POLITICAL STRATEGY CLEAN BALTIC SEA SHIPPING

Strategic Approaches to Sustainable Shipping

As a member of the political committee of the INTERREG program Clean Baltic Sea Shipping the Baltic Sea Forum supports the efforts of the offshore policy on national level as well as international level in the Baltic region and beyond. Main goals are

- improvement of the environmental situation of the Baltic
- support of innovations and its implementation
- improvement of wealth and prosperity within this region
- improvement of infrastructure incl. Hinterland traffic
- improvement of marine safety

The CBSS Project focusses on strategic approaches to sustainable shipping, which includes environmental issues as well as economic and social aspects.

a more general perspective.
First Thesis

There is a strong argument to undertake every effort to protect our environment, not only but especially the Baltic Sea as a question of vital importance:

It is our living space, workshop, our connection to neighbors, business partners and friends – and it is the only one we have. Once mankind has destroyed the environment there unfortunately is no second chance.

Second Thesis

Quite often sustainability and – as part of it – environmental protection is perceived as something threatening or at least disturbing because annoying or - even worse – costly.

This approach needs to be changed dramatically and there are good arguments to persuade doubters.

Many innovative technologies available nowadays not only help to protect environment but also have a positive impact on cost. Just think about lights onboard ships.

In the past crew members were advised by the electrician never to switch off the light because there was more than sufficient energy available and tuning on and off destroyed the bulbs as people told. So bulbs were always burning and produced -> heat, much more than light. Especially on ships with many lights, as the large cruise ships, this additional heating made life quite uncomfortable. Consequently air
condition was used to cool the room temperature down again. Decades later LED lights have been invented. This lamps not only require less energy, it also does not produce heat and air condition is not needed to cool the room down. So it saves energy twice and thereby reduces fuel consumption. Besides saving money and has a positive impact on the environment because the most environmental friendly fuel is the one you don’t burn.

**Third Thesis**

The Baltic Sea is one of the most crowded shipping areas of the world. Only the English Channel shows a comparable traffic volume.

At the same time the Baltic is an extremely shallow sea, which has a negative impact on the ability to rejuvenate.

Therefore it was necessary to decide lower limits of SOx and NOx in addition to existing MARPOL regulations. From July 1st, 2010 maximum sulfur content in ships’ diesel has been reduced to 1% and during stay at port to 0,1%. The intention is to further reduce the percentage for fuel to be burned during sea voyages to 0,5% from 2020.

This generally positive development has to be aligned to technical feasibility and economic conditions to avoid unwanted shift (back) from sea to road.
Fourth Thesis

The next way of reducing air emission by ships’ engines is the shore power supply. Many ports are talking about projects to accommodate ships with electricity from shore whilst in port. Some have already installed facilities to provide such services. Issues like standardization and options whether electricity shall be delivered via cable from a remote power plant – as for example in the port of Lubeck - or whether solutions with (LNG-) power plant barges – e.g. in the port of Hamburg - are a better concept because more flexible, cheaper and much quicker to be realized, will have to be discussed.

Another aspect might be to evaluate the ecological balance sheet. Not in every case shore power production will always be more environmental friendly than the production by modern on board generators.

Fifth Thesis

Development of a rating system to assign vessels to different ‘ecological classes’ might be an innovation driver. With this classification vessels can be recognized and it will be easy for ports to decide whether a ship is allowed to produce own electricity during its stay in port or will be forced to connect to shore power supply.
Sixth Thesis

Some ports think ECAS and SECAS are for ships and do not impact the ports at all. Those ports are mistaken. Ports and ships are much more geared than they sometimes seem to think. Regulations under which shipping companies have to use low sulfur diesel have an increasing impact on fuel cost. Being situation within such an area ports will be confronted with the simple calculation that it will be more expensive to sail to that port instead others and shipping companies will not hesitate to ask the port for compensation in form of reduced port fees. So shipping all under this aspect is a highly regulated but also integrated industry.

Seventh Thesis

A proper organization of ports and hinterland traffic can although have a positive impact on energy efficiency of the transport chain by saving fuel and consequently reducing emissions. Cruise ships and ferry boats to improve coordination of arrival and departure slots.

Local administration have to guarantee that traffic control to avoid traffic being stuck.

Eighth Thesis

Being a closed area in the middle of well-developed industrial bordering countries the Baltic has a good chance to become a model region and to set standards for other areas worldwide.
Initiatives like the Clean Shipping Program or the HELCOM rightly support both, the environmental protection and the economic development, which have an impact on the social wealth as well -> sustainability in its best form.

Universities, science institutes and private companies as well as governmental and non-governmental organizations are joining forces to support these initiatives. The member states have to provide financial resources to support such projects and to create aid programmes.

**Ninth Thesis**

Sometimes “new thinking” and a different view on existing solutions can also help to create new concepts: Since years multi hull vessels are constructed to achieve higher speed with the same power input by reducing water resistance/viscous drag. Turning that concept into the opposite could lead to multi hull vessels with reduced resistance to go at the same speed as before but with reduced power input to save energy.

Other means of decreasing resistance are under development. Technologies such as silicone underwater painting or air lubrication systems will reduce consumption by another 5% - 7%, which is an enormous step ahead.

**Tenth Thesis**

LNG as one of the future fuels can help solving many problems – especially emissions. But for the time being there
will be a lack of availability (and sometimes acceptance). Therefore there will be a need for dual fuel engines, to be able to use LNG where and when available and diesel if not.

Other alternative fuels or fuels substitutes, like bio diesel or synfuel, are although available and will play an increasing role in future concepts.

The sea – especially the Baltic – will become even more important as an economic area, traffic area by accommodating ‘sea roads’ and connecting metropolitan areas, water and food resource and recreation area for people spending their holidays or going on cruises. All together a highly integrated area with huge demands from many stakeholders.

Common understanding of all those stakeholders has to be the protection and sustainable growth of this life spending sea. We should always remember: this Baltic is the only one we have.

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