



# Position paper on Clean Fuel Deployment in the BSR

Work Package 2 | Activity 4

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#BSRAccess





## Table of Content

Table of Content .....	2
Abbreviations .....	3
Table of Figures .....	3
The platform project, BSR Access .....	4
Purpose of the position paper on clean fuel deployment .....	4
The process behind the position paper .....	5
Next phase and steps .....	6
1. Visions and goals - Transport in Transition, Towards zero emission .....	7
Alternative Fuels Infrastructure Directive (AFID) .....	10
2. Clean fuel deployment in the BSR .....	11
Status of development in the BSR countries .....	12
3. Challenges, further developments, and issues for actions .....	13
4. Issues and positions on clean fuel deployment .....	17
Collaboratively governed transition to zero emission .....	17
More ambitious and technology neutral policy .....	17
Harmonised and interoperable clean fuel infrastructure across borders .....	21



## Abbreviations

AFI Directive	Alternative Fuels Infrastructure Directive
AFV	Alternative fuel vehicle
BEV	Battery electric vehicle
BSR	Baltic Sea Region
CBG/CNG	Compressed biogas/Compressed natural gas
CEF	Connecting Europe Facility
CNC	Core Network Corridors
EAFO	European Alternative Fuels Observatory
EU COM	European Commission
EUSBSR	European Strategy for the Baltic Sea Region
EV	Electric vehicle
FCEV	Fuel cell electric vehicle
GHG	Greenhouse gas emissions
LBG/LNG	Liquefied biogas/Liquefied natural gas
PHEV	Plug-in Hybrid Electric Vehicle
ScanMed	Scandinavian-Mediterranean
TEN-T	Trans-European Transport Networks

## Table of Figures

Figure 1 Elements of the Green Deal.....	7
Figure 2 Market share of BEVs, PHEVs and CNG vehicles 25/11-2020 in BSR countries, passenger vehicles. Source.....	11



## The platform project, BSR Access

The platform **BSR Access** facilitates innovative and sustainable transport by creating linkages between traditional infrastructure nodes and smart transport solutions to further develop the TEN-T Core Network Corridors and contribute to sustainable growth in the region.

BSR ACCESS is not a regular Interreg project. It is a project platform – a special purpose vehicle organised by the Interreg BSR Programme to ensure a streamlined communication of results by projects of a similar kind. BSR Access combines expertise from projects on transport interoperability in connection to the TEN-T core network corridors. Interreg Baltic Sea Region projects **NSB CoRe**, **TENTacle**, **EMMA** and **Scandria@2Act** as well as **E12 Atlantica Transport** of Interreg Botnia-Atlantica, **FinEst Link** of Interreg Central Baltic, and the **GREAT-project** (Green Regions with Alternative Fuels for Transport), funded by the EU Connecting Europe Facility.

A special focus lies on clean fuel deployment along transport corridors and their catchment areas. A multi-fuel approach will be considered as a starting point for a realistic recommendation on future policy.

For more information please visit: [www.bsraccess.eu](http://www.bsraccess.eu)

## Purpose of the position paper on clean fuel deployment

This position paper is the result of the activities specifically related to group of activities 2.4 Clean Fuel Deployment. The deployment of clean fuels in road transport is one of the BSR ACCESS project's key objectives. The overall aim for these activities is to create better basis for integrated and interoperable clean fuel systems across the countries of the BSR, using the already existing experiences, knowledge and best practices with clean fuel deployment in the Baltic Sea Region. Especially building on the comprehensive, experiences and knowledge from the Interreg Baltic Sea Region project, Scandria2Acts' *Clean Fuel Deployment Strategy*<sup>1</sup> and the EU Connecting Europe Facility funded project, GREATs' *Report on Policy Measures*<sup>2</sup>.

Based on the clean fuel deployment activities carried out in the BSR ACCESS project, this position paper addresses the major challenges that exist in order to create good clean fuel systems along the core network corridors. It should provide input to future discussion by drawing attention certain recommendations and positions on measures needed to ensure the future development of clean

<sup>1</sup> Pathway to the future – Scandria@2Act Clean Fuel Deployment Strategy. 2018, Deutsche Energie-Agentur GmbH

<sup>2</sup> GREAT ROAD MAP, Final Report on Policy Measures. 2018, Region Skåne and Capital Region of Denmark



fuel deployment in the BSR. It targets a broader circle of stakeholders comprising decision-makers, transport practitioners, researchers and politicians in the EU, Member States, cities and regions, and other stakeholders, dealing with issues related to the green transition of road transport and the deployment of clean fuels and vehicles.

The positions are a result of the BSR Access project platform as joint BSR Interreg activity and not an expression of the position of a single partner or institution part of the project. Positions should be considered as proposals on policy measures directed towards different groups of stakeholders at different levels. This position paper contains three types of proposals:

1. On what the BSR countries all should do at a national level
2. On what actors/stakeholders in BSR as a region could agree on and do together (common vision and targets, joint action plan etc)
3. On what the BSR countries together should propose/recommend the EU to do (legislation, research, investments, CEF etc)

### The process behind the position paper

The clean fuel deployment activity has consisted of an empirical study, an online questionnaire and interviews with key stakeholders.

Initially, a thorough study of data of the development of clean fuel policy and frameworks, targets, ambitions, current market developments and successful supporting mechanism and incentives for the development of clean fuel deployment in the BSR and the actual status for the development of vehicles and infrastructure for clean fuels were reviewed and assessed in the eight countries. This study resulted in the status quo report from November 2019 on development of clean fuels deployment in the BSR<sup>3</sup>.

Since then, a stakeholder involvement process during 2020 has been carried out. Challenged by the Covid-19 crisis and the limited possibility to travel and arrange physical workshops, the project team has collected inputs from key stakeholders from all BSR countries through different involvement processes, such as online surveys and questionnaire and through individual interviews with key stakeholders in the BSR.

Knowledge from previous projects on clean fuel deployment, the study of the status quo of the development in all countries as well as input from questionnaire and interviews have served in the preparation of this position paper, which remains as main deliverable of the clean fuel deployment work package.

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<sup>3</sup> Clean fuel deployment in the Baltic Sea Region, Review and assessment of status quo. 2019, Capital Region of Denmark



## Next phase and steps

This position paper will constitute a central contribution to the discussions at the Clean Fuel Agora of the BSR ACCESS project with attendance of among others the European Core Network Coordinators.

The positions from the Clean fuel deployment GoA processes will feed as input when disseminating policy standpoints to European, intergovernmental and national decision-makers.

The Clean Fuel Agora will take place in the Summer of 2021.



## 1. Visions and goals - Transport in Transition, Towards zero emission

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Commission (EU COM) presented the **European Green Deal** – a set of policies to make the European Union’s (EU) economy more sustainable. The European Green Deal is the latest, and most ambitious plan, of the Commission in greening the transport sector.

As a new growth strategy the European Green Deal aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.<sup>4</sup>

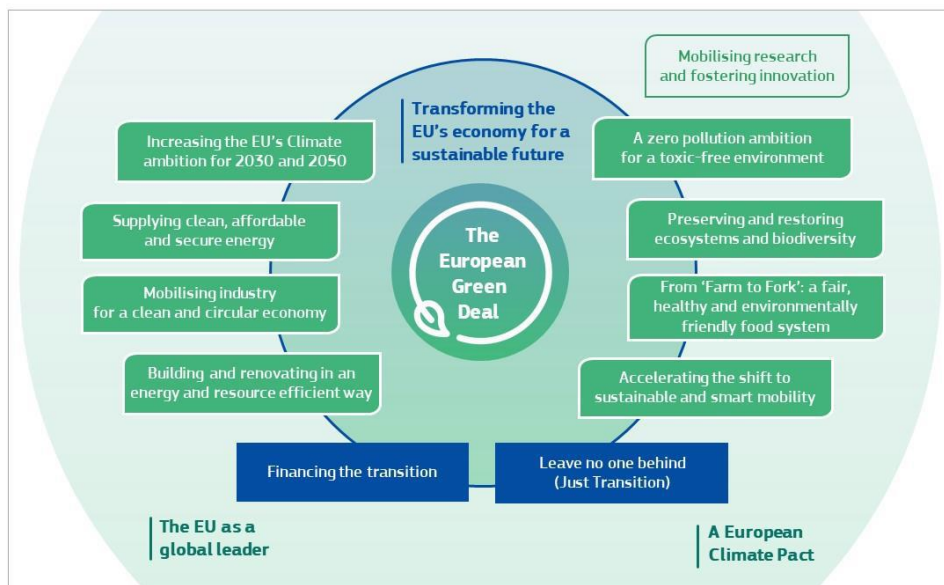


Figure 1 Elements of the Green Deal<sup>5</sup>

The main goal of the EU with regard to the European Green Deal is to reduce emissions from all sectors by 80 % below levels until 2050. Between 1990 and 2018, greenhouse gas emissions were

<sup>4</sup> European Commission: The European Green Deal, p. 3

<sup>5</sup> Ibid

reduced by 23 %, while the economy grew by 61 %. However, current policies are projected to only reduce greenhouse gas emissions by 60 % by 2050.<sup>6</sup>

The transport sector is currently the second largest producer of greenhouse gas emissions (GHG) in the EU. Despite the Paris Agreement, high ambitions and clear targets, emissions – especially CO<sub>2</sub> - from road traffic continues to grow and specifically road freight is projected to increase by around 40 % by 2030 and by just over 80 % by 2050 (compared to 2005). The action plans are not strong enough, the pace in the implementation and deployment of clean fuels is not high enough in the light of the urgency for deliberate and coordinated actions – both on national and European level.

Some countries and regions are forerunners when it comes to the deployment of clean fuels. There are a lot of best practice examples, initiatives and successful projects, but the overall European picture is scattered. The EU has still to respond more concrete on the Paris Agreement and “decarbonisation of transport” as a slogan must be followed by concrete and coordinated actions within the member states. Thus, in the coming years there is a need to develop measures to reduce GHG emissions from road transport and at the same time handle the expected growth in transport volume to meet the targets set by the Green Deal.

On 9 December 2020 the Sustainable and Smart Mobility Strategy was released by the European Commission. [COM (2020) 789 final]. This strategy includes an action plan with 82 concrete initiatives. These initiatives are linked to 10 key areas for action called Flagships highlighted in the Strategy, each with concrete measures.

Flagship 1 consist of measures to make all modes of transport more sustainable and is headed: Boosting the uptake of zero-emission vehicles, renewable & low-carbon fuels and related infrastructure – for instance by revising CO<sub>2</sub> standards, proposing more stringent air pollutant standards, revising the weights and dimension rules, adjusting roadworthiness legislative framework, promoting high performance tyres or revising the AFID (installing 3 million public charging points by 2030).

The Strategy sets 14 milestones, 3 of these on reducing the current dependence on fossil fuels:

1. By 2030, there will be at least 30 million zero-emission cars and 80 000 zero-emission lorries in operation.
2. By 2050, nearly all cars, vans, buses as well as new heavy-duty vehicles will be zero-emission.
3. Zero-emission ocean going vessels and large zero-emission aircraft will become market ready by 2030 and 2035, respectively.<sup>7</sup>

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<sup>6</sup> Ibid., p. 4f

<sup>7</sup> European Commission: Sustainable and Smart Mobility Strategy – putting European transport on track for the future.





The purpose of this new strategy is to help and support all actors – within and outside the transport sector – to create, decide and set in forth efficient measures to reach the ambitious goals in the Green Deal.

Status of the new strategy is a document called “Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions”. That means that it is a proposal from the Commission (DG MOVE and other DG´s) that now will read and evaluated by for instance the governments in the Member States. But meantime it gives clear signals on what will come in form of new or revised directives and regulations, AFID, TEN-T guidelines etc.

The **Core network corridors** (CNCs) are fundamental and guiding for the successful implementation of the TEN-T dimensions, which were written into the guidelines in 2013. All CNCs have set themselves the common goal that emissions will be lowered by developing the corridors through harmonised TEN-T standards, increased share of a stable dominant position of inland waterway transport, modal shift from road to rail and further deployment of alternative fuels infrastructure. The implementation of the TEN-T core network is expected to reduce transport-related CO<sub>2</sub> emissions significantly.<sup>8</sup> At the moment (11/2020), the Commission undertakes a review of the current guidelines for the TEN-T in order to revise the regulation by 2021. This revision aims to ensure cross-border infrastructure networks and the transport system are ready for the Green Deal objectives of carbon neutrality and climate resilience. The revision will also look at how to prepare the network for smart and connected mobility.

In the next years it will be crucial to develop and implement measures to reduce GHG emissions from road transport and at the same time to handle the expected growth in transport volume to meet the targets set by **the Green Deal**.

Corridors are a powerful tool, and especially cross border corridor and pilot projects, not limited to one country, are becoming more important than ever, when creating alignments in the clean fuel systems in the BSR. The CEF funded project, GREAT is a good example of this. This approach builds on a transport corridor concept spanning from Hamburg to Oslo/Stockholm, in order to support the exchange of knowhow and develop an example for transnational implementation of charging infrastructure and policy coordination in the field of alternative fuels. Several corridor-based initiatives have been taken in the ScanMed corridors such as Scandria Alliance and STRING and latest a few which focusses on Hydrogen Refuelling Systems (HRS). No corridor-based initiative has been taken within the North Sea – Baltic corridor, yet.

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<sup>8</sup> European Commission: The impact of TEN-T completion on growth, jobs and the environment, p. 19

## Alternative Fuels Infrastructure Directive (AFID)

The Clean Power for Transport Package launched by the Commission in January 2013 lays out a comprehensive alternative fuel's strategy for the long-term substitution of oil as energy source for transport, for all transport modes. The main tool to achieve the strategy is Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure. It sets out minimum requirements for the building-up of alternative fuels infrastructure (for electric and natural gas) and pursues several interlinked objectives:

- to break the "hen or egg" problem that there are no alternative fuel vehicles because there is no infrastructure and vice versa;
- to make sure that common technical standards are being developed;
- and to make certain that EU-wide mobility with alternative fuel vehicles is possible.

The Directive focusses on electricity, gas, hydrogen, as well as liquid biofuels, and oblige Member States to ensure minimum coverage of charging and refuelling points. The latest detailed assessment of the National Policy Frameworks (NPFs) that focus on the Member States' implementation of the directive, shows that the Member States ambitions regarding alternative fuel infrastructure deployment differ significantly and clear targets and investments in alternative fuels infrastructure are lagging behind.

The Directive is the most important instrument to reaching Europe's long-term decarbonisation objectives and achieving carbon neutrality in the transport sector. It is currently under revision and a new revised version is expected in 2021. The ongoing revision of AFID is stressed in the new transport strategy:

*"The ultimate goal is to ensure a dense, widely spread network to ensure easy access for all customers, including operators of heavy-duty vehicles. The Commission will publish a strategic roll-out plan to outline a set of supplementary actions to support the rapid deployment of alternative fuels infrastructure, including in areas where persistent gaps exist. These would include recommendations on planning and permitting processes as well as on financing, developed in collaboration with the Sustainable Transport Forum of the Commission that brings together key public and private representatives of the entire value chain."<sup>9</sup>*

*Europe also needs to end the persistent fragmentation and pervasive lack of interoperable recharging/refuelling services across Europe for all modes. In the context of the **upcoming revision of the Directive on Alternative Fuels Infrastructure (AFID)**, the Commission will consider options for more binding targets on the roll-out of infrastructure, and further measures to ensure full*

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<sup>9</sup> European Commission: Sustainable and Smart Mobility Strategy – putting European transport on track for the future

*interoperability of infrastructure and infrastructure use services for all alternatively fuelled vehicles.”*  
(ibid)

In the context of the revision of the TEN-T regulation aiming at establishing a Trans-European transport network, it is discussed, whether requirements for recharging and refuelling infrastructure need to be introduced.

## 2. Clean fuel deployment in the BSR

There has been an increase in the development of vehicles that run on alternative fuels in BSR countries the last five years. Since 2019, the market share of new registered vehicles on alternative fuels has doubled, this applies in all BSR countries except Lithuania.

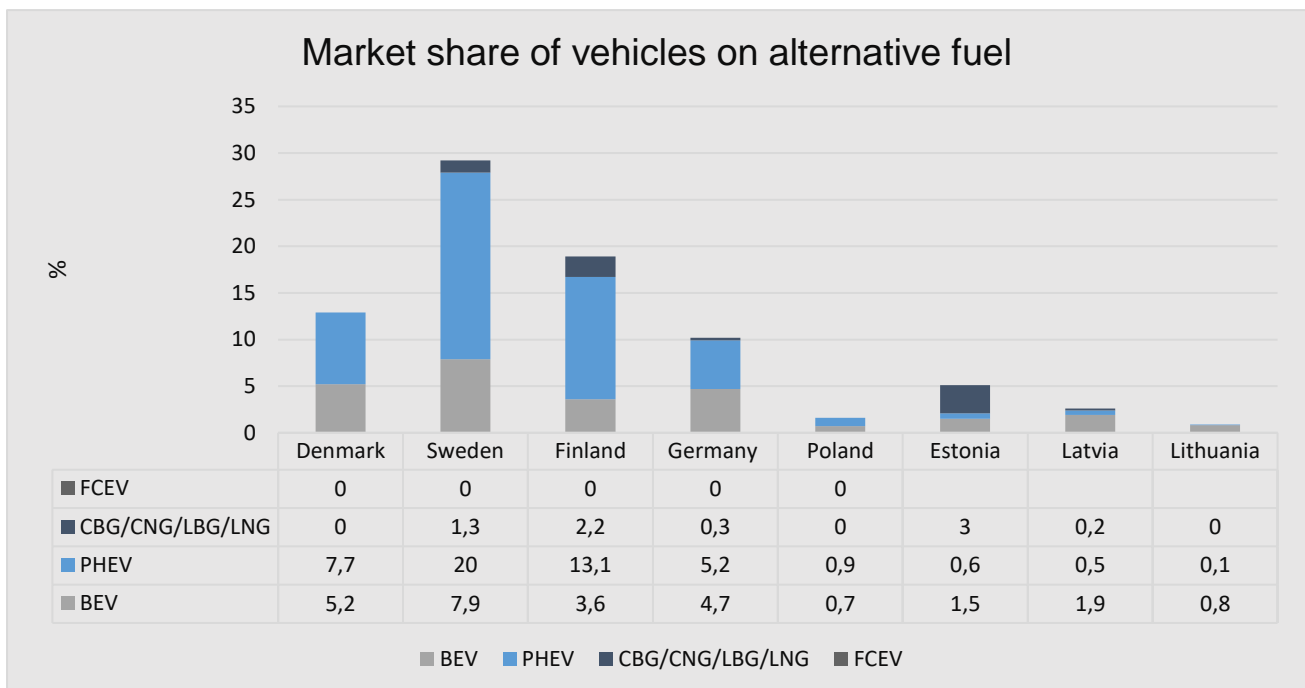


Figure 2 Market share of new registrations of BEVs, PHEVs, FCEV and CNG/CBG/LNG/LBG vehicles 25/11-2020 in BSR countries, passenger vehicles. Source [EAFO, 2020]

This increase predominantly applies to BEVs and PHEVs, and especially the number of plug-in hybrid vehicles has increased significantly in recent years. However, even though we see an increase in the number of alternative fuels vehicles, we simultaneously still see an enormous dependence of fossil fuels, as the fossil fuel combustion engine is a central part of the plug-in hybrid

vehicles, which means that the resistance to clean fuels is greater than the statistics immediately indicate.

Despite the increase, the data shows, the market share of new registrations of passenger cars with alternative fuels in the BSR countries reveals very different levels of penetration and uptake of vehicles on alternative fuels. Some countries have succeeded in a steadily rising trend in the uptake over time, while others have more fluctuations and a much lower vehicle uptake compared to the rest of BSR countries and other EU countries.

Poland, Estonia, Latvia and Lithuania stand out from the other countries in the region in terms of a current very low market share. Denmark, Sweden, Finland and Germany are at a fairly higher level, but still far from the target.<sup>10</sup> As a comparison, the market share of AFV in Norway is 50%. This is a result of many years of priority including strong economic incentives and purchasing grants.

### Status of development in the BSR countries

The study of the clean fuel deployment in the Baltic Sea Region reveals vast differences between the different countries and consequently along the TEN-T Core Network Corridors.

When reviewing the policy frameworks, clean fuel targets, action plans and the development of clean fuels in the past 3-4 years, it is clear that there are major differences in the stage of development and in the establishment of the supporting mechanisms that may help to support the clean fuel development. Some countries have started the transition to electrification of the transport remarkably early (Latvia and Estonia), as some of the first in the world to install a nationwide charging network for EVs. A development that seems to have been severely decelerated, as the development in policy measures, incentives and actual vehicles on the roads did not follow the investments in infrastructure.

Only few countries including Finland, Germany and Sweden have support schemes for all types of alternative fuels mentioned in the AFI Directive, and especially differences in fuel focus between the different corridors and countries are evident.

The level of ambitions in the national strategies towards clean fuel deployment differs among the countries and the coherence between the national policy frameworks is low. Some countries' efforts reflect an ambition to simply live up to the minimum requirements of the AFI Directive, which is not enough if the EU is to live up to its part of the Paris Agreement, while others, for instance Germany have plans of higher ratios of public infrastructure than required by the AFI Directive.

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<sup>10</sup> Clean fuel deployment in the Baltic Sea Region, Review and assessment of status quo. 2019, Capital Region of Denmark

As a result of the political actions in the past the countries have different levels of vehicle and infrastructure penetration today. Furthermore, there are not only differences between the countries but also between different alternative fuels in each country. This manifests itself for example, by the fact that biogas is given high priority in Sweden, while it is not of focus in Denmark. (Ibid)

**Summary - from a BSR perspective, the main challenges are:**

- Different ambitions in targets and goals across countries and corridors
- Different focus on the different fuels between countries
- Some countries do not have tax benefits or incentives for alternative fuels in place
- Lack of concrete targets for infrastructure and vehicles for alternative fuels for transport
- Many countries are characterised by short-term plans and incentives.

11

More findings can be found in the [Status Quo Report on Clean fuel deployment in the BSR](#).

### 3. Challenges, further developments, and issues for actions

Clean Fuel Deployment means challenges on all levels: EU, macro-regional (BSR), national, local. Clean Fuel Deployment as a challenge is only a minor part of a much bigger challenge: climate change.

Phasing out, during a limited number of years, the hegemony of fossil fuels and fossil fuel vehicles (cars, truck, buses etc) and replacing it by other fuels and other drive lines takes time. Public awareness, business ideas, new infrastructure for the new fuels (charging and refuelling stations), legislation, regulations etc to make it happen.

Europe, BSR, the entire world is still in the beginning of this dramatic change and looking at the figures – the development is not quick enough. Perhaps we are on the right track, but we are not moving so fast that we should and need to.

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<sup>11</sup> Clean fuel deployment in the Baltic Sea Region, Review and assessment of status quo. 2019, Capital Region of Denmark

For the further development, for the next year to come, we must gear up. This is true also for the BSR which is focus for this project. BSR as part of EU is to major extent depending on decisions and actions taken in EU.

As written above the European Commission presented in December 2020 a proposal on a New Transport Strategy. The full title of the document is: **“Sustainable and Smart Mobility Strategy – putting European transport on track for the future”**.

One of the goals for the New Green Deal is to radically reduce GHG from transport. To reach the goal that by 2050 lower the emissions with 90 % the Commission has launched this new strategy to support and help the stakeholders – both public and private – to make the big change of the European transport sector.

**BSR countries must revise their strategies and action plans.** When the EU now is raising the overall ambition, when during the spring 2021 the commission will present an updated and much tougher AFID and a TEN-T regulation with several mandatory requirements e.g., infrastructure for clean fuels it is necessary for all BSR countries to revise strategies and action plans and make their policies for clean fuel more ambitious and more concrete.

As mentioned in the [Status Quo Report](#) and in other documents, one of the major challenges for clean fuel deployment in the Baltic Sea Region is the big differences between the countries. Especially differences in fuel focus between the different corridors and countries are evident. If there is a strong focus on, say, HVO in one country, the demand in that country will increase, and there will be a pressure on prices in that country and a risk of tankering on neighbouring countries. If we are striving for a multi-fuel approach to make border crossing traffic and transport with clean fuel cars and trucks as easy and efficient as possible, these differences must be tackled with high priority.

When interviewing stakeholders in the BSR countries we have found that there is a widespread insight on this challenge. At the same time, we have also found a readiness to do something about it.

The analysis and recommendations from the two corridor projects GREAT and Scandria<sup>®</sup>2Act could be very useful for stakeholders when taking a new discussion on following important issues such as strategies and measures, long term plans, investments in infrastructure and incentives.

## Measures and Instruments – overview and assessment

Efficient instruments should substantially contribute to reducing GHG emissions. The implementation of clean fuels in road transport is still going too slow and further instruments are needed to enable a market growth in clean fuel deployment.

Review of current instruments to foster clean fuels shows that there is not any single instrument that fits all countries and every stage of market development. Both the [Scandria2Act Clean Fuel Deployment Strategy](#) and the [GREAT Report on Policy Measures](#) provide an overview and assessment of the most effective and powerful actions to support clean fuel deployment. The key messages are summarised and described below.

### National level:

- The most effective political actions to foster the use of alternative fuels have been purchase incentives, either in form of direct subsidies or registration tax rebates. Bonus-malus has proven effective in France and Sweden, and cost neutral for the governments. This only have effect if the rebates cover the gap in price difference between an ICE and an AF vehicle.
- The same applies to vehicle ownership taxes. All ScanMed countries have rebates for electric vehicles. Overall, they are less effective than financial incentives at the time of purchase, as they are smaller in size and accure only over a time horizon of several years.
- Strategic and consistent policy with long-term perspectives and commitments is most effective. Short-term actions and quickly changing instruments do not provide the necessary investment security, neither for market players nor consumers. Unstable political decision-making leads to uncertainty, lack of trust and market slumps.
- Most national governments offer matching funding for private in publicly accessible EV charging infrastructure, but public chargers do not directly link to increased adoption of electrical vehicles.
- The effect of other instruments, such as parking privileges, is highly dependent on the local circumstances and the resulting financial benefit. Mostly these instruments enhance clean fuel deployment in the early market phase but are seldom a main argument for investments in clean vehicles.
- Non-financial instruments such as air pollution restrictions and zoning can boost vehicle sales by motivating interested consumers and open new market segments. But in the early market phase these are not appropriate as the sole instrument. Here a combination of policies are needed.

### Regional level:

- Communities and regions are frontrunners and supporters in the drive to increase market uptake of alternative fuels. Because the regions and communities are tightly interconnected with their surrounding regions in terms of transport, and form part of transport corridors, their actions can potentially be catalysts for the whole market.
- In the areas of infrastructure adaptation, regulations, knowledge sharing, pilot projects, and public procurement, the public entities e.g. cities and regions play an important role and have the ability to take action and drive progress directly. Furthermore, they have the capability of becoming role models within the areas of procurement and knowledge sharing and pilot projects. The Sustainable Transport Forum (STF) has published a handbook for public authorities procuring support for electric recharging infrastructure for passenger cars and vans. It includes recommendations on how to design tenders.
- The top policy measures from the perspective of public entities which have been considered extra efficient and selected based on their highly transferable character are:  
Transition of public authorities' fleets, establishment of programmes and funding/subsidies.

### **Conclusions:**

The measures are not necessarily applicable one to one. They have to be compared with each country or region's corresponding situation regarding market and policy frameworks, and the stage of market development for alternative fuels. Also, the measures need to be developed over time as the status of development in clean fuels develops.

The effectiveness of instruments broadly depends on their ability to bridge the gap between conventionally fueled vehicles and those using alternative fuels. Therefore, it is important to introduce measures that make it more attractive to invest in clean fuel vehicles according to the polluter pays principle, e.g. bonus-malus systems. It also seems to be important to have technology neutral policies and by that support all clean fuel technologies, even as there is no "ideal" technology available but rather technologies that have "use-specific" advantages. This is especially important in an international context, as it is necessary to avoid a situation where a certain technology or technical standard is limited to only some of the countries and by that will become a barrier for border-crossing transports and travel.



## 4. Issues and positions on clean fuel deployment

With above presented background and prerequisites, we consider that the most important areas and issues which with priority need coordinated actions are following:

### Collaboratively governed transition to zero emission

#### 1. Strengthen the collaboration and interplay between public and private actors

Collaborations and the interplay between public and private actors of all levels will be crucial to stimulate and support the growing interest for renewable fuels from consumers and users. And as it is said in the Scandria®2Act Clean Fuel Development Strategy:

*“Market supporting mechanisms should stimulate the market to allow a market-driven achievement of goals. However, especially in imperfect markets, regulatory instruments are necessary to guarantee GHG emission reduction and technology development.”<sup>12</sup>*

Clean fuel deployment is part of the ongoing necessary conversion to fossil free transports and society. For this big challenge we need public awareness, broad involvement of all actors and an increased coordination between different initiatives.

We recommend the BSR governments to consider initiating a new regime/platform to support and strengthen this collaboration. One of the existing mechanisms, EUSBSR, could be used for setting up a coordination and supporting platform – the BSR Clean Fuel Platform. Within this platform, relevant ministries of member states, the EU Commission, the Corridor Coordinators, regional organisations and private companies via business networks could be involved.

### More ambitious and technology neutral policy

#### 2. A common clean fuel vision: Clean, renewable fuel is the new normal in BSR by 2030

Despite the differences between the countries in BSR but since they all have ambitions and plans it might be possible to agree on a common clean fuel vision: Clean, renewable fuels is the new normal in Baltic Sea Region by 2030.

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<sup>12</sup> Pathway to the future – Scandria®2Act Clean Fuel Deployment Strategy. 2018, Deutsche Energie-Agentur GmbH

Such a vision should be followed by clean fuel deployment goals and a road map with concerted actions, including awareness campaigns, in the coming years that assure the fulfilment of Climate Protection goals of the Paris Agreement and the related European Strategies, such as the European Green Deal and the Sustainable and Smart Mobility Strategy.

We recommend all present actors – national governments, industry, regions, etc – to decide on the vision above as a guiding star for the important work that need to be done in the BSR. The vision should be developed at the BSR level by a working group representing national governments and other actors including the existing platforms EUSBSR, CPMR and BSSSC. It is recommended to include the development of a BSR clean fuel vision as a strategic flagship of the EUSBSR Action Plan directly contributing to the Action 2 “Development of measures towards climate-neutral and zero pollution transport” in the Priority Area Transport.

### 3. All BSR countries should revise and rise their ambition and targets for Clean Fuel Deployment

The national legislation is crucial for the success of clean fuel deployment. Only then the private stakeholders and some regional authorities will start making specific plans. And in the light of ongoing revision and upgrading of EU goals we recommend all the BSR countries to revise existing strategies and plans. If national strategies and plans do not exist – we recommend the countries to decide on such important steering documents, as they are necessary to create stability and certainty both for public and private stakeholders.

To ensure the necessary and fast enough development per country and to ease a fruitful collaboration between the countries and between public and private actors within the BSR it is necessary:

- To set up concrete targets on national level for infrastructure and vehicles
- To set up and implement nationwide infrastructure plans
- To ensure that public investment would serve to address market failures, while a good part of the infrastructure investment can be covered by the market
- To decide on long term plans and incentives to support the desired development

The BSR Clean Fuel Platform presented above in Position 1 could be used to support this process in terms of e.g. platform exchange, policy guidelines etc.

#### 4. Clean Fuel Deployment as part of the future TEN-T implementation – need for more precise EU-goals and mandatory targets for member states

The EU transport commissioner Välean stated in a speech to the European Parliament in beginning of July 2020 that “alternative fuel infrastructure will be integrated as a mandatory TEN-T requirement”. New regulatory instruments should ensure charging and refuelling infrastructure for clean vehicles. This was also confirmed in December 2020 when the new EU transport Strategy was presented.

We welcome and support this statement and recommend the BSR member states to proactively follow these changes by planning for investments in such infrastructure along the core network corridors. Both the ScanMed corridor and the North Sea – Baltic corridor could, with help of strong partnership and a multi fuel perspective, become forerunners. A new BSR Clean Fuel Platform could support national governments in setting up transnational infrastructure projects.

The BSR Access project platform would like to add following proposals to the Commission (DG MOVE, etc) when working out the regulatory instruments:

- It is necessary to present more precise EU goals and to set up and give the member states more concrete requirements and measurable targets for the member states
- Increase the number of charging points and refuelling stations for all type of vehicles: passenger cars, vans, and heavy-duty vehicles
- Give priority for CEF-funding to transnational cooperation and projects especially along core network corridors that implement infrastructure for alternative fuels across borders

#### 5. Multi fuel perspective – technology neutral

Review of current instruments to foster clean fuels in the BSR shows that there is not any single instrument that fits all countries and every stage of market development. The BSR countries have made different decisions on clean fuels – electricity, biofuels, or gas. Different priorities in investments are done and different mix of subsidies and taxes are chosen.

There is no single solution for alternative renewable fuels. And still, it exists little knowledge and experiences of use specific advantages of the different fuels for different type of vehicles: which fuels suits for which vehicle in the most efficient way, etc.

All available technologies with market potential should be supported. Transparency and exchange of/in knowledge of available clean fuels is crucial as it will give a better picture of what is possible and where there are restrictions. This should include research projects as well.



Public support for multi-fuel stations at strategically important sites along the core network corridors and other corridors as well as common standards for these multi-fuel stations, could stimulate future investments by energy providers.

We recommend all BSR countries to take a strategic decision to support all types of clean fuels. Until now only Finland, Germany and Sweden do so.

## 6. Hydrogen strategy for BSR

Until recently hydrogen has not been a realistic alternative when looking for clean fuels. This was also obvious when the BSR Access project presented the Status Quo Report in Autumn 2019. But now during 2020 the situation has changed. The EU and several countries in Europe have decided on a hydrogen strategy. Hydrogen is prognosed to represent 24 percent of the total energy demand in Europe 2050. The European Commission has pointed out hydrogen as a focus area for the recovery of Europe after the Covid-19 crisis within the Green Deal. Together with the industry EU is planning a huge investment program for green hydrogen. Green hydrogen is hydrogen made without fossil fuels. Instead it is produced from electrolysis powered by renewable electricity

In the transport sector the big OEMs have taken strategic decisions to invest in H2 and fuel cell technology. For instance, Daimler and Volvo has recently signed an agreement on investment in a joint venture company for production of fuel cells and development of fuel cell systems.

We recommend the BSR governments to initiate developing a common H2-strategy for the BSR based on green hydrogen and including a roadmap for the transport sector.

We also recommend the BSR countries, in line with the multi fuels perspective, to initiate a process together with other countries, potential partners and the European coordinators to make the two corridors ScanMed and North Sea-Baltic pilot corridors for green hydrogen – production, network of filling stations etc.

## 7. Ban on distribution of vehicles on fossil fuels

A few countries in Europe, for instance the British government, have already taken decisions to stop all production and/or distribution of fossil fuel vehicles from a specific date. Similar decisions have also been made by some European OEMs. To stop the distribution of vehicles using fossil fuels and to set up long term plans for phasing out fossil fuels in transport are radical steps towards a fossil free society. This would make market players dare to invest and minimise the barrier of uncertainty.

The banning of fossil-fuelled vehicles of a defined scope requires authorities to enact legislation that restricts them in a certain way. The combustion engine is not necessarily the problem. Driving a



biogas vehicle have emissions comparable to an EV. Current EU legislation (type approval directive, internal market rules etc) make it impossible to introduce national bans on sales on fossil fuel cars and sales of fossil fuels.

Denmark has decided to work for changes in EU legislation and to make it possible to introduce a national ban in Denmark in 2030. In Sweden, a governmental investigation on these issues is going on.

So, to conclude, within EU the member states are not allowed to make this decision. Therefore, we need decisions on EU-level, and we recommend the Commission to start the preparatory work for such decisions.

## Harmonised and interoperable clean fuel infrastructure across borders

### 8. Coherent infrastructure for clean fuels within the entire Baltic Sea Region

Cross-border travel and transport with alternative fuels must be supported to ensure growth and economic development. Cross-border connectivity is crucial. Therefore, it is important to build a coherent infrastructure for clean fuels within the entire Baltic Sea Region.

New projects funded by CEF or The Recovery and Resilience Facility along the North Sea – Baltic corridor like GREAT and other already fulfilled projects along the ScanMed corridor could be a good starting point. New Interreg projects could play an important role for dissemination of knowledge and experiences from West to East.

Ensuring adequate national networks of all alternative fuels without gaps or white spots is very important. It must be easy to drive cars and trucks across the BSR without hinders or disturbances.

We recommend the BSR's governments to agree on a building and invest plan. Dialogue should be initiated with EU to get CEF-money for BSR as a macro region to support such an initiative. This requires coordination and transparency with regard to ongoing initiatives and project developments. Also, here a proactive approach from BSR community within the BSR Clean Fuel Platform could be helpful.

### 9. Harmonised EV-roaming

Currently, the e-roaming charging markets are very fragmented and based upon different regions, different protocol adoptions as well as national and local regulatory frameworks. These are currently not providing a uniform way or ability to provide cross network as well cross-border charging possibilities. Therefore, to ensure harmonised EV-roaming, the following should be considered:



- Standardised payment methods (VAT-standards)
- Optimisation of the infrastructure to make it more seamless by cross-border collaboration. This could for instance be done by assuring a good EV roaming system across the Core Network Corridors as a beginning.
- Prioritise interoperability and open networks to facilitate the adoption of non-discriminatory and uniform communication protocols and related standards.
- In the absence of regulatory requirements at the EU level regarding use/support of specific protocols, mandatory rules could be part of the new updated TEN-T regulations or directive, and the BSR can pave the way for this EU-wide development.

We recommend the BSR governments to agree on a plan for harmonising roaming for EV charging and roaming within BSR to encourage and speed up the harmonising work which normally is carried out by the standardisation authorities. At the same time, the BSR countries should demand EU-wide directives. The practical solutions should be in place before 2025. However, tests in roaming across national borders have already been done, and it has been shown that it is indeed already possible to provide national and cross-border e-roaming using the current protocols.<sup>13</sup>

## 10. Consistent taxes and harmonised taxation

The implementation of clean fuels in road transport is still going too slow and further instruments are needed to enable a market growth in clean fuel deployment. Here both sticks and carrots can be and should be used. Not only use subsidies - the customer must also be challenged.

Currently the most effective political actions to foster the use of clean fuels by private consumers have been purchase incentives for AF vehicles, either in form of direct subsidies or registration tax rebates. This of course, only works if the rebates cover the gap in price difference between an ICE and an AF vehicle. In all countries it is still cheaper to buy a “fossil” car than a corresponding AF vehicle. It must become cheaper and more attractive to buy and to use an AF vehicle than an ICE.

Legislation and regulations in the countries should be more harmonised. Not such rather big differences as today that generate unexpected and unwished effects. The Swedish bonus-malus model is a concrete example. Swedish consumers are buying new EV’s and sell them further as used cars to Norway to a higher price than new. The Swedish consumer get the bonus and the benefit from selling. Norwegian consumers buy the EV’s to a good price. Norwegian and Swedish consumers are winners, while the Swedish taxpayers and the Swedish government are losers.

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<sup>13</sup> Roadmap for OCPI implementation at European level including recommendations for policymakers and market parties. evRoaming4EU - Realising cross-boarder charging in Europe, 2020.



For harmonisation to take place you need to have something to harmonise. All countries should at least have tax benefits or incentives for clean renewable fuels in place.

We recommend the BSR governments to initiate a common investigation on how to harmonise the legislation between the countries. A first step could be an expert group study with recommendations to the governments. This should include a united approach towards the new Energy Taxation Directive. The final aim should be consistent taxes within the entire EU to support creating of this new market but at the same time avoiding unwished effects.

