

Monitoring and assessment of CO₂ emissions in inland transport to facilitate climate change mitigation
The UNECE ForFITS model

Seventy-sixth session of the Inland Transport Committee, 25-27 February 2014

Evaluating CO₂ emissions in inland transport and climate change mitigation

ForFITS

A monitoring and assessment tool "For Future Inland Transport Systems"

General overview and summary of the results

Miquel Gangonells - UNECE Transport Division

- 2008 [Call for funds](#) by the UNECE Transport Division on the UN Development Account (UNDA)
- 2009 [Project endorsed](#) by the UN General Assembly
Duration: 3 years (January 2011 – December 2013)
Leading agency: UN ECE (Economic Commission for Europe)
Implementing entities: ECA, ECLAC, ESCAP & ESCWA (other UN Regional Commissions)
- 2010 [Project document](#)
Major phases and activities of this three-year project defined

Project leveraging on the [development of a modelling tool \(called ForFITS\)](#) meant to be freely available for all UN Member States) capable to assist users in the selection of the most appropriate and effective measures to reduce CO₂ emissions in the inland transport sector (including road, rail and inland waterways)

2011 Project launched

Global Status Report on transport statistics, policies being implemented and existing tools

2012 **International Expert Meeting (IEM)** (April) to disseminate information, share experiences, identify possible synergies with other stakeholders

Definition of the **methodology** and implementation

Release of the **prototype version of ForFITS** (December)

2013 **Finalization of the ForFITS model** including a **user manual** (Summer)

Application in pilots, awareness-raising, capacity-building and training workshops (second half)

PILOTS AND WORKSHOPS

Seven pilot countries belonging to the different UN Regions:

- Chile, Ethiopia, France, Hungary, Montenegro, Thailand and Tunisia
- Validation of ForFITS

Regional raising awareness events and capacity building workshops organized by each UN Regional Commission:

<i>Date</i>	<i>Location</i>	<i>Awareness-raising event</i>	<i>Capacity- building/technical workshop</i>	<i>Corresponding United Nations Regional Commission</i>
5–28 August 2013	Santiago	●	●	Latin America and the Caribbean
13 September 2013	Geneva	●		Europe
23–24 September 2013	Bangkok		●	East Asia and Pacific
26–27 September 2013	Bangkok	●		East Asia and Pacific
8–10 October 2013	Geneva		●	Europe
31 October 2013	Addis Ababa	●		Africa
1–2 November 2013	Addis Ababa		●	Africa
19–20 November 2013	Pogdorica		●	Europe
2–3 December 2013	Hammamet, Tunisia	●		West Asia
4–5 December 2013	Hammamet, Tunisia		●	West Asia

Characteristics of the ForFITS model

- **Coverage:** 2 areas, 9 transport modes, 6 vehicle classes, 31 powertrains, 10 fuel blends
- **Local/National/International** levels
- **Two components**

Vensim Packaged Model (.vpm file)
Excel interface (.xls file)



ForFITS.vpm



ForFITS Inputs.xls

- **Inputs:** Information at the base year and definition of scenarios/policy interventions
- **Outputs:** Projections on transport activity, energy use and WTW CO₂ emissions in a certain time span
- Evaluation of a **large number of policies** under the Avoid-Shift-Improve-Approach
- **Freely available online**

Beyond the project

The ForFITS project was concluded, **the ForFITS model just begins**

- **Provide assistance** to the ForFITS users
- Increase the number of **pilots** (Lyon, São Paulo)
- Ensure regular **up-dates**
- **Further development** of ForFITS:
 - Inclusion of **Non-Road Mobile Machinery**
 - Extension to other **greenhouse gases** and to **local pollutants**
 - Infrastructure module** (interaction between transport networks and vehicle use)
 - Road Safety** (e.g. fatalities, injuries and effect of road-safety policies)

ForFITS has the potential to become an important asset for the UN and its Member States

The UNECE Transport Division is seeking stakeholders interested in the establishment of solutions providing opportunities to maintain and further develop the model

Links and contact information

Links

Model download/UNDA project page

http://www.unece.org/trans/theme_forfits.html

User manual, including methodological information

http://www.unece.org/trans/forfits_user_manual.html

Contact information

miquel.gangonells@unece.org