



66th Session

Working Party on Transport Statistics

ForFITS UNECE-wide implementation Status report





ForFITS background

- Developed under the framework of a United Nations Development Account (UNDA) project implemented from 2011 to 2013
- Projects transport activity, energy use and CO₂ emissions under different policy scenarios
- Currently applying model to UNECE region as follow-up to UNDA project





Status/Challenges

- Provisional results from 40 member States
 - 12 member States which returned questionnaires
 - 4 additional member States which were subjects of previous ForFITS studies
- 78% of population and 93% of GDP (USD) for UNECE region in 2013
 - Biased towards member States with high data availability
 - Lack of data in remaining member States pose difficulties
- Data gaps for all member States
 - Vessel and aircraft data
 - Average annual travel, load and fuel consumption

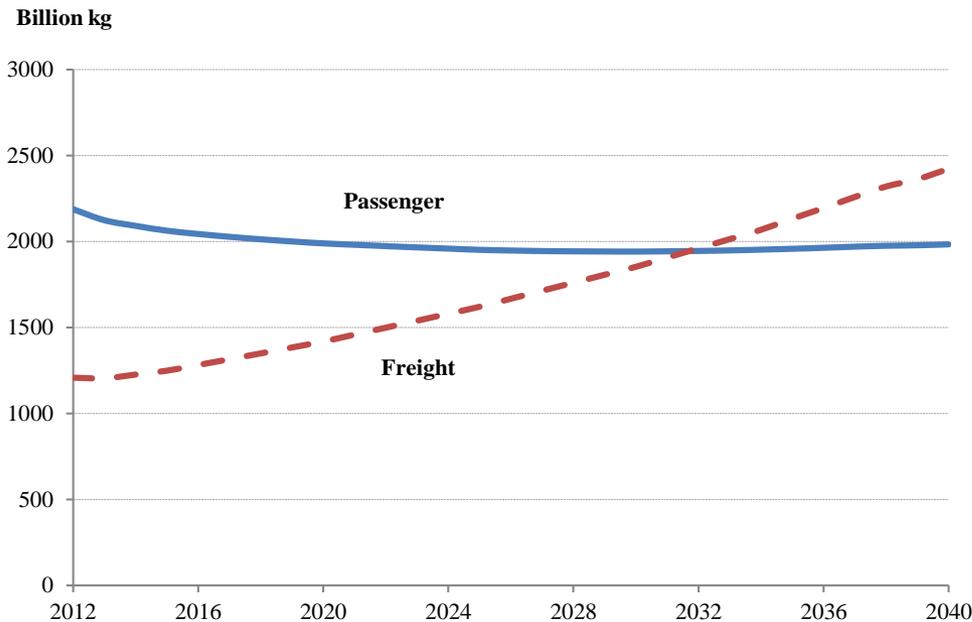




Provisional Results

➤ Projected well-to-wheel CO₂ emissions from inland transport to 2040

- 100 % increase in freight
- 10 % decrease in passenger



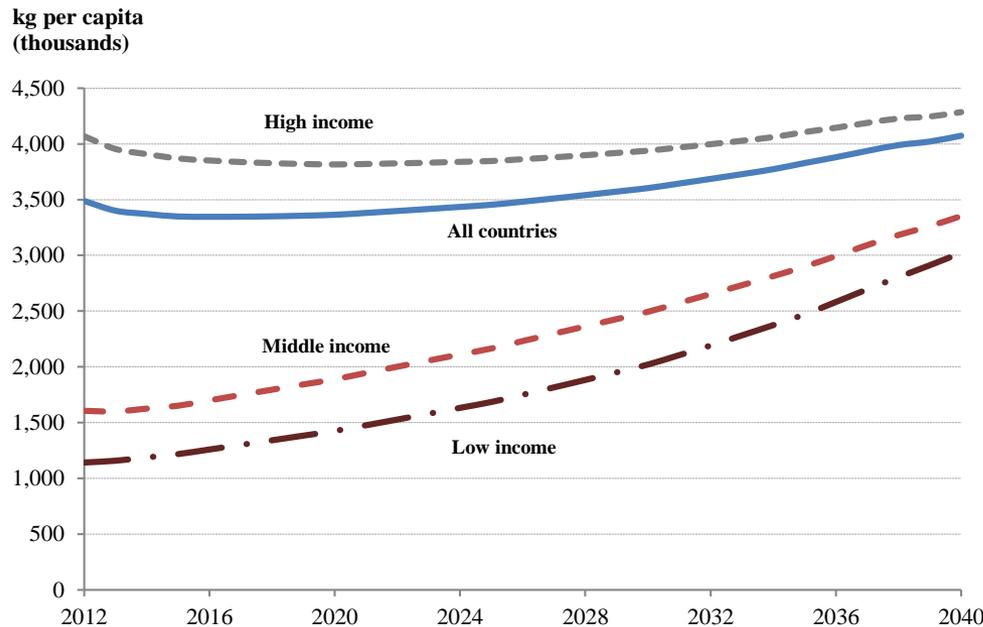
- Population growth < economic growth
- Fuel efficiency improvements
- Saturation of passenger car market in high-income countries





Provisional Results

- Projected total well-to-wheel CO₂ emissions per capita expected to increase
 - Both low and middle income countries approach levels of high income countries



- Low income = 2013 GDP per capita < 10 000 USD.
- Middle income = 2013 GDP per capita 10 000 - 25 000 USD.
- High income = 2013 GDP per capita > 25 000 USD.
- For comparison purposes only - not comparable to World Bank classifications



Possible Future Steps

- UNECE is currently evaluating results and considering next steps
 - Preliminary results presented as an informal document at 77th Session of Inland Transport Committee
 - Technical review of analysis forthcoming
 - Feasibility of projections for remaining member States
 - Feasibility of assessing the effects of different policy decisions on CO₂ emissions

- Questions? - ForFITS@unece.org
- More information on ForFITS:
www.unece.org/trans/theme_forfits.html



Backup - Why use ForFITS?

- **Today** - What is the current annual level of transport CO₂ emissions in a country? Transport system characterized by inputs including:
 - Vehicle stock, annual vehicle travel, average fuel consumption, average vehicle load, breakdown of powertrain types in current fleet
- **Tomorrow** - How will the level of transport CO₂ emissions change in the next decades in a country? Adjustable inputs include:
 - GDP and population growth
 - Fuel taxation schemes
 - Modal shift (eg shift to public transit)
 - Usage of biofuels
 - Technology improvements





Backup - Acronyms and Definitions

GDP	Gross Domestic Product
ForFITS	For Future Inland Transport Systems
PPP	Purchasing Power Parity
UNDA	United Nations Developed Agency
Well-to-wheel	CO ₂ emissions both from vehicle operation and from production and distribution of fuel used for operation





Backup - Member States analyzed

Category	Count ¹	Member States		
Low income	17 (6)	<ul style="list-style-type: none"> Albania Belarus FYR Macedonia Montenegro Serbia Ukraine 	<ul style="list-style-type: none"> Armenia Bosnia and Herzegovina Georgia Rep. of Moldova Tajikistan Uzbekistan 	<ul style="list-style-type: none"> Azerbaijan Bulgaria* Kyrgyzstan Romania Turkmenistan
Middle income	15 (13)	<ul style="list-style-type: none"> Croatia Greece Latvia Poland Slovakia * 	<ul style="list-style-type: none"> Czech Republic Hungary Lithuania* Portugal Slovenia 	<ul style="list-style-type: none"> Estonia Kazakhstan Malta Russian Feder. Turkey
High income	24 (21)	<ul style="list-style-type: none"> Andorra Canada* Finland* Iceland Italy Monaco San Marino Switzerland* 	<ul style="list-style-type: none"> Austria* Cyprus France Ireland* Liechtenstein Netherlands* Spain United Kingdom 	<ul style="list-style-type: none"> Belgium* Denmark Germany Israel Luxembourg Norway Sweden United States

¹ Figure in parenthesis shows count of countries in group for which initial ForFITS analysis has been performed

* Completed questionnaire submitted

Note: **Bold** = initial ForFITS analysis performed. GDP = Gross Domestic Product. USD = US dollars. Low income = 2013 GDP per capita < 10 000 USD. Middle income = 2013 GDP per capita 10 000 – 25 000 USD. High income = 2013 GDP per capita > 25 000 USD. FYR Macedonia = Former Yugoslav Republic of Macedonia