branch**, this would be stable as a result in particular of the increased added value linked to the spread of clean technologies (of course this effect may be more or less strong depending on the rate of coverage of the European market).

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→ Recommendations for transport policy

- ▶ Implement a wide range of economic, regulatory and market based instruments
 - develop trans-european transport networks contributing to reduce emissions from transport as well as those necessary for new fuels such as hydrogen
 - develop appropriate measures in financing of research and development (clean motor technologies)
 - fiscal policy for all transport networks – roads, motorways, railways- aiming at internalising external social costs of various transport modes
 - policy of localisation of activities, control of urbanisation and planning of urban roadways, evaluation of planning policy

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→ Recommendations for transport policy

- ▶ Issues for job quality
 - improvement of social conditions in the road transport sector
 - development of combined unaccompanied transport
- ▶ Social dialogue as a facilitator of change
 - In a voluntarist scenario of reduction of road transport, social dialogue may also contribute to the design of social policies aiming at supporting job mobility from road transport towards public transport or other activities
- ▶ Investing in training

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→ **Thank you for your attention!**

The study's report is available at:

www.syndex.fr