Inland navigation in Poland

The need for development

by Anna Lewandowska, Coordinator of Baltic and Inland Navigation Programs, and Zofia Wetmańska, Programs Assistant, Global Compact Poland

There are various benefits to investing in inland navigation. Water transport, if properly run and managed, is deemed as the cheapest and the safest. Unfortunately, Poland with one of the best developed river networks in Europe does not use its over 3,600 km of waterways for transport purposes.

In 2014, according to a report published by the Polish Supreme Audit Office, as much as 90% of the country’s waterways did not comply with regulations defining the navigability of the river system. It’s peculiar because total external costs of inland navigation are roughly seven times lower than those generated by road transport. It is also about 30% cheaper than the railroads, especially when considering that one barge can transport the equivalent tonnage of goods as 52 trucks (assuming that the waterway meets the requirements of the IVth class of navigability).

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Great potential
New research conducted by Prof. Krystyna Wojewódzka-Król, a Global Compact Poland expert, and Prof. Ryszard Rolbecki, clearly shows that the benefits of river management are far greater than the costs needed for the development of waterways infrastructure. Investments connected with the opportunities to exploit the transport-related, hydrological and environmental potential of the rivers is simply profitable.

It is necessary to realize the long-term opportunities coming from the European waterways network, which cuts through Poland and could become the axis for regional development.

Poland has an extremely favourable, strategic geopolitical position due to its access to the Baltic Sea and route of the two main Polish rivers – Oder and Vistula. According to a strategic document created by the UN Economic Commission for Europe (UNECE) – European Agreement on Main Inland Waterways of International Importance (AGN), which defines the directions of European waterways network development and aims at creating the legal basis needed for coordination of the inland waterways, three rivers of international importance flow through Poland and connect the Baltic Sea with other parts of the continent. First, E 30 links with the Danube River, the second one, E 40 with the Black Sea, and E 70, reaching Antwerp. The network defined by the AGN Agreement is divided into nine main inland shipping routes with a total length of 27,000 km that connect 37 European countries. It is necessary to realize the long-term opportunities coming from the European waterways network, which cuts through Poland and could become the axis for regional development. Not exploiting such development potential would be a great act of mismanagement.

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Inland navigation in Europe
According to the White Paper on transport adopted by the European
Inland navigation in Poland

Inland navigation was set by the French grocery retailer Franprix, which already supplies 135 of its 350 stores located in Paris via the Seine River. Such a relatively simple act of inland navigation goes hand-in-hand with the provisions of the Paris Agreement.

Tab. 1. The share of inland waterway transport [mln tn]

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>The Netherlands</td>
<td>324.1</td>
<td>346.9</td>
<td>356.1</td>
<td>+9.9%</td>
</tr>
<tr>
<td>2</td>
<td>Belgium</td>
<td>134.6</td>
<td>161.6</td>
<td>187.4</td>
<td>+39.2%</td>
</tr>
<tr>
<td>3</td>
<td>Romania</td>
<td>29.4</td>
<td>32.1</td>
<td>26.9</td>
<td>-8.5%</td>
</tr>
<tr>
<td>4</td>
<td>Bulgaria</td>
<td>6.6</td>
<td>18.4</td>
<td>16.7</td>
<td>+153%</td>
</tr>
<tr>
<td>5</td>
<td>Germany</td>
<td>249.0</td>
<td>229.6</td>
<td>226.9</td>
<td>-8.9%</td>
</tr>
<tr>
<td>6</td>
<td>Poland</td>
<td>9.8</td>
<td>5.1</td>
<td>5.0</td>
<td>-49%</td>
</tr>
</tbody>
</table>

The European Union regards the waterways network as a conveyor belt for the European economy, a tool for regional cooperation and an opportunity for international exchange. The European Union is covered by more than 37,000 km of waterways and half of the population lives near a coast and inland water routes. It is important to emphasise that most of the European industrial centres can be reached via rivers. Currently, many countries take advantage of such situation.

The Netherlands, Belgium and Bulgaria, between 2006 and 2013, recorded an increase in their share of inland waterway transport by respectively 10%, 39% and even 153% (Tab. 1). The European Union regards the waterways network as a conveyor belt for the European economy, a tool for regional cooperation and an opportunity for international exchange. The European Union is covered by more than 37,000 km of waterways and about half of the population lives near a coast and inland water routes. It is important to emphasise that most of the European industrial centres can be reached via rivers. Currently, many countries take advantage of such situation.

The European capital cities of Brussels, Paris, Berlin, Budapest and Vienna, in order to decrease the impact of transport on the environment and the quality of citizens’ lives, in 2011 pledged to increase their share of inland waterway transport as an element of a green city logistics plan.

A good example of the promotion of inland navigation was set by the French grocery retailer Franprix, which already supplies 135 of its 350 stores located in Paris via the Seine River. Such a relatively simple act allows decreasing the company’s lorry fleet and the city’s congestion by roughly 2,600 vehicles. Moreover, European countries are focusing on innovative fleet modernization; for example, Austria is developing innovative solutions for intermodal transport, while the Dutch are building an environmentally-friendly, low emission fleet.

Benefits of inland navigation

Development of a waterways network and related wet retention reservoirs, in a broader sense of water resource management, can also be highly beneficial. It will enable flood and drought prevention. Secondly, Poland, having one of the lowest water resources in Europe is now in a water crisis experienced as a result of climate change. Needless to say, the significant amplitude of the extreme weather conditions like droughts and floods cause further degradation (drying up) of rivers and their environment.

What is more, the hydropower potential of Polish rivers should be exploited with regard to the need for renewable energy sources by using the potential of water retention reservoirs. It would also increase energy security in the country. Currently, the state of hydropower in Poland is relatively bad. It is estimated that hydropower uses only 11% of the Polish river’s potential whereas in some European countries it is used up to 90% while the European average is 45%. Development of inland navigation goes hand-in-hand with the provisions of the Paris Agreement concluded during December’s 2015 UN Conference on Climate Change (COP 21) not only because of the possibility of developing hydropower but also because water transport is the most environmentally-friendly. It emits five times less CO₂ per tonne of transported goods than road transport and one and a half times less than rail. Unfortunately, for many years inland navigation in Poland transports as little as 0.2% of all transported goods, with the European mean value being at a level of 7%.

Inevitably, such a complex issue as the development of inland navigation requires cooperation between the representatives of business, academia and ministries, which leads to more effective governance of the Polish rivers in terms of their transport, energy and economic potential in accord with the principles of sustainable development. Simultaneously, such synergy of many public and private institutions serves as an effective tool to stimulate local integration. We, at UN Global Compact, strongly believe that after many years of negligence Poland will have a chance to address the burning issues of climate change, water management and air pollution by developing inland navigation according to UN standards.