



Warsaw, 27/02/2020

The PGE Capital Group remarks concerning the Polish implementation plan

For Poland as a country with an identified adequacy concern the proper functioning of capacity market is crucial in terms of security of supply. Therefore we highly appreciate the publication of the Polish implementation plan as a prerequisite for further functioning of implemented capacity mechanism. We also believe that the proposed market reforms will facilitate the proper price formation, especially on wholesale market (energy exchanges) and further integration with neighboring bidding zones and as a result – will lead a way to a common electricity market. In our opinion the implementation plan is in line with Article 20 of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity¹ (“IEM Regulation”), as presented below.

Article 20 (3) of the IEM Regulation provides a list of measures that should be considered by a Member State with identified resource adequacy concern and addressed in implementation plan. These are measures targeted at elimination of regulatory distortions impacting proper price formation and include inter alia: removing price caps, introducing a shortage pricing function for balancing energy, increasing interconnection and internal grid capacity with a view to reaching at least their interconnection targets, enabling self-generation, energy storage, demand side measures and energy efficiency, ensuring cost-efficient and market-based procurement of balancing and ancillary services and removing regulated prices where required.

The Polish implementation plan directly points out that:

- price limits on both wholesale and balancing markets are already removed (other than resulting from CACM for wholesale market and technical ones on balancing market);
- from 2021 an administrative scarcity pricing mechanism will be introduced;
- Poland has developed an action plan (in accordance with Article 15 of the IEM Regulation) to increase cross-zonal electricity trade by means of grid investments and other measures, that will eventually lead to reaching the 70% target;
- all Balancing Service Providers will be allowed to update their integrated scheduling bids to the extent possible until the intraday cross-zonal gate closure time and DSR and storage will be eligible to participate in the wholesale electricity markets;
- energy prices on the balancing market will be based on a marginal pricing scheme; reform of the balancing market will cover cost-efficient and market-based procurement of balancing capacities. Therefore, as of 1 January 2021: Cold Contingency Reserve, Interventional Operation, Guaranteed Program of Emergency DSR and Operational Capacity Reserve will be terminated;

¹ OJ L 158, 14.6.2019, p. 54–124.

- there are currently no decisions regarding the deregulation of prices for households and the measures and timeline will be considered under the process of implementation of the Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L 158, 14.6.2019, p. 125–199), so as this issue has also been concerned when drafting implementation plan.

The abovementioned measures should remove most of the regulatory distortions. Therefore in our opinion the implementation plan is compliant with the Article 20(3) of the IEM Regulation and shall be assessed positively.

We see also a few market inefficiencies and flaws (like regulated redispatching settlement impacting balancing market prices). However, in our opinion those inefficiencies are out of scope of the subject implementation plan and should be addressed at the national level.



Warsaw, 27/02/2020

The PGE Capital Group remarks concerning the Innovation Fund draft methodologies

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Observations on Poland's market reform plan

ClientEarth assesses positively the electricity market reforms listed on pages 12-13 of the Polish implementation plan that is subject to the ongoing consultation process¹. In our view, compared to the present regulatory situation, the abovementioned changes are for the better. However, the Polish electricity market is highly distorted in many other ways and the list of planned reforms addresses only a part of existing market failures. Therefore, the Polish implementation plan should be extended by other regulatory reforms that are not included in the submitted document. The additions that are the most important in ClientEarth's view have been listed below.

1 Reductions from the capacity levy for energy intensive users

While Poland's market reform plan refers to the capacity market itself, it is silent on the planned reductions from the capacity levy for energy intensive users. In ClientEarth's opinion, **the proposed design of the reductions scheme questions the efficiency of the capacity market as a whole.**

Reducing unit capacity charge rates for industrial customers that are responsible for a substantial share in Poland's peak power demand² and not connecting the capacity charge with actual electricity consumption – not only for households, but also for smallest business customers (as proposed by the Polish authorities) highly distorts the original concept of Poland's capacity market. The capacity mechanism scheme has aimed also at incentivising broader demand-side management among all Polish non-household customers, i.e. not only via direct participation of demand-side response units in capacity auctions, but also through adopting a progressive and variable method of charging companies with the new fee.

The proposed changes in the capacity charge collection mechanism (not yet adopted by the Polish Parliament and subject to State aid authorisation) would mean that ensuring the necessary flexibility in the Polish Power System would be exclusively dependent on small and medium-sized undertakings and public entities (offices, schools, hospitals etc.), which already pay the highest unit rates in case of all components of electricity bill and are responsible for the minority of electricity consumed in Poland.

¹ https://ec.europa.eu/energy/sites/ener/files/polish_implementation_plan_final.pdf.

² We understand that Poland submitted to the Commission that this share amounts to 12.2% of peak power demand – and not 43% as indicated in the Commission's opening decision on SA.51502.

The reductions scheme is now subject to a separate assessment process by the EC³. In ClientEarth's opinion, **in its present form, the proposed scheme is not compatible with the internal market** and should not be authorised. Full ClientEarth's observations on this scheme are available at: <https://www.documents.clientearth.org/wp-content/uploads/library/2019-07-15-observations-on-reductions-from-a-capacity-mechanism-levy-for-energy-intensive-users-in-poland-ce-en.pdf>. **As Poland's market reform plan refers to the capacity market, it should also take into account the described reductions scheme.**

2 Subsidising power consumption under the so-called Energy Prices Act

At the end of 2018, the Polish Parliament adopted the so-called Power Prices Act⁴, aimed at "freezing" retail electricity prices for final customers in Poland at the level from mid-2018. In a recent report by ClientEarth and WiseEuropa the anti-market mechanisms contained in this act, which in addition, for the first half of 2019, is not compliant with the requirements of EU State aid law, have been assessed as extremely inefficient⁵. **Despite many negative assessments of the scheme that was in force in 2019, the Polish authorities have now published a proposal for similar regulation for 2020⁶.**

The leading Polish think tank for energy, Forum Energii, has criticised the Power Prices Act, in particular because it may lead to the maintenance or even increase of energy demand and because instead of investing in emission reduction it supports the consumption of high-emission electricity⁷. These allegations are important from the point of view of the possibility of indirect aid to the power generation sector, by artificially maintaining demand for the goods it sells. Therefore, the act may also indirectly support high-emission generating assets operated by incumbent undertakings: in practice, under Polish conditions, additional demand for electricity is covered by the least cost-effective and least environmentally efficient existing hard coal-fired power units operated by state-owned companies.

Such state interventions may weaken price signals for investments in new, low carbon generation sources, especially those installed by final customers. Nor should it be forgotten that the funds to cover the compensations come from unused funds from the EU ETS, which were intended to finance the modernisation of the country's power sector and not to contribute to maintaining its current structure. Revenues of the four largest, state-owned power companies from compensation mechanisms provided for in the Power Prices Act in the first three quarters of 2019 have amounted in total to nearly PLN 3 billion (~EUR 700 mln).

The state intervention under the Power Prices Act therefore raises wider doubts as to the compatibility with EU competition law and, all the more, should be formally notified to the EC in order to obtain legal certainty as to the admissibility of the regulatory arrangements provided for therein. **The Polish authorities should commit in the consulted market reform plan that the country will not continue to subsidise electricity consumption by final customers. The available funds should be redirected to comprehensive schemes supporting long-term**

³ Case SA.51502.

⁴ Act amending the Excise Duty Act and certain other acts (Journal of Laws of 2018, item 2538, as amended).

⁵ See: <https://www.documents.clientearth.org/library/download-info/subsydia-motor-czy-hamulec-polskiej-transformacji-energetycznej/> (the report will soon be available in English).

⁶ <https://legislacja.rcl.gov.pl/projekt/12330500>.

⁷ See: <https://forum-energii.eu/pl/analizy/ustawa-pradowa>.

investments in energy efficiency or distributed energy sources, targeting the most vulnerable groups of consumers.

3 Lack of plan for implementing market-based supply prices

As regards retail electricity market, Poland does not also have a plan for deregulating power prices for household customers. According to the amended directive on the internal market for electricity, **state interventions in the retail market should be limited to vulnerable consumers**. In ClientEarth's view, **a proposal for market-based supply prices for all groups of Polish customers should be included also in the country's market reform plan**.

4 Lack of legal framework for power storage

Poland still does not have any specific legal framework regulating the power storage sector, which prevents it from a broader development. Such legal framework is under consideration in Poland since 2018⁸, but the relevant draft proposal has never gone beyond the stage of governmental work. **As storage is to play a crucial role in the power system of tomorrow, Poland's proposals regarding this market sector should also be included in the consulted market reform plan**.

5 Expiration of RES auction scheme

Since 2018, Poland has been implementing a new auction scheme for the sale of electricity from renewable energy sources. This scheme has proven to be very successful, with average prices being well below the level of forward power contracts on the Polish Power Exchange (where the clearing price is set by existing coal-fired power plants). **From an economic point of view, the RES auctions increasingly cease to function as a support scheme and become a means of cost-competitive contracting of large volumes of electricity for the Polish consumers**. According to the recent study by ClientEarth and WiseEuropa, the auction scheme is already bringing savings for the final customers⁹.

Despite such auctions' results, according to the current legal status (i.e. the Polish Act on Renewable Energy Sources and the corresponding EC's decision approving the auction scheme¹⁰) the last auction under this scheme shall be held by June 30, 2021 at the latest. In other words, unless the authorities decide otherwise, this very well functioning mechanism will expire as soon as next year (new auctions cannot be held from 1 July 2021 onwards). Poland's RES market is not as developed as the ones in the Western Europe and the **prolongation of the scheme is especially important in the context of fulfilling the country's 2030 RES-related obligations under the Clean Energy Package**, as well as in a broader climate-neutrality perspective.

⁸ See: <https://legislacja.rcl.gov.pl/projekt/12317354/katalog/12543041#12543041>.

⁹ <https://www.documents.clientearth.org/library/download-info/subsydia-motor-czy-hamulec-polskiej-transformacji-energetycznej/>.

¹⁰ SA.43697.

6 Wind Energy Investments Act

Poland's Wind Energy Investments Act has been in force since July 2016¹¹. Despite some changes in the legislation, in practice, in its present form the act blocks the development of all new onshore wind projects that have already not been commissioned in the auctions held in 2018-2019. This means that Poland does not allow the construction of new zero carbon power plants in the technology that has already proven to be the cheapest in the Polish power market conditions. The act does not even allow for repowering the existing turbines with new, much more efficient ones, in existing locations.

Onshore wind energy is the only power generation technology in Poland that could already be developed on a market basis (i.e. without involving State aid) and such development is banned due to an unfounded spatial planning legislation. In ClientEarth's view, **repealing the Wind Energy Investments Act would be good not only from a general low carbon energy transition, but also from a pure power market perspective. Therefore, the Polish authorities should commit to make changes in the act also in the consulted market reform plan.**

7 Overall level of subsidies on Poland's power market

Poland's power market has been highly distorted with various State aid mechanisms that subsidise mostly conventional power generation technologies (in practice, coal-fired power units). According to the recent study by ClientEarth and WiseEuropa, only in the years 2013-2018, the Polish authorities have granted approx. PLN 45 billion (~EUR 10 bln) in various subsidies to the country's power generation sector and nearly PLN 30 billion (~EUR 7 bln) of this total sum has been granted to carbon intensive technologies¹². This means that in 2013-2018 Poland allocated twice as much public funds to help conventional power sector (mostly coal) than for the renewable power sector.

In ClientEarth's view, such **distribution of subsidies results in mutual elimination of the effects of the aid, preserving the Polish power sector and hindering its transformation towards low carbon technologies.** This transition has also been slowed down by the progressive link between the power sector and mining. Moreover, the vast majority of the existing support schemes for the Polish power sector should be considered as inefficient in terms of costs and environment, especially in comparison to the countries of Western Europe.

By way of example, State aid granted for the Bełchatów Power Station has proven to be particularly inefficient in the context of a long-term energy transition. The average annual value of support for this power plant has been estimated at approx. 9-10% of its total revenues. In the years 2013-2019 the Bełchatów Power Plant received approx. PLN 2.5 billion (~EUR 600 mln) in the form of free EU ETS allowances, and for the years 2021-2025 the State guaranteed the same amount of support within the capacity market. This means that only one power station in Poland (which, despite such level of public support, continues to be the biggest single CO₂ polluter in Europe) has obtained about 1/4 of the country's total free allowance allocation under Article 10c of the ETS Directive.

In ClientEarth's opinion, **Poland's energy transition can be increasingly carried out through market price signals. State intervention in the energy sector should aim at achieving**

¹¹ OJ of 2019, item 654, as amended.

¹² <https://www.documents.clientearth.org/library/download-info/subsydia-motor-czy-hamulec-polskiej-transformacji-energetycznej/>.

additional environmental benefits, in particular by promoting solutions significantly reducing carbon dioxide emissions.

8 Not respecting EU State aid law requirements

Poland has not been fully fulfilling its power market-related obligations under EU State aid law, including specific commitments contained in the EC's decisions approving particular State aid mechanisms. In particular, the EC decision approving State aid referred to in Article 10c of the ETS Directive has not been adopted unconditionally. The Commission has not objected to this aid, in view of the commitments made by the Polish authorities concerning:

- decrease in the installed capacity level in coal-fired power plants by 2020 (from 31,375 MW at that time to 28,854 MW); and
- deconsolidation of the domestic electricity generation market, in particular by "seeking to ensure that the market shares of the main electricity generator, the PGE group, will not increase or even slightly decline from 37.7% (2011) to 33.4% (2020)"¹³.

The Polish authorities have not implemented the abovementioned elements of the EC Decision and the recent data show that at the end of 2019 the volume of installed capacity in domestic coal-fired power plants was even higher than at the time of the Commission's approval of State aid under Article 10c of the ETS Directive.

In addition, in the Polish power market, we are confronted with progressive consolidation and strengthening of the market position of the main beneficiaries of the free allowance allocation mechanism, and this market is currently operating under actual oligopoly conditions, with the dominant position of the PGE Group. In particular, as a result of the acquisition of the assets of the French EDF Group (in 2011 it was the third largest electricity generator in Poland) in 2018 PGE's share in the domestic electricity generation market increased year-on-year by 6 percentage points and amounted to 43%, and the group 2020 target resulting from the PGE strategy is "over 40%"¹⁴.

This shows that distorting competition with such **State aid mechanisms aimed at subsidising conventional power generation has been leading to strengthening the market position of domestic incumbent utilities and lowering the level of competition on the Polish power market.** In ClientEarth's opinion, **Poland should include in its market reform plan additional measures aimed at reducing the level of oligopoly in the domestic power market.**

Furthermore, based on the Polish intervention mechanisms in the power market which have never been officially notified to the EC, the conditions for State aid within the meaning of the TFEU appear to be met by the compensation mechanisms provided for in:

- the abovementioned Power Prices Act (in particular the refunding of the price difference and the freezing of retail electricity prices for all categories of customers in the first half of 2019);
- the existing capacity mechanisms (Cold Contingency Reserve and Operational Capacity Reserve); and

¹³ SA.34674.

¹⁴ See: Report of the Management Board on the activities of PGE S.A. and PGE Capital Group in 2018.

- the possibility of exchanging investment certificates into shares of energy companies as referred to in the amended act on long-term power purchase agreements¹⁵.

Importantly, strategic reserves notified to the EC by the authorities of other Member States (Germany, Belgium) have been very similar to the abovementioned Polish mechanisms and the Commission finally concluded that they constitute State aid.

The Polish authorities should therefore each time notify the EC of such doubtful mechanisms in order to obtain legal certainty as to the legality of their implementation in the proposed form. This is of particular importance for the beneficiaries themselves.

¹⁵ OJ of 2019, item 1874.

Warsaw, February 28, 2020

**European Commission
Directorate General for Energy
Unit B2 - Internal Market, Wholesale markets;
electricity and gas**

To whom it may concern,

With regard to the ongoing consultation on Poland's market reform plan, Forum Energii—a Warsaw-based think tank, is submitting its contribution.

1. Lack of a fresh assessment of resource adequacy

In case of Member States that apply a capacity mechanism, consultation on market reform plan shall be conducted in such a way so that the European resource adequacy assessment and the national resource adequacy assessment could be taken into account. Since the last such an analysis in Poland was carried out in 2017 (the former notification process), the country has had four capacity auctions, which resulted in securing capacity starting from 2021. Some long-term contracts will be in force even up to 2040. Currently there wasn't any simulation conducted that would take into account the already secured capacity and confirming (or denying) shortfalls in adequacy.

2. Distortions of competition on the retail market in Poland

Although we mostly refer to interactions of the capacity market and the wholesale market, the retail level needs a special comment in case of Poland. At the end 2018 the Parliament introduced administrative freezing of prices for households and small industrial consumers to be effective in 2019. It resulted in a situation where the competition in this segment of the electricity market in Poland was virtually stalled. There are now similar proposal—ex post compensation in 2021 for the [redacted] will be all energy consumers (more than 15 million) whose [redacted] threshold. It means that such a compensation mechanism is intended [redacted] rules on deregulation of prices are in force. What is more, at that [redacted] already have been added to the electricity bills (October 2020). This [redacted] market will not only decrease competition between sellers, but also result in phenomena of passing through costs directly to clients. In particular a capacity payment will be directed to consumers regardless of its level. For that reason this type of compensation needs to be assessed as a market distortion. Additionally, a detailed plan for deregulation of prices for end [redacted]

3. Too few references to flexibility

Flexibility issues (except for DSR) are not included in the consulted document. Currently the Polish power system is insufficiently flexible. We do take a notice on a process of balancing market reform which is currently ongoing in Poland. However, we want to underline the flexibility concern in Poland. The most important market mechanism are: change of energy pricing mechanism to include not only costs of its production, but also its supply to the

recipient. This will create proper signals for network location and generation in a specific geographic area; further development of short-term markets with higher liquidity; new tariff design.

4. Existing barriers to renewables development

The document recognizes recent steps that will facilitate the uptake of decentralized renewable energy sources. In fact, there has been a significant progress in developing both small and large renewable energy installations. Around 7.3 GW of new renewable capacity can be installed in the forthcoming years as a result of the 2018-2020 auctions. Furthermore, “My electricity” programme may lead to another 1 GW of PV capacity. There are, however, a few areas where more clarity for investors would help speeding up investments:

- Feed-in tariff (FiT) and feed-in premium (FiP) systems to support hydro power plants and biogas power plants—the recent amendment of RES law provides that the 1 MW threshold for installations entitled to benefit from those mechanisms would be increased to 2,5 MW. It is, however, a subject of notification to the European Commission. The respective decision has not been announced yet.
- The distance rule for onshore wind, so called the 10H rule, is still in place. As a result, around 800 MW of new projects can potentially participate in this year’s auction for renewables. From 2021 onwards, there will be a marginal number of new projects available only.
- Future of the auction scheme—the current scheme envisages the possibility to organize RES auctions by mid-2021. It is important, therefore, to initiate the discussion on a new approach to support renewables afterwards.

We stay at your disposal in case you wish to discuss our contribution or receive more information.

Forum Energii is a think tank, focused on forging the foundation for a clean, innovative, safe and efficient energy sector based on data and analysis. We observe world trends, analyze data and changes in regulations. We share our knowledge through research activities and by supporting dialogue on the future of power sector. Our motivation to act is passion and belief that changes in the power sector should proceed in accordance with global trends. We deal with energy sector and heating as well as European energy and climate regulations.

DG Energy
Unit B2
1049 Brussels, Belgium

28 February 2020

Subject: EFET¹ response to the consultation on Poland's market reform plan

EFET welcomes the opportunity to comment on Poland's market reform plan. We believe that lack of transparency is a major flaw of the Polish electricity market that hinders its development and acts to the detriment of the consumers. Below we elaborate on some of the major problems in the context of transparency that ultimately impact the prices paid by the end-customers.

To begin with, we would like to note that the term "market failure" used under the Resource adequacy assessment section is confusing, suggesting market's inability to match supply and demand in different timeframes. The fact that that demand has moved to short-term transactions does not necessarily imply Polish market's incapacity to forecast and plan in the long-term, but rather reflects the uncertainties that market participants are facing in a highly unstable business environment. Frequent, major changes to primary and secondary legislation with no prior consultation discourage long-term investments and affect the investments already concluded or under development. We argue that such circumstances should not be seen as legitimate grounds for establishing a capacity mechanism but should encourage Polish authorities to improve transparency and stakeholder engagement.

We take this opportunity to highlight that the enforcement of an exchange trading obligation should not be seen as a measure to increase market transparency. European Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) has already provided the necessary oversight over both bilateral and cleared transactions across the EU and the Polish authorities require multiple additional reports in parallel. The obligation placed on most producers to sell over the exchange has deprived many market participants of the option to conclude non-standard transactions and has substantially increased the transaction costs². We would also like to note the speed at which the exchange trading obligations were implemented back in 2018, since the consultation period lasted two days.

Furthermore, we would like to highlight that the overview of the developments on the retail side that was provided in the implementation plan is confusing and incomplete. Prices for 2019 have been administratively and retroactively changed for some consumers, resulting in bankruptcies of smaller suppliers and uneven compensation level offered to those, who have

¹ The European Federation of Energy Traders (EFET) promotes competition, transparency and open access in the European energy sector. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and a competitive economy. We currently represent more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org.

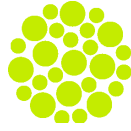
² see our consultation response on the [measures distorting the free formation of prices in Poland](#) for further reference

managed to avoid insolvency³. Such unprecedented way of market interference should not be left without a comment and a clear commitment to avoid such actions in the future should be made. EFET believes that under the existing instability of the legal environment, capacity mechanism will encourage little long-term investments in Poland on economic grounds.

When it comes to the reform of the balancing market, we applaud the proposed changes and the transparency of the process managed by the system operator. Our concern in this respect is that the major overhaul of the balancing market along the lines of the Electricity Balancing Guideline needs to be prepared within a year, giving market participants little time to adjust. Furthermore, we note that while the TSO envisages 15-minute balancing settlement periods, no such products are so far envisaged by the power exchange, which can make it very difficult for market participants to balance their positions.

Finally, we would like to highlight that the proposed implementation plan does not offer any additional clarity over the envisaged changes to the Polish legislation and essentially describes the already ongoing balancing market reform. Transparency is undoubtedly a key concern of the electricity market, which is reflected by the fact that the actual costs of the capacity mechanism has substantially exceeded the forecasts (240 PLN/MW for 2021 and 200 PLN/MW for the following years against the forecasted 100 – 180 PLN/MW). We also take this opportunity to highlight that while the cross-border participation in the capacity mechanism was set to zero for the years 2020-2023 as expected, no participation was allowed for the 2024 auctions either, limiting the potential competition even further. Therefore we believe that the Polish authorities should ensure market participants that no further legislative changes will be made without proper stakeholder engagement and clearly outline the envisaged reforms in the upcoming years.

³ see our [statement on the Polish power market suspension](#) for further reference



European Commission
Directorate General for Energy
Unit B2 - Internal Market, Wholesale markets; electricity and gas
1049 Brussels
Belgium

ener-market-reforms@ec.europa.eu

28 February 2020

To whom it may concern,

Chameleon Technology response to European Commission consultation on Poland's market reform plan¹

Chameleon Technology is pleased to have the opportunity to respond to the European Commission consultation on Poland's market reform plan. We have only responded to areas that we feel are relevant to Chameleon experience and expertise. If you would like to discuss any of our response with us, please do not hesitate to contact us.

Introduction to Chameleon Technology:

Chameleon Technology² is a multi-award-winning, market leading, innovative technology company specialising in real time energy data. Chameleon Technology has been working with the wider energy industry, primarily in the UK, for many years as part of the domestic smart meter rollout, providing the vital customer engagement element of the smart metering solution to enable customers to visualise and act upon their real-time energy consumption and costs for the first time.

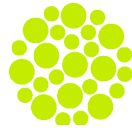
Chameleon Technology believes that In Home Displays and access to real time energy data, will help all customers manage their energy use better, and also help them to manage their bills, vital for all customers but especially those on low income and those living in sub-standard properties. To date we have delivered over five million In Home Displays and we expect to provide many more millions over the next few years, to the completion of the rollout.

Chameleon Technology is now looking at what revolutionary applications can be developed using the energy data on behalf of energy consumers. Chameleon Technology works with a variety of energy suppliers and other businesses to create solutions to increase awareness of energy consumption and encourage behaviour change through bespoke insights to deliver cost savings and energy reduction and comfort.

Chameleon Technology believes that all customers can benefit significantly from new technology in the digitalised energy world. Developments in hardware and software solutions can enable increased awareness levels and behaviour change. Chameleon Technology wants to ensure that the digitalised energy technology revolution helps customers to manage their energy bills and heat their homes better.

¹ https://ec.europa.eu/energy/sites/ener/files/polish_implementation_plan_final.pdf

² <https://chameleontechnology.co.uk>



Comments on Poland's Market Reform Plan:

In Poland's Market Reform Plan it references that “Facing the unprecedented challenges of the new market design as it was defined in the Clean Energy Package, Poland is continuously working on increasing the effectiveness and appropriateness of the policies, measures and tools already in place.” [Page 12]. However, we notice that there are important areas of the Clean Energy Package (and the Energy Efficiency Directive (EED) and the Electricity Directive (ED),) missing from being referenced with the Market Reform Plan (The Plan), which have significant relationships with areas that The Plan refers to.

Specifically, the Clean Energy Package, the Energy Efficiency Directive (EED) and the Electricity Directive (ED), have key articles each member state will have to adopt, specifically:

- ***EED: Article 9: metering - Article 9: metering – ‘final customers for electricity and natural gas are provided with competitively priced individual meters that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use.’***
- ***ED: ‘Article 19: Smart metering’ has a recommendation to introduce interoperable smart metering systems in particular with consumer energy management systems and smart grids, and where there is a negative CBA, obligation for the MS to revise it “at least every four years, or more frequently in response to significant changes in the underlying assumptions and to technology and market developments.” The smart metering provisions in this Directive shall apply to future installations and to installations replacing older smart meters.***
- ***ED: ‘Article 20: Smart metering functionalities’ states that validated historical consumption data shall be made easily and securely available and visualised to final customers on request and at no additional cost. Non-validated near-real time consumption data shall also be made easily and securely available to final customers at no additional cost, through a standardised interface or remote access.***

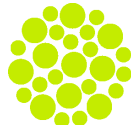
The Clean Energy Package entered into force on 24 December 2018. Each Member State is now required to draft integrated national energy and climate plans for 2021 to 2030 outlining how they will achieve their respective greenhouse gas reduction objective targets and see what they need to do to ensure they meet the Directives and how they will transpose it into national legislation.

It would make logical sense that The Plan is cohesive with the requirements of the Clean Energy Package, and aligns with and supports Poland's national smart meter roll out plan, specifically for where it references decentralised generation and the role of prosumers [Page 9, Page 10]. Households and businesses who engage with the “My Electricity” programme would significantly benefit from a smart meter and access to real time energy data and insights that can be provided through intelligent management of data and energy assets.

It would be a missed opportunity if The Plan was not joined up with other market reform activities that are happening within the energy market.

There has been significant research commissioned in this area, and I would commend the Commission and the Government of Poland to review the following research papers to fully understand how access to this data, through smart meters and In Home Displays can help customers to reduce their usage, so therefore reducing the capacity requirements for the grid, and become active prosumers of energy who are an asset to the grid:

- **Report: The Role of Data for Consumer Centric Energy Markets and Solutions - <https://esmig.eu/resource/report-role-data-consumer-centric-energy>**
- **Report On The In-Home Display Of Energy Data - <http://www.beama.org.uk/news/beama-press-release-new-report-on-the-in-home-display-of-energy-data.html>**



Other Points to Note:

- Smart meters are a building block to digitalise, decarbonize, decentralize and democratize energy systems, and access to real time energy data will unlock major benefits for consumers and help the nation meet 2050 Net Zero Carbon targets.
- IHDs and access to real time energy data should be seen as an integral part of any smart meter rollout as a key driver towards consumer engagement and behaviour change.
- A comprehensive Market Reform Plan is essential in paving the way the for a long-term target of net zero greenhouse gas emissions by 2050, and bring forward the wide adoption of smart energy technologies and innovation to create a positive consumer experience, and gain consumer confidence in energy digitalisation. Enabling smart energy technologies will play a crucial role in facilitating smart, flexible energy markets, provided the technical architecture of demand side response (including half hourly settlement) is put in place.
- The digital energy revolution, initiated by smart metering technology via a successful rollout, will present a wide range of benefits to the consumer by integrating homes and business to smart storage systems and EV charging, and smart house functions to address energy cost saving, energy efficiency measures and the integration of renewable energy to the grid with the Feed In Tariff and other customer-focussed policies and tariffs.
- Half-hourly settlement is a key enabler to unlock unlimited consumer benefits and innovations including demand side response and smart EV charging. It is crucial that other segments of the industry are updated to enable smart flexible energy system, the transition to low carbon energy and the adoption of further smart and connected home technologies. A complete smart meter rollout is a foundation to enable all customers to access the wider associated benefits. The smart meter rollout is the beginning of the digitalisation of the energy industry.
- The ‘smart meter benefits narrative’ should move on from benefiting switching (essentially a sign of market failure), to more sophisticated messages for customers of the real benefits of what a digitalised energy system can do. The role of the Consumer Energy Manager will be an integral part of the final solution – see Annex 1.
- Consumer understanding of how to use the data from smart meters, to unlock the benefits of having a smart meter, will be fundamental to incentivise consumer acceptance of digitlised energy. Smart meters are the foundation needed to create a smarter, cleaner, simpler, greener energy system and ensuring as many consumers and businesses have smart meters and IHDs as soon as practicable will allow these benefits to also be realized as soon as possible.

I hope you have found our comments useful. We would be more than happy to meet with you to demonstrate our products and services. Please do get in touch if this is something you would like to arrange. I hope to hear from you soon,

Yours faithfully,

[Redacted signature block]



Annex 1 - The Consumer Energy Manager – The CEM

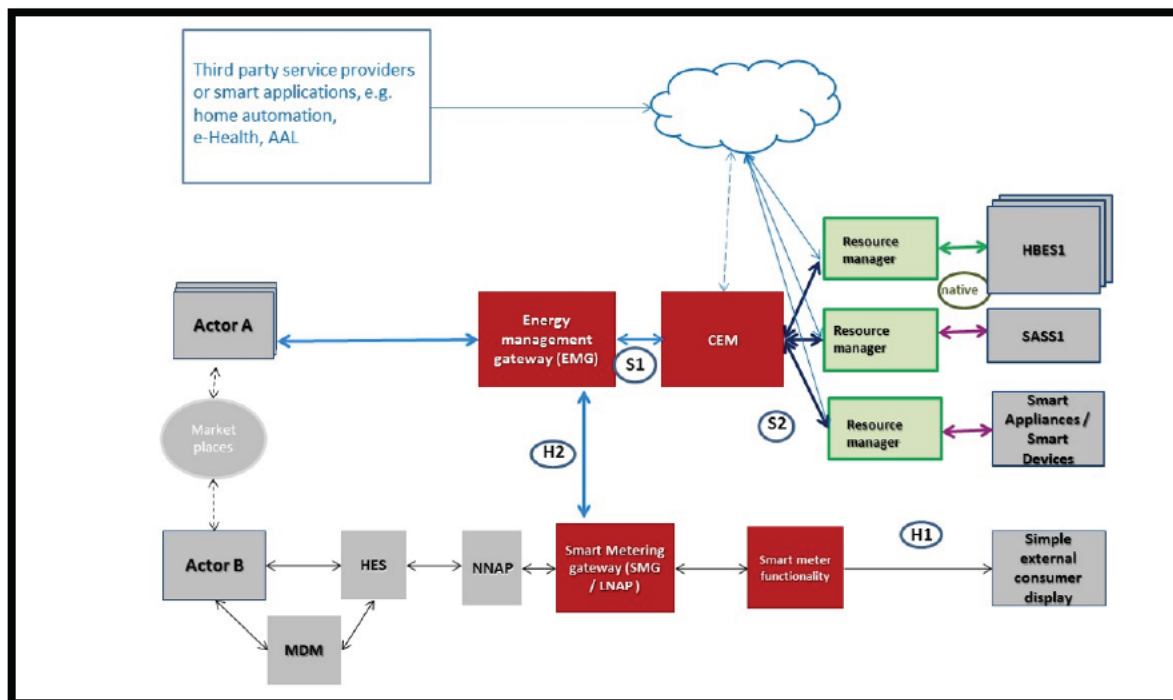
Once the smart meter has been installed it is important that the wider home digital energy solution can bring all home appliances technologies together and join them to the smart meter. This is essential in order to enable customer choices such as time of use tariffs, charging EVs efficiently, making optimal use of solar and other micro-generation and storage, feed in tariffs and optimising the level of comfort such as heating and lighting. The question of how, technically, this will be achieved, for the benefit of the consumer, will need to be addressed as a new policy measure connected to the market-wide smart meter rollout.

- **European Standard 'BS EN 50491-12-1:2018**

The European Standard 'BS EN 50491-12-1:2018'³, approved by CENELEC⁴ on 18/06/2018, specifies general requirements and the architecture to provide an 'interface connection' between the Customer Energy Manager (CEM) and Smart Devices (SD) operating within the smart grid with the home.

The Resource Manager and the defined interfaces allow a CEM to concern itself with the energy use of a device without being burdened with unnecessary information. The CEM can manage the energy flexibility of a device without needing to know the specific characteristics – e.g. it can manage a washing machine without knowing the details of the wash cycle, or a charging EV without needing to understand the complexities of the charging circuit.

This Standard defines a system that allows the control of smart energy devices in the home/building by a Consumer Energy Manager (CEM) according to the consumer's preferences.



³ General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Smart grid - Application specification - Interface and framework for customer - Part 12-1: Interface between the CEM and Home/Building Resource manager - General Requirements and Architecture.

⁴ European Committee for Electrotechnical Standardization.