



## The Nijmegen EU Green Capital Declaration on smart and healthy regions, inland port cities and inland shipping sector

At the occasion of the Ports and the City conference, 12-13 April 2018 in Nijmegen, the Green Capital of Europe 2018,

### Considering that:

1. Cities and regions are destined to grow rapidly in the coming years. Historically, many of Europe's cities and regions have developed along the continent's rivers and canals, which provided the cities and regions with means of transport, opportunities for trade and industrial development, and areas to live. Inland Ports can benefit from the waterfront location by strengthening the city distribution and logistics functions in the port area. Various opportunities are being explored to **develop inland ports** to places that accommodate economic as well as residential and recreational activities.

2. The Paris Agreement aims to reduce the **global CO<sub>2</sub> emissions** by at least 85-95% by 2050 compared to 1990. For the transport sector, this means that significant progress will have to be made towards the transition to clean and green fuel/energy in the coming decennia. The mid-term goal for 2030 is a reduction of CO<sub>2</sub> emissions of 40-50% compared to 1990. There is also significant

room for improvement in **air quality** for inland port cities and urban regions around busy waterways and corridors. In line with the Urban Agenda or the EU, a Partnership Air Quality has been launched. In the Action Plan of this Partnership, shipping has been mentioned as a significant source of air pollution in the coming decennia.

3. Inland waterways transport ('IWT') is among the most sustainable means of transport. Transporting one ton of freight by inland vessels causes two to twelve times less CO<sub>2</sub> than transporting the same freight by road truck (CE Delft 2018). As innovation in the road sector takes place at a higher speed, the inland waterway transport sector wants to take next steps in bringing further down its carbon footprint. Different technical solutions are available to reduce or eliminate emissions, some of which can be applied by retrofitting whereas others are more suitable for new-build vessels. The challenge is to apply the **most appropriate solution** to each vessel. The knowledge about the actual effect of available solutions on emissions is being built up in projects that monitor

real-life emissions ('measuring at the pipe'). IWT can benefit from technological breakthroughs in other transportation modes, such as electric road vehicles powered by batteries and/or hydrogen fuel cells. Where such zero-emission solutions are not yet possible, low-emission solutions such as hybrid propulsion, (bio-) LNG engines or scrubbers can be applied, among others.

4. The inland shipping sector is optimistic towards the sustainability of waterborne transport but is reliant on the supply of **onshore energy facilities** for low and zero-emission sailing. These facilities can be integrated with local clean and renewable energy projects for other sectors such as residential areas and industrial users. The facilities are not only needed for vessels but also the other elements of the multi-modal chain such as clean trucks for regional and local distribution and handling equipment in the ports.

5. **Cooperation** between inland port cities, regions and cooperation between inland cities and the inland shipping sector is a prerequisite for the achievement of the transition to clean and renewable energy. Inland ports supported by local, regional and national governments are willing to cooperate on facilitating more sustainable freight transport.

**Conclude that:**

6. Freight transport via inland shipping has **sustainable growth potential** as long as the sector makes the transition towards clean and renewable energy. By stepwise switching to low- and eventually zero-emission shipping, the sector can grow and help to prevent road congestion, reduce greenhouse gases emissions, and improve the air quality in inland port cities, regions and agglomerations along busy waterways.

7. There is **added value** to bring stakeholders working in the Rhine basin together and, building on and in the context of the previously mentioned initiatives, encourage the transitions towards a sustainable inland shipping environment with particular focus on ultimately achieve (near) zero emissions from inland shipping and the constituent multi-modal chain. This is the rationale for this Declaration of Nijmegen.

**And propose the following:**

8. Signatory partners initiate a **three-step process** to achieve (near) zero emissions from inland shipping and the constituent multi-modal chain by 2050. Although this is over 30 years from

now, the long turnover times in the IWT sector imply that the transition is likely to take such a prolonged period.

9. **Step 1** concerns a study on how sustainable freight transport can be implemented for major waterways in the Rhine basin. The scope is the range of sustainable initiatives that contribute to reducing CO<sub>2</sub> and other emissions, with focus on zero emission/air quality initiatives. The focus in this step will be the answering of research and innovation questions that address the technological, financial/economic and organizational issues that need to be solved to accelerate the market for (near) zero emission solutions for inland shipping.

10. The signatory parties will be involved in this step. Partnerships are possible with initiatives/projects within the EGTC Rhine-Alpine Corridor consortium, which also focuses on sustainable shipping. The Dutch Ministry of Infrastructure and Water Management **offers to facilitate this process**. The aim is to deliver specified business cases in the Rhine basin that embody low and zero-emission operations and contribute to a more sustainable inland shipping industry in the corridors of the signatories. Step 1 starts today and runs until the end of 2020. The initiative will remain open to new signatory partners.

11. **Step 2** involves arranging the public-private investments in the development of new and already viable business cases proposed in step 1. Moreover, work will be done to expand the network of relevant local, national and international partners in order to implement step 2 and step 3 goals. The possibility will be studied to organize step 2 as a project under one of the EU funding schemes such as LIFE (similar to CLINSH).

12. **Step 3** starts in 2023 and involves the upscaling of the business cases demonstrated in step 2. The signatory parties will work together to achieve at least a 20% CO<sub>2</sub> reduction<sup>1</sup> on the waterways/corridors involved, provided that the scenarios developed in step 2 demonstrate the technical and socio-economic feasibility of this objective<sup>2</sup>. Ports can contribute to business cases with local incentives, which can be based on environmental classifications such as Green Award.

1 The Netherlands' 2030 target is to reduce emissions from IWT from 2.1 Mton CO<sub>2</sub>-equivalents to 1.7 Mton. The EU figures would be twice as high.

2 This may be measured by the effectiveness of spending public-private budgets on reducing a unit of CO<sub>2</sub> in IWT compared with doing the same in another sector or another modality of the transport sector.