Will the European Green Deal make ports' future sustainable?

by Dr. Kai-Dieter Classen, *LL.M. (Berkeley), Deputy Director of the External Affairs Division*, and Manfred Lebmeier, *Senior Environmental Advisor in the Environment & Sustainability Division, Hamburg Port Authority*[1]

The European Green Deal (EGD) is a set of comprehensive policy initiatives by the European Commission (COM) aimed at achieving climate neutrality in Europe by 2050. It will affect all European industries, in particular transport, with ports very much included. For the impact to be significant – and positive – EGD-related policies will have to be carefully revised and adjusted accordingly. In sum, this is a Herculean task.

In December 2019, the new COM presented the core of its governmental programme – the EGD. It addresses some of the most urgent mega-trends of our times, which can be, by all means, considered as this generation's defining task. The most prominent is climate change, followed by the loss of biodiversity, pollution and destruction of ecosystems, and the waste of resources. To counteract these across the board, the COM identified various measures which shall be driven or supported by regulation and fiscal measures. Overall, it suggests making the EU's economy decarbonised, digitalised, and circular, a move that is hoped to create new commercial sectors and business models along the way. Even though no stones are to be left unturned by the EDG, an immediate focus lies on the transport sector – and consequently, on ports.

Superordinate legislation – Climate Law and Green Taxonomy

The most prominent part of the EDG currently in the legislative process is the proposal for the European Climate Law. This proposal aims to establish the framework for achieving EU climate neutrality in 2050 (incl. defining a trajectory towards it, such as an intermediate target for 2030). The COM's proposal increases the CO_2 reduction target for 2030 to 55%, which was originally set at a 40% reduction in emissions compared to 1990 by the 2013 Climate Change Adaptation Strategy (the European Parliament even suggested raising this intermediate target to 60%).

Meanwhile, another and quite complex policy is taking shape, intending to support the EDG objectives by way of fiscal measures. The purpose of Regulation 2020/852 on the establishment of a framework to facilitate sustainable investment (Taxonomy Regulation) is to direct investments in the EU towards sustainable projects and activities. Therefore, it establishes criteria for determining whether an economic activity qualifies as environmentally sustainable. While this regulation has already been in place since June 2020, the supporting delegated acts, which will contain the technical screening criteria, are in the making. Once completed, this set of rules is going to have a big impact on the EU funding policy, as unsustainable projects are not likely to be eligible anymore.

[1] *This article represents the authors' personal views.*

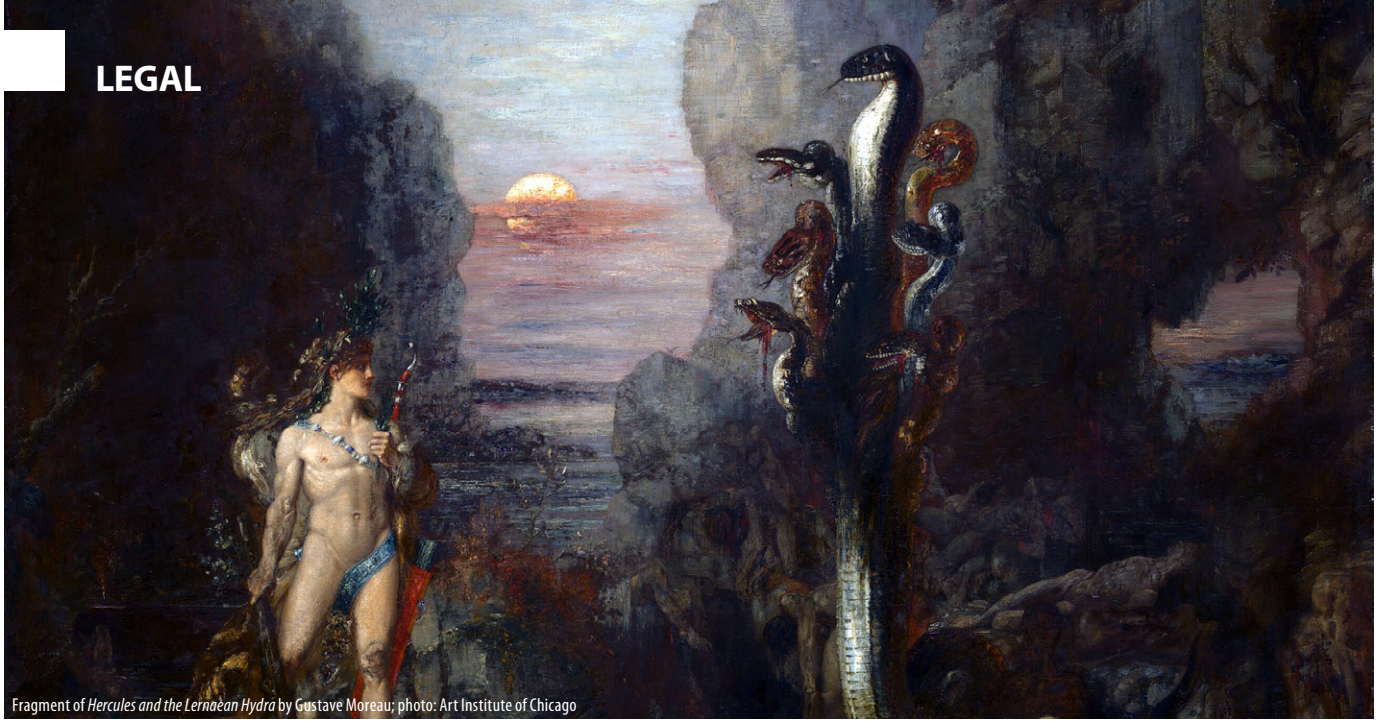
Several current initiatives of the COM have repercussions for ports on short notice, among others, the revision of the Energy Taxation Directive 2003/96/EC (which will presumably be completed in summer 2021). Energy taxation is relevant to the overall cost of onshore power supply (OPS), liquefied natural gas (LNG), bunker, and net-zero-carbon fuels and other forms of energy – as a result, it bears a significant impact on the attractiveness of both established and alternative means of power generation. Under the proposed FuelEU Maritime Initiative, the demand side of shipping will be in focus. The announced directive seeks to increase the use of sustainable alternative fuels in European shipping and ports by addressing market barriers and uncertainty about technical options. Likely, it will regulate the emission behaviour of vessels in ports and at berth. The controversial and increasingly heated discussion on the inclusion of shipping in the European Emission Trading Scheme (ETS) is in full progress. Concerning infrastructure, two initiatives deserve the ports' full attention.

First, the revision of the TEN-T Regulation. In 2013, the EU laid down its infrastructure policy regarding transport in Regulation 1315/2013 on Union guidelines for the development of the Trans-European Transport Network (TEN-T). Notably, the EU recognized more than 300 European ports as essential nodes in the defined Core and Comprehensive Networks. This decision has an impact on many fields of EU policy, i.a., on state aid law, where the character of a port being part of either the Core or Comprehensive network is an important aspect in framing a positive notification decision. The corresponding Regulation 1316/2013, establishing the Connecting Europe Facility (CEF), provides the funding instrument for EU's strategic investments in transport, energy, and digital infrastructure. According to an informal agreement (reached during passing for press), the CEF transport budget for the 2021-2027 term will be €25.81b (incl. €11.29b for Cohesion Countries).

All things considered, the TEN-T policy is of critical importance to ports. According to the COM's Green Deal Action Plan, a proposal for a revision of the TEN-T regulation is planned. The main problem of the current TEN-T regulation, according to COM, is its insufficient effectiveness to stimulate zero- and low-emission transportation. It seems that the COM intends to gear a revised TEN-T Regulation away from classical infrastructure policy and towards an instrument with a strong decarbonisation impact. This shall include, i.a., supporting the deployment of high-power charging facilities and new flexible bunkering infrastructures to provide large quantities of sustainable alternative fuels for different shipping segments in European sea- and inland ports. In this respect, the COM tends to blur the demarcation lines between infrastructure and transport policy and needs to establish a clear border between the TEN-T revision and our second focus point, the ongoing revision of the Alternative Fuels Infrastructure (AFI) Directive.

A clean port starts with clean ships. To that end, the AFI Directive 2014/94 on the deployment of alternative fuels infrastructure creates a common framework for the development and realisation of such infrastructures in the EU, notably in ports. It marks the first decarbonisation efforts of the EU by means of supporting infrastructure policy. The main idea was to make setting up infrastructure for LNG bunkering and OPS mandatory in TEN-T Core Ports. At the time of drafting the AFI Directive, LNG and OPS were considered the silver bullets for shipping to solve the emission issues at sea and berth. Eight years on, it is apparent the original approach failed for several reasons. As a standalone measure, it addressed only the supply side – there was no regulatory support targeting the demand side. And, instead of being technology-neutral, it prescribed two solutions without a deeper understanding of the economic rules and forces applying to the shipping business. As long as traditional fuels are dramatically cheaper and available pretty much anywhere, the pressure on freight rates will continue to discourage the uptake of sustainable alternative fuels or the use of (electricity-taxed) OPS, putting the first-movers, shipping companies and ports alike at a significant competitive disadvantage.

In April 2020, the COM started a revision of the AFI Directive with the objective of building-up a dense and easy-to-use alternative fuels infrastructure network for land vehicles, vessels, and aircraft. However, it seems that the COM, by following the mantra of 'more is better,' now runs the risk of treading even farther – and increasingly faster – down the inconclusive path taken in 2014. LNG is still regarded as a highflying new fuel, used by less than 1% of the merchant fleet; in addition, as a fossil fuel, its CO_2 saving potential is nil. The construction of OPS infrastructure could become mandatory for TEN-T Core Ports, a move that may backfire at least at two levels. These are costly installations, to begin with, especially those for serving the needs of cruise ships, with no guarantee the shipping side will make use of it; at the same time, given the 'wrong' power mix using OPS can actually increase CO_2 emissions. Establishing infrastructures for net-zero-carbon fuels is not the focus.



Fragment of *Hercules and the Lernaëan Hydra* by Gustave Moreau; photo: Art Institute of Chicago

Zero-emission at berth: a goal-based technology-neutral approach

Under the EDG, the COM, fortunately, seems to take a holistic approach to decarbonising transportation, as its parallel engagement with Energy Taxation, ETS, the TEN-T Regulation, the AFI Directive, and additionally the FuelEU Maritime initiative indicates. And yet, the challenge of the huge difference in costs between fossil fuels and sustainable alternatives will probably remain unsolved. All vessels in all ports should contribute to climate change mitigation and air pollution reduction. Shipping lines should not be able to bypass offers of clean alternatives, neither the availability of green electricity as a prerequisite for genuine emission reductions by means of OPS should be omitted.

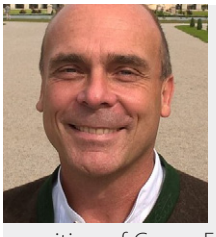
Thus, prescribing a specific technical solution in binding EU legislation at this time will most likely produce stranded assets, in many cases at the expense of the taxpayer, leaving the competition with cheaper fossil fuels untouched. A goal-based, technology-neutral approach seems economically and ecologically much more worthwhile: a zero-emission limit at berth, that is.

With this requirement, it is up to ship owners to decide for each vessel on the best way to comply, which might vary from port to port. Once traditional fossil fuels are no longer the price benchmark due to the zero-emission at berth requirement, OPS will be one of the cheapest solutions in terms of operational expenditures, thus attractive to invest in and use. New solutions for ship propulsion, like net-zero-carbon fuels (e.g., hydrogen, ammonia, or methanol), batteries, or fuel cells, will become competitive as they will no longer run against cheap fossil fuels. Additionally, the zero-emission at berth standard would allow the COM to focus the revision of the TEN-T Regulation and the AFI Directive on their respective hitherto regulatory core. In the case of the latter, the revision should only centre around mandatory safety and permit standards for OPS as well as net-zero-carbon fuel infrastructure. A goal-based technology-neutral approach is also no novelty in EU law, as the very successful example of the Sulphur Directive 2016/802 proves.

Much more than carbon footprint

Greening a whole economic system is a formidable task of evermore pressing importance. It will need constant & constructive input to succeed. For ports, the measures described above are the most imminent. However, the EDG's focus is broader than CO_2 alone. Other aspects will become relevant in the near future as well, including improving the energy efficiency of buildings, the condition of the water body and the soil, and the integration of biodiversity in the highly industrialised port areas. These will force ports not only to make considerable investments but to question and ultimately re-establish the role they play in the greater scheme of things by seeking, testing, and putting in place new business models, most probably being much more open to incorporating practices from other industries – which we already see today. A generation's defining task – for sure.

Kai-Dieter Classen is a Strategic Legal and Policy Advisor to the management of the Hamburg Port Authority. He represents Hamburg in several Committees of the European Sea Ports Organisation. As an Adjunct Professor at Hamburg University's Law School, he teaches WTO-Law and European Seaports Law. Prior to joining the Hamburg Port Authority, he served, i.a., as an Official for the Hamburg State Government and as a National Expert in the EU Commission's Legal Service.



Manfred Lebmeier is an Environmental Engineer and works for the Hamburg Port Authority's Environmental and Sustainability Department as Senior Environmental Advisor. He represents Hamburg in the European Sea Ports Organisation's Sustainable Development Committee. Before joining the Hamburg Port Authority, he held the position of Group Environmental Officer at the Allianz Group in his hometown of Munich.