

Position paper

ACER Public Consultation on The Bridge beyond 2025

Berlin, 06. September 2019

1 Summary

With the “Clean Energy for All Europeans” Package (CEP) the EU has set parts of the “target model” for the decarbonisation of the energy system. Leading to the CEP proposal, ACER’s work on “A Bridge to 2025” was an important step to bring forward thinking on how to address the developments in mainly the electricity system. BDEW, therefore, welcomes the opportunity to respond to ACER’s public consultation on “The bridge beyond 2025” concerning the trends in the energy sector – and particularly in the gas sector – in the mid- to long-term.

As the evolving discussion at EU and national level has shown, a functioning gas market as well as the gas infrastructure will be instrumental to reach the mid- and long-term climate targets while preserving secure and affordable energy supply in Europe. This requires adequate framework conditions to facilitate the integration of renewable and decarbonised gases and the market launch of power-to-gas (PtG) as a key technology for sector coupling. Both, renewable and decarbonised gases as well as PtG and other technologies play an important role to enable sector coupling as a clever interplay of the electricity and gas system.

BDEW main messages:

- The current market monitoring regime based on the existing Gas target model seems adequate and should be continued.
- It is necessary to give at least a clear signal for the transition towards renewable and decarbonised gases, including incentives for these technologies if a market-based approach does not prove sufficient.
- Hydrogen networks should fall under the same regulatory rules as gas networks if the hydrogen is used predominantly as an energy carrier in the public energy supply for households, industry, commercial consumers and power plants, as defined in the 3rd Energy Package. In principal, the establishment of an extensive parallel new infrastructure should be avoided, if cheaper blending options are available to ensure economic efficiency.
- BDEW supports the joint infrastructure planning of electricity and gas already underway at EU level. Moreover, it should be further intensified, also by joining national grid development plans during their development process and by appropriately involving Distribution System Operators (DSOs) and other stakeholders. However, while a joint Electricity and Gas target model might be an interesting idea at an abstract level, BDEW has difficulties to see how it could be implemented in concrete terms leading to added value for the development of sector integration.

Please find below in detail the BDEW answers to the consultation questions and the proposed responses to the challenges and opportunities ahead set out by ACER.

2 Comments on “Topic 1: Targeted regulation and market functioning”

Question 1: Is the proposed response set out above appropriate to address the challenges the sector faces? What should be done differently and why?

BDEW agrees with ACER’s analysis that the Gas Target Model (GTM) has been successfully implemented in most of the Member States in North and West Europe whose gas markets function well. This holds also true for Germany and its gas market framework, which has successfully developed, tailored to its specificities.

As problems and challenges are limited to certain regions and markets, BDEW also agrees with the approach of targeted regulation. In consequence, BDEW does not see a strong need for action at EU level as these problems mainly stem from insufficient implementation of existing rules and regulations and other structural issues.

In principle, therefore, the current market monitoring regime based on the existing GTM seems adequate and should be continued. The proposed process for monitoring and improving market performance described in the consultation document does not seem necessary for markets which are already functioning well.

Many national gas markets are currently in a state of transition towards renewable und decarbonised gases. With regard to the implementation of European and national climate targets, there will be major changes in these gas markets. Therefore, regulation should be designed in a manner that such developments can be handled with flexibility, such as the decision on the coal-phase out in Germany and the corresponding developments for the use of gas in the German gas market.

Question 1a: For monitoring the GTM metrics and prompting action, should the threshold values be set out at EU level? What should they be? Who should set these values?

BDEW agrees that the key metrics identified in the GTM are important indicators for monitoring market performance. The implementation of the European gas market legislation together with the action of National Regulatory Authorities (NRAs) has led to liquid and functional gas markets in the North-West European (NWE) region as in many markets in the Central and Eastern European region.

The NRAs have a clear task to monitor the key metrics in their national markets and to consider action if necessary. One of many possible means for NRAs could be to conduct an analysis combined with a cost benefit analysis (CBA) as suggested in the consultation document. However, as the lack of functioning in some markets are linked to specific circumstances, BDEW does not believe that creating a new detailed legislation with fixed requirements, a fixed analytical framework and a fixed process is proportionate. As seen in the past, detailed legislation can be counterproductive. Instead, we recommend giving NRAs more flexibility in tackling their specific national and regional challenges.

Question 1b: Should there be new principles for tariff and allowed revenue methodologies in legislation, e.g. ensuring a level playing field between the gas and electricity sectors? What principles would be crucial?

According to Article 18 of Regulation 2019/943 system operators' allowed revenues must reflect the costs of an efficient system operator and tariffs must take into account the use of the infrastructure by system users. These principles are sufficient to ensure ACER's aim of a level playing field for technologies that will potentially act in gas and electricity sectors.

The Agency gives the opinion that at present the tariff design does not appear to be causing major issues on pan-EU basis. Nevertheless, ACER does recognize that long-term gas capacity contracts are moving to much shorter time horizons. Furthermore, ACER states that it is desirable to further reduce the pancaking effect of gas network tariffs for the integration of the European internal market. Although BDEW agrees, that for the future challenges of a carbon-neutral European gas market pancaking effects should be reduced in order to encourage a European wide exchange of decarbonized gases, at the same time pan-EU cross-border flows should reflect costs that are caused by transit gas transmission.

Furthermore, EU harmonized rules for pan-EU cross-border tariffs for a single EU gas market and its goals as competition and security of supply should be analysed, taking into account that investment signals for cross-border routes should not be distorted.

Regarding electricity, the recently revised Electricity Regulation (EU) 2019/943 came into force as a part of the CEP and already contains more detailed provisions in this regard. At the same time, the co-legislators explicitly withdrew the possibility for an electricity tariffs network code. Therefore, new legislation does not seem to be an appropriate proposal. The identification of best practices in electricity as foreseen in the CEP seems to be sufficient.

Question 2: Should the Agency develop a joint Electricity and Gas Target Model in view of sector coupling and what key features should this model have?

Concerning sector coupling and sector integration, the internal market for electricity and for gas should not be solely regarded on their own. A smart interplay of both systems contributes to achieving the decarbonisation at lower costs and with a much higher degree of security of supply.

BDEW regards sector integration (i.e. "Sektorkopplung") as key for achieving the energy transition. It requires a level playing field in order to enable the deployment and the economic viable operation of sector coupling / sector integration technologies. When designing the market framework for sector integration, the focus should be on the implementation of market-based instruments.

Currently, sector coupling technologies like PtG are in Germany generally classified as "end consumers" in the electricity sector and are therefore charged with all associated taxes and levies. However, PtG-facilities provide valuable flexibility to the electricity system for example

by reducing the load in the electricity system during periods of extensive renewable energy production. That provides the possibility for the shifting of energy to the gas system where it can be used or stored even over longer terms (seasonal storage of energy).

Partial exemptions, some of which are in place today in Germany, are often complicated, of temporary nature, or specific for certain technologies. Storage and conversion of one form of energy into another should be treated as a separate process, exempted in particular from end consumer taxes and levies. Moreover, the goal should be a technology-open level-playing field with a CO₂ pricing in all sectors.

Regarding the situation in Germany, BDEW has identified a two-phased approach for the market-based development of sector integration. The first phase (“market launch”) consists of removing existing barriers and distortions. The second phase (“target model”) is characterised by a level playing field for sector integration technologies and flexibilities in general and, consequently, requires much more fundamental policy measures such as a carbon pricing in all sectors.¹

Although the second phase of the BDEW-approach to sector coupling and sector integration is described by the term “target model”, it is of a different nature than the Electricity and the Gas Target Models. The purpose of both these target models was to guide the development of the European markets for electricity and gas. The implementation of these target models has been successful in many regions and is still ongoing in some, as the analysis of ACER’s market monitoring has shown (see above). This should be continued.

BDEW supports the joint infrastructure planning of electricity and gas already underway at EU level. Moreover, it should be further intensified, also by joining national grid development plans during their development process and by appropriately involving Distribution System Operators (DSOs) and other stakeholders.

It should also be recognised, that Transmission System Operators (TSOs) are developing an interlinked model since the end of 2016, which has been foreseen by regulation 347/2013. The aim of the interlinked model is to make sure that all transmission infrastructures as well as storage and LNG facilities are put to their best use. For the construction of new infrastructures, the interlinked model defines the rules in which cases a CBA should be followed through to define which investment in the various infrastructures is the most efficient and resilient in the long way. That way a competitive level playing field across sectors is created.

Secondly, the work between the DSOs and the TSOs has to be intensified. The large majority of onshore renewable plants in electricity and gas are connected to the DSO network. The impact of this embedded generation on the TSO network – to which additional renewable generation (in particular offshore wind) is connected - is substantial. Therefore, a close cooperation between all infrastructures is necessary.

¹ BDEW-Diskussionspapier „Marktregeln für eine erfolgreiche Sektorkopplung“, May 28th 2019

Of equal importance is the co-operation and co-ordination between DSO for electricity and gas which could also be extended to other areas like district heating. The objective is to optimise the energy system at all levels starting with very small units like Energy Communities, but also extending to towns, cities and regions in addition to the overall system. A successful Energy Transition should be organised bottom-up. In this context the DSOs hold a crucial function for the decentralised optimisation of the energy system, which requires further development of the links between electricity and gas DSO.

However, while a joint Electricity and Gas target model might be an interesting idea at an abstract level, BDEW has difficulties to see how it could be implemented in concrete terms leading to added value for the development of sector integration. As stressed in the introduction, the CEP has set parts of the “target model” for the decarbonisation of the energy system. The gas-related parts are underway as well as the overall cross-sectoral climate framework.

ACER’s powers were strengthened with regard to oversight and decision-making powers over the EU entities (ENTSOs and EU DSO entity). Nevertheless, in the CEP the role to oversee the system operators revenues (and financial contributions to EU activities) remains with the NRAs. ACER already provides opinions on the internal governance structure of these entities and the work programme. A double oversight by ACER does not seem to have a benefit and is not in line with the principle of subsidiarity.

3 Comments on “Topic 2: Enabling new products and enhancing infrastructure governance”

Question 3: Is the proposed response set out above appropriate to address the challenges the sector faces? What should be done differently and why?

BDEW would like to point to the fact, that the “Clean Energy for all Europeans” package was adopted only a few months ago. The new legislative framework on the electricity market shifts responsibilities and assigns new tasks to existing (or new) market players and institutions. It also establishes a new “balance of power”, which has been thoroughly negotiated by the co-decision makers in respect of the principles of subsidiarity and proportionality. Many of the provisions of this legislative package have to be implemented yet and therefore cannot show the desired effects so far. The implementation of the adopted legislation should be prior to any decision regarding additional shifts in responsibilities. Furthermore, it might be worth noting that in this context, ACER has been assigned a significant number of new responsibilities which require a substantial amount of additional resources.

With respect to defining new technologies, we agree with ACER, that there is a wide range of different decarbonisation technologies and we do not yet know which technology will end up providing the most economic solutions. These technologies could be on the supply side, e.g.

low carbon gases, or on the consumption side, e.g. through CCS or carbon black from methane pyrolysis. We agree that a dynamic regulatory approach to new products would be better than including detailed rules in legislation at this stage.

However, it is necessary to give at least a clear signal for the transition towards decarbonised gases, including incentives for these decarbonisation technologies if a market-based approach is not sufficient.

On regulation of (new) infrastructure, we support that infrastructure operators are allowed to operate infrastructure that carry other gases, such as pure or blended hydrogen as well as CO₂. Infrastructure operators could be authorised to take on those activities by extending the existing Gas Directive and Regulation to apply beyond natural gas to include other gases. This would then automatically make the existing regulatory framework applicable to natural gas and other gases.

We question the added value of collecting fundamental data on gas production assets in place and planned.

Question 3a: Who should provide data on the availability of decarbonised gases by location so as to enable assessment of changes of gas system needs and flows, in parallel to greater availability of decarbonised gases? At what frequency should this data be provided to the Agency?

BDEW does not see the need for any additional requirements to provide data on the availability of decarbonised gases by location at this time. Biomethane or green or decarbonised gases are fed into the network as well as hydrogen. The data collected annually within the framework of national energy monitoring seems to be sufficient.

Regarding the operation of the grids there is intensive work going on in the CEN working groups which also includes hydrogen. Part of this work will be operational methods how to cope with the injection and transport of various and changing gas qualities to insure that end-users can cope with the delivered gas quality. This will be discussed in the Madrid Forum. Detailed production and usage data for renewable and decarbonized gases will be collected on state level for the monitoring of the EU targets for renewables and Greenhouse Gas (GHG) reduction.

Question 3b: Do TSOs face a conflict of interest in the future in planning gas and electricity infrastructure? If so, would stronger regulatory oversight resolve the problem? Which powers are needed and at which level (European, regional, national)? Would transparency requirements on TSOs/ENTSOs mitigate this problem and if yes, what shall be done?

With TSOs being responsible for ensuring system security and stability, they have a very strong interest in planning and operating the grid in the most efficient way. The German NRA

as a neutral body is responsible for checking the TSOs' assumptions and results before any decision on a potential investment can eventually be taken. Stakeholders are also invited to express their views on the draft national network development plan.

With respect to the roles and responsibilities regarding the Ten Year Network Development Plan (TYNDP) process and the CBA methodology, BDEW sees that tasks currently assigned to ACER are sufficient. We do not see a compelling reason for providing new tasks for ACER in this area, also taking into account that infrastructure planning remains primarily a national responsibility.

Under the Governance of the Energy Union, the energy and climate plans are developed at the national level. Therefore, there is no need for a regulatory entity such as ACER, to develop EU-wide definitions, criteria and scenarios.

In addition to the measures covered in questions 3a and 3b, we would like to comment the following aspects considered in the proposed response:

- Impact of new products on markets and regulation/dynamic regulation and new activities:

BDEW agrees with the basic direction of ACER's approach to potentially competitive activities and fully supports ACER's view regarding the creation of an EU DSO entity for gas.

Regarding PtG, BDEW believes that such facilities have to establish themselves in the market and prevail. Deviations during a parallel market ramp-up and experimental phase should only be allowed with firm trust in a strict limitation. In the spirit of a regulatory sandbox approach, (e.g. Reallabor) such a phase must have the clear goal of gaining system experience with the grid-supporting operation of large-scale PtG-facilities and their flexibility.

In the German context, this possibility should also be applicable for projects of grid operators, who have applied by May 2019 or who receive a positive response within the "Reallabor"-Programme. After the "Reallabor" or experimental phase and an appropriate transition period, the ownership of the PtG-facilities should be transferred to market participants based on a market test. In case of a negative result, the market test should be re-run on a regular basis.

In principle, grid supporting pilot facilities implemented in the regulated area cannot be a substitute for functioning market-based provision of PtG-capacities. It remains BDEW's goal to create the framework conditions for such flexibility markets as quickly as possible.

BDEW agrees with ACER opinion to implement a DSO entity in gas. This should be a separate entity as the EU DSO entity for electricity. As has been discussed at the last Copenhagen Forum in May 2019² it is very important to have a very close cooperation between the DSOs in gas and electricity and between the DSOs and the TSOs in gas. Therefore, the respective steps agreed upon in the Copenhagen Forum conclusions such as the DSO

²See in particular point 3 and 4 of the Copenhagen Forum 2019 conclusions: https://ec.europa.eu/info/sites/info/files/20190524_conclusions_of_the_2019_energy_infrastructure_forum_final.pdf

roundtables, should be implemented without unnecessary delay, as the necessary legislative changes to create a separate DSO entity for gas will require some time.

- Governance for infrastructure planning:

ACER and the NRAs should be responsible for managing a continuous development of European integrated TYNDPs, which are focused on sector coupling.

The existing framework and the TYNDP processes based on Regulation 715/2009 have proven to be very transparent and well accepted by stakeholders. Regulators as well as the European Commission have played an important and active role in this process so far. Taking into account that the TYNDP remains a non-binding network planning tool, additional administrative burden does not appear reasonable from BDEW's perspective. On the contrary, additional requirements and approval processes might make the TYNDP process even more lengthy and complex. The level of the involvement of the NRAs and ACER is already described in detail in European Regulations (347/2013 and 715/2009) and has proven to work very well. It is more important to join national grid development plans for gas and electricity during their development process and to ensure appropriate DSO and stakeholder involvement in the scenario building process. At European level, gas and electricity TSOs already develop joint scenarios and an interlinked model. Sector coupling and sector integration and the cost efficient use of existing infrastructure should be the key principles. Realistic assumptions building on recent experiences should be taken into account, e.g. the current scenarios for the next TYNDP 2020 in electricity and gas built on a future reference grid of 2025.

Moreover, improvements in the TYNDPs and the CBAs are needed and are already progressively being undertaken. In the former ACER opinions on the TYNDPs (gas and electricity) improvements in quality and in harmonization of the approaches were welcomed. No fundamental criticism on the TYNDP process and CBAs was made by ACER which would justify such new legal measures. It is not comprehensible why ACER proposes the approval by the Agency or alternatively binding guidelines for the TYNDP development and the CBA methodology. Therefore, these measures / changes to the current TYNDP governance do not seem appropriate.

- Regulation of new networks:

Hydrogen networks should fall under the same regulatory rules as gas networks if the hydrogen is used predominantly as an energy carrier in the public energy supply for households, industry, commercial consumers and power plants, as defined in the 3rd Energy Package. In principal, the establishment of an extensive parallel new infrastructure should be avoided, if cheaper blending options are available to ensure economic efficiency. However, many grids may develop from blends to pure hydrogen in the course of time. Per definition, these grids would always be part of the regulation. The reuse of existing networks will require the replacement of certain network components. This should be taken into consideration by the regulatory authorities.

At the same time, hydrogen pipelines for specific consumers already exist today, e.g. in Germany and other European countries. These are mostly point-to-point industrial hydrogen pipelines dedicated for a specific hydrogen production and delivery to one or few large industrial consumers. Generally, these pipelines are oriented to the industrial needs and are not accessible for other consumers due to technical reasons. When shaping a regulatory framework for future hydrogen networks, the co-existence of these already existing pipelines and public grids for all consumers has to be taken into account. In general, the development of an infrastructure dedicated for 100% hydrogen transport has to be in line with the demand.

With respect to network access, inefficient grid connection for hydrogen should be avoided. A cost-benefit analysis or minimum requirements depending on the existing infrastructure could be a solution in those cases.

- Measuring and reporting of methane emissions:

BDEW agrees with ACER's opinion that methane emissions should be measured and reported. Work for a standard methodology already started. For the last Madrid Forum Gas Infrastructure Europe (GIE) and Marcogaz have compiled a very detailed report of the status in the gas infrastructure. The report shows clearly that due to the strict security rules in the gas grid Leak Detection and Repair (LDAR) systems were implemented for more than a century. Through the large investments of the past decades into the renovation of the grids and plants, the number of leaks was drastically reduced. Furthermore, detailed work is happening on different levels of the infrastructures to identify ways to reduce methane emissions even further. In Germany, the DVGW- German Technical and Scientific Association for Gas and Water has set up a large programme at DSO level to measure the emissions at leaks in the grid. The results will help to validate the existing calculations. The associations Eurogas, CEDEC and GEODE decided to take up this discussion to broaden this initiative into other countries. In parallel, Marcogaz works on a standard to harmonize the quantification methods in Europe on DSO and TSO level, which will then feed into the work of the European Committee for Standardization (CEN).

Question 4: What powers are needed for dynamic regulation to be effective?

For dynamic regulation to be effective with respect to new products (e.g. hydrogen), we believe that the regulatory framework should be more generic in its definitions. As an example, transmission is defined in the Gas Directive as the transmission of natural gas. This now appears to be too restrictive and should be expanded to include new gases. To be effective, we suggest that the regulatory framework includes some flexibility to allow a selection at national level on which gases, in addition to natural gas, are to be used/transported. However, a fragmentation of the European single market for natural gas to various local markets for renewable and decarbonized gases should be prevented.

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