# O.T2.1

## Output factsheet: Pilot actions

<table>
<thead>
<tr>
<th>Project index number and acronym</th>
<th>CE36 ChemMultimodal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead partner</td>
<td>Ministry of Economy, Science and Digitalization Saxony-Anhalt</td>
</tr>
<tr>
<td>Output number and title</td>
<td>O.T2.1</td>
</tr>
<tr>
<td>Responsible partner (PP name and number)</td>
<td>SGH Warsaw School of Economics (SGH, PP14) and Polish Chamber of Chemical Industry (PIPC, PP5)</td>
</tr>
<tr>
<td>Project website</td>
<td><a href="http://interreg-central.eu/chemmultimodal">http://interreg-central.eu/chemmultimodal</a></td>
</tr>
<tr>
<td>Delivery date</td>
<td>23 April 2019</td>
</tr>
</tbody>
</table>
ChemMultimodal’s pilot phase had the purpose to test the usefulness and effectiveness of the project’s before-developed tool-box which aimed at the promotion of multimodal transport. To that aim, companies were addressed in each of the participating regions/countries and invited to collaborate closely with ChemMultimodal project partners to investigate if transports realized by road could be shifted towards rail and/or short-sea transport. To raise awareness for multimodal transport and to network chemical industry with logistics service providers, a series of local workshops took place during the pilot phase. In Poland 6 companies participated in the pilot phase representing 8400 road kilometers. These transports were responsible for CO2 emissions of around 3484,2 tons of CO2 per month. By the end of the ChemMultimodal pilot phase those transports were successfully shifted off the road and feasible multimodal transport solutions were found allowing to reduce transport kilometers realized by road. In real-life tests demonstrated the feasibility of multimodal transport on 6 of the down mentioned transport routes. The pilot action in Poland achieved around 1540 tons of CO2 emissions reduction per month.

<table>
<thead>
<tr>
<th>Chemical company addressed</th>
<th>Shipped materials or goods</th>
<th>Quantity (estimate; per month)</th>
<th>Transport distance and mode(s)</th>
<th>Modal split (in %)</th>
<th>CO2 emitted (per month; calculated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY A</td>
<td>Plastic &amp; rubber</td>
<td>22 800 t</td>
<td>Oświęcim (PL) - Bilbao (ES) / road transport / 2400 km</td>
<td>Road transport (100%)</td>
<td>3 392,6 t CO2</td>
</tr>
<tr>
<td>COMPANY B</td>
<td>Raw materials</td>
<td>125 t</td>
<td>Rotterdam (NED)-Płock (PL)/road transport/1172,5 km</td>
<td>Road transport (100%)</td>
<td>9 t CO2</td>
</tr>
<tr>
<td>COMPANY C</td>
<td>Raw materials</td>
<td>900 t</td>
<td>Gdynia (PL) - Röpczyce (PL) / road transport / 651 km</td>
<td>Road transport (100%)</td>
<td>36,3 t CO2</td>
</tr>
<tr>
<td>COMPANY D</td>
<td>Raw materials</td>
<td>100 t</td>
<td>Gdynia (PL) - Aleksandrów Łódzki (PL) / road transport / 349 km</td>
<td>Road transport (100%)</td>
<td>2,2 t CO2</td>
</tr>
<tr>
<td>COMPANY E</td>
<td>Raw materials</td>
<td>360 t</td>
<td>Runcorn (GBR) - Kędzierzyn Koźle (PL)/road transport/1 842 km</td>
<td>Road transport (100%)</td>
<td>41,1 t CO2</td>
</tr>
<tr>
<td>COMPANY F</td>
<td>Finished products</td>
<td>24 t</td>
<td>Brzeg Dolny (PL) - Dublin (IRL) / road transport/2000 km road</td>
<td>Road transport (100%)</td>
<td>2,98 t CO2</td>
</tr>
</tbody>
</table>
In addition 2 workshops were realized in Warsaw where an accumulated number of 15 stakeholders participated. In conclusion of the pilot phase, suggestions to review and modify the ChemMultimodal tool-box were shared with the project consortium, and a discussion was initiated how to continue the promotion of multimodal transport beyond the pilot phase and project lifetime.

### NUTS region(s) concerned by the pilot action (relevant NUTS level)

The pilot actions were planned on the whole territory of the Poland. Due to the size of the country, relevant multimodal transports could be organized both in and out of Poland. Regarding the starting points the regions concerned were:

- National level
- NUTS 2 PL12 Mazowieckie
**Expected impact and benefits of the pilot action for the concerned territory and target groups**

With the realisation of the pilot action in Poland road transports on 6 routes were investigated for their multimodal potentials. In result of the activities carried out, transport on 6 of these routes have been successfully reorganised while feasible potentials for multimodal transport have been identified on 6 of routes for further review by industry decision-makers.

Stakeholders meeting, Pilots workshops and our daily cooperation with chemical companies and LSP impacted on raised awareness of companies’ transport management activates on environment. Functionality of Intermodal Links or ChemMultimodal CO2 emission calculator enabled real time solution finding and easy calculation. Even though promoted tools still need development like extended database, chemical companies can use them as a trigger in decision making process comparing impact on environment, economics and possibilities to execute particular supply chain. In summary expected impact can be listed as:

- Capacity building in the community of ChemMultimodal stakeholders’ groups.
- Raise awareness on multimodal solutions for supporting modal shift.
- Promoting economic successfulness of multimodal transport.
- Promoting easy calculation methods to show CO2 emission savings by mode shifting.
- Promoting solutions based on new technologies enable integration between chemical and logistics companies.

Apart from the measurable impacts, PIPC and SGH benefitted from the increased knowledge that allowed not only the further refinement of the ChemMultimodal tool-box but also built up capacities to further support chemical industry companies to identify multimodal solutions for the transport of their goods.
Sustainability of the pilot action results and transferability to other territories and stakeholders

The approach adopted for the pilot phase of ChemMultimodal, namely the direct collaboration with chemical industry and logistics service providers while using the project’s developed tool-box, and the regular implementation of awareness raising and networking workshops will be continued amid the achieved successes. Details of the continuation will be identified in an action plan that will be surrendered to the competent decision-makers in spring 2019.

The approach taken in the pilot phase, described in the tool-box element "consultancy services", and the raised awareness for transport-related CO2 emissions, using the CO2 calculator element of the tool-box, can be universally applied not only to chemical industries but to other sectors of the economy. Used visualization tools cover most European territories and allow replication of the approaches in other regions. The revised tool-box of ChemMultimodal is published on the project’s website. Further information regarding the realization of the pilot in Poland can be found [http://www.pipc.org.pl](http://www.pipc.org.pl) and [http://kolegia.sgh.waw.pl/pl/KNoP/struktura/KL/Strony/ChemMultimodal.aspx](http://kolegia.sgh.waw.pl/pl/KNoP/struktura/KL/Strony/ChemMultimodal.aspx)

Impact can be noticed by managers’ engagement in further operations on modal shifts in other routes. The awareness have been risen and it is an important step to change managers’ habits in their daily operations now and in the future. Toolbox elements will stay available for them after project’s end and it can easily adopted to companies CSR activities covering not only production processes, but also logistics.

Project sustainability also depends on further actions and strategies which projects partners need to continue after project end. PIPC has decided to continue project development as a joint approach with Transport commission for Chemical industry. By the best practices database and well established cooperation with other country Lead Partners transferability to other territories and stakeholders will be possible in upcoming future.
Lessons learned from the implementation of the pilot action and added value of transnational cooperation

The review of the pilot phase’s experiences allow to refine the ChemMultimodal tool-box and the preparation of Poland’s action plan specifying how the successfully tested approaches will be continued after the termination of the project’s lifetime. In particular:

During workshops with logistics managers list of blocking points for modal shift were mention:

- it requires higher knowledge, experience and skills to manage complex multimodal solution.
- Industry is not obliged to look for low-emission transport even if introduced CSR strategy is implemented
- Limited solutions ie. multimodal platforms for exchanging data, reliable LSPs

Pilot actions and close cooperation with the companies and LSPs during this phase of the project helped to solve at least part of those challenges. Sharing information between partners on transnational level helped us to realize that problems of multimodal supply chains cover more than a region, but are international or even global aspect. Therefore, this cooperation should cover improving close relationships between chemical companies and LPSs’

Project partners has shared their own methodology to distinguish mode of transport suitable for their needs but they were very welcome to extend it by best practices coming from other chemical companies.
Press releases and scientific articles about the project are available at:


In the course of the Pilot Actions the Toolbox was tested and revised according to the experiences made. The final toolbox elements (D.T1.2.6 It Visualisation of transport flows, D.T1.2.7 Planning Guidelines for increasing multimodal transport, D.T1.2.8 Consulting Services for chemical companies to improve multimodal transport, D.T1.2.9 Measuring CO2 footprint of chemical logistics) are available on the project website:

https://ifs150.mb.uni-magdeburg.de/chemmultimodal/
The results of the regional Pilot Actions (D.T2.3.5 Final implementation report Saxony-Anhalt) are available on the project website:


The comprehensive Pilot Phase report (D.T2.9.3 Evaluation report on results and achievements of pilot projects) is available on the project website: