DEVELOPMENT OF ENERGINET'S TARIFF DESIGN

Autumn 2022
The green transition is well on its way, and electrification is increasing the need for flexibility in the electricity system and across sectors. At the same time, the transition affects the cost drivers for Energinet. Energinet therefore sees a need to modernise its tariff design and is fully engaged in developing and implementing a number of changes to this.

The green transition is changing many parts of the electricity system fundamentally. And as a society, experiencing major and significant changes, we also need to change the tariff models.

Our aim is to develop a coherent tariff model that reflects the costs of availability and use of the grid, and rewards consumers for their flexibility. At the same time, the tariff model must ensure continued payments for the operation and development of the public electricity grid as well as for the services that contribute to maintaining the security of supply.

With this publication, Energinet provides a status on tariff design changes in progress and an overall picture of the changes to come.

All changes will be subject to public consultation, and stakeholders will be consulted. All changes must be approved by the Danish Utility Regulator before they can come into force.

Energinet looks forward to the dialogue.
WHAT ARE ENERGINET'S ELECTRICITY TARIFFS?

Electricity tariffs are user payments which, together with income from electrical interconnectors, must cover all the costs of establishing, maintaining and operating the public electricity supply grid (grid tariff), and operating and balancing the electricity system (system tariff).

The electricity tariffs are not a tax that, for example, can generate income for government spendings. It is a user payment with an annual adjustment to make the total tariff income cover the total costs of the collective electricity system.

Energinet owns and operates the main electricity grid and the transmission grid, while a number of grid companies own and operate the underlying distribution grids, where almost all consumers and producers, except the very largest, are connected.

Energinet's grid tariffs must thus cover the costs of the transmission grid, while the grid companies have their own grid tariffs for the secondary grids. Energinet's system tariff covers the costs of being able to balance the entire electricity system safely today, and in the years to come, so that it does not suddenly become unstable and breaks down.

Today, all of Energinet’s tariffs are charged as energy tariffs with an annually fixed rate per MWh used. This has been a simple tariff design to understand and administer, but with society’s radical electrification and green transition, this method no longer reflects the cost structures of the public electricity grid.

<table>
<thead>
<tr>
<th>Cost groups of the system tariff</th>
<th>Cost groups of the grid tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancillary services</td>
<td>Return and depreciation</td>
</tr>
<tr>
<td>System operation</td>
<td>Operation and maintenance</td>
</tr>
<tr>
<td>DataHub</td>
<td>Grid loss</td>
</tr>
</tbody>
</table>
ENERGINET’S PRESENT TARIFFS

Energinet collects several different tariffs to cover the costs of establishing and operating the electricity grid as well as operating and balancing the electricity system. The current tariffs for 2022 are shown in the tables below. The tariffs apply for TSO connected as well as DSO connected users of the grid.

**TARIFFS CHARGED TO CONSUMERS**

<table>
<thead>
<tr>
<th>Transmission grid tariff (grid tariff)</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>The grid tariff for consumption covers Energinet’s costs of establishing and maintaining the main electricity grid (the 132/150 and 400 kV grids) and for operating and maintaining international connections.</td>
<td></td>
<td>DKK 49 per MWh</td>
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<table>
<thead>
<tr>
<th>System tariff</th>
<th>Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>The system tariff for consumption covers, among other things, costs of security of supply and the quality of the electricity supply, including reserve capacity, system operation, etc.</td>
<td></td>
<td>DKK 61 per MWh</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance tariff for consumption</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tariff covers a small share of Energinet’s total costs for ancillary services and handling of the balancing market. Note: From 2023, the balance tariff for consumption will be included in the system tariff.</td>
<td></td>
<td>DKK 2.29 per MWh</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumption tariffs 2022</th>
<th>DKK per MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission grid tariff*</td>
<td>49</td>
</tr>
<tr>
<td>System tariff</td>
<td>61</td>
</tr>
<tr>
<td>Balance tariff for consumption</td>
<td>2.29</td>
</tr>
</tbody>
</table>

* Customers with their own 132/150 kV transformers settled on the 132/150 kV side are settled at a reduced transmission grid tariff. It has been fixed at DKK 46 per MWh in 2021.

**TARIFFS CHARGED TO PRODUCERS**

<table>
<thead>
<tr>
<th>Feed-in tariff</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>The feed-in tariff for production contributes to covering a minor part of Energinet’s costs associated with the transmission grid (the 132/150 and 400 kV grids).</td>
<td></td>
<td>DKK 3 per MWh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance tariff for production</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tariff covers a small share of Energinet’s total costs for ancillary services and handling of the balancing market. Photovoltaic cells, wind turbines and local CHP plants which are still subject to a purchase obligation do not pay the feed-in tariff and balance tariff.</td>
<td></td>
<td>DKK 1.16 per MWh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Producer tariff 2022</th>
<th>DKK per MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed-in tariff</td>
<td>3</td>
</tr>
<tr>
<td>Balance tariff for production</td>
<td>1.16</td>
</tr>
</tbody>
</table>
OVERVIEW OF CHANGES TO TARIFF DESIGN

TARIFFING OF CONSUMERS

SYSTEM TARIFF
The collection model for the system tariff is changed so that collection reflects the underlying costs to a greater extent:
- subscription payment of DKK 180 per year for all consumption metering points
- reduced energy payments (DKK/MWh) for consumption above 100 GWh
Expected start: 1 January 2024
From 1 January 2023, the balance tariff for consumption will also be collected as an integrated part of the system tariff. It has no tariff effect, but simplifies the electricity bill.

GRID TARIFF
LIMITED GRID ACCESS
Offer to transmission-connected demand customers to accept interruptibility in return for a reduced tariff.
Expected start: 1 January 2023
TSO DSO MODEL, CAPACITY PAYMENT AND TIME DIFFERENTIATION. Energinet want true-cost price signals which are more related to the cost structure. This is achieved, among other things, by introducing capacity payment and switching to a model where the grid tariff must be paid by those connected directly to the transmission system, including DSOs.

TARIFFING OF PRODUCERS

GEOGRAPHICALLY DIFFERENTIATED PRODUCER PAYMENT
- A standardised connection contribution consisting of
  - A fixed substation connection contribution per bay (or a geographically differentiated standard transformer contribution per MW, in the case of a DSO-connected facility).
  - A geographically differentiated standard connection contribution per MW
  - As well as a geographically differentiated continuous feed-in tariff per MWh.
Expected start: 1 January 2023

TARIFFING OF CO-LOCATED CONSUMPTION AND PRODUCTION

CO-LOCATION INITIATIVES
Direct lines, geographically differentiated consumption tariffs and local collective tariffing are initiatives aimed at ensuring better utilisation of the electricity grid and reducing the need for grid investments, and for the benefit of consumers and businesses.
Energinet expects to start the development of methods and dialogue regarding direct lines in autumn 2022.

GROSS TARIFFING OF PROSUMERS
Energinet harmonises prosumers’ tariff payment with the other electricity customers’ payments so that all electricity consumption supplied from the grid is tariffed in accordance with the same principles, thereby eliminating discrimination against other types of consumption.
Expected start: 1 January 2024
NEED FOR MODERNISATION OF ENERGINET’S TARIFF DESIGN

Tariff design historically
The energy-based electricity tariff with a fixed rate of DKK per MWh and predominantly paid by electricity consumers is easy to understand and manage.

The model was introduced at a time when the electricity system consisted primarily of large central power stations which were dimensioned according to and located close to consumption. Today, and increasingly in the future, electricity generation primarily consists of local wind turbines and solar cells far away from major cities and electricity consumption.

Future tariff design
This fundamental change to the electricity system requires changes to the tariff structure, so that tariffs to a greater extent reflect the true costs and support the green transition.

Electricity generation from wind and solar power is green and cheap – but it is also inflexible and is often placed far from consumption, where there is sufficient space. In more and more places, electricity generation from wind and solar power will thus be the dimensioning factor for the transmission grid, predominantly driving the costs.

Electrification has also resulted in new types of electricity consumption which are far more price-flexible than classic electricity consumption and perhaps even interruptible. This flexibility and interruptibility makes it possible to utilise the cost-consuming capacity in the electricity grid better if, for example, you can move your consumption away from places with ‘congestion in the grid’.

Today, placement, flexibility, and operating patterns of electricity generation and consumption are thus far more diverse than previously. This necessitates a tariff design that makes the costs in the electricity system more visible, and where a significantly larger part of the costs can be allocated more specifically to the electricity consumers and producers who give rise to the costs – and, conversely, reduce tariffs for those that have the least impact on electricity system costs.

Such a more cost-effective – but still transparent and administratively possible – tariff design must, through more correct price signals to users, support a continued efficient electricity system and a cost-effective green transition.
The need to modernise Energinet’s tariff design, cf. the previous page, must be designed within the regulatory framework.

The Danish Electricity Supply Act and the Electricity Market Regulation sets up a number of principles for the design of electricity tariffs. Among other things, tariffs must:

- Be true to cost and reflect the expenses the individual grid user categories give rise to.
- Be collected on the basis of reasonable, objective, and non-discriminatory criteria for the expenses the individual grid user categories give rise to.
- Provide appropriate incentives both in the short and long term to ensure an efficient electricity system.
- Be transparent and understandable.

These principles apply to Energinet and underpin current as well as future tariff design changes.

In addition, Energinet will contribute to ensure predictable and stable framework conditions for the many stakeholders who will realize the green transition through large and often long-term investments.

Finally, it must be possible to implement changes to the tariff design in the collection systems that exist or can be developed to this end.

The aim is to achieve a comprehensive tariff model that to a greater extent reflects the costs of availability and use of the grid. A revised tariff should also reward consumers for any flexibility they wish to show, while ensuring continued payments for the operation and development of the public electricity grid as well as the services that contribute to maintaining the security of supply.
KEY ELEMENTS IN MORE COST-EFFECTIVE TARIFFS

To ensure that the electricity tariff design will be modernised and made more cost-effective is an extensive task, involving many concerns and regulations. However, this is also necessary to prevent the tariff structures becoming barriers to effective electrification and a green transition of the entire energy supply. The modernisation of the tariff design will consist of many major and minor changes in the years to come.

The following pages provides an insight to the planned initiatives.

Below, we outline four key elements for a cost-reflective tariff design. The more specific measures described on the following pages can to a large extent be seen as measures addressing one or more of the dilemmas in the key elements below.

1. **More cost-effective tariffing of electricity producers**
   Today, electricity consumers predominantly pay the costs of the electricity system. But electricity generation, from wind and solar sources in particular, is to a greater extent becoming the dimensioning factor for the whole electricity grid, thus driving costs. This is primarily addressed through a new producer payment model.

2. **The payment for grid capacity available instead of transported energy**
   Today, Energinet’s tariffs are purely energy-based—a fixed rate per MWh transported. However, grid costs are to a far greater extent determined by the grid capacity made available to the user. On transmission grid level, almost only the cost of grid losses varies with the amount transported. A much higher degree of capacity payment is therefore a key element in the modernisation of Energinet’s tariff design. This applies to both consumption and producers.

   Today, the system tariff is also purely energy-based. But the costs here are also very fixed. This is, amongst other things and to a certain extent, addressed with a fixed subscription in the new tariff model for the system tariff.

3. **Congestion payment**
   With a higher degree of capacity payment, you pay for the grid capacity you want to have access to—regardless of whether you use it or not. New types of electricity consumption may be as flexible, however, that there is no need for full availability of grid capacity at all times, for example in periods where grid capacity is a limited resource.

   A tariff measure that supports such a more efficient utilisation of the electricity grid is ‘Limited grid access for electricity consumption’, where an electricity consumer, against a significant reduction in the tariff payment, accepts disconnection in the event of grid congestion.

   Another tariff measure is time differentiation, which is already known from several distribution grids. Here, a higher energy tariff in typical ‘congestion periods’ (e.g. during the ‘evening peak’ around 18 o’clock) or a lower energy tariff in periods with good grid space (typically at night) may provide better utilisation of grid capacity.

4. **Price signal for the joint location of production and consumption**
   Everything else being equal, more green electricity generation from wind and solar sources has also increased the distance between electricity generation and consumption. Large distances between consumption and production necessitates more electricity grids and thus higher costs.

   Geographically differentiated payment/tariffs for both generation and consumption is a way of providing a location signal that reflects the reduced costs for the electricity grid if, for example, new electricity consumption is placed in generation surplus areas (or vice versa).

   Direct lines and own production capacity allow for concurrent production and consumption ‘behind the meter’ and therefore have a very high degree of joint placement value. With true-cost capacity payments in the interface, the stakeholder can, to a large extent, optimise exchange capacity with the public electricity supply grid and thereby tariff costs. Particularly wind and solar power in combination with demand-side response may benefit greatly from ‘behind the meter’ joint models, while at the same time increasing the degree of utilisation of the public electricity supply grid and the integration capacity of RE significantly.
Since establishment, Energinet has charged all tariffs as energy payment (DKK/MWh) with the same tariff for all kilowatt hours consumed. The green transition and expected altered consumption patterns in the future, means a need to make this simple tariff model more cost-compliant.

Collecting all tariffs as energy payment, the price is the same for consumption of the first and the last MWh, which does not comply with the underlying system operation costs etc. Tariffing where the first and last unit costs the same may affect the profitability of new investment decisions, and Energinet’s tariffs can therefore distort decisions to substitute energy consumption based on fossil energy with consumption based on renewable energy, mind you without any real basis in the underlying cost conditions. However, other Energinet costs are not related to the extent of consumption, such as the administration of meters in the DataHub.

1. Therefore, a subscription element of DKK 180 per year is introduced for all consumption metering points. In total, the fixed subscription covers approx. 25-30% of the costs for which the system tariff is charged, and the variable tariff (energy payment) is therefore reduced by a corresponding percentage rate.

2. At the same time, a reduced energy payment will be introduced for consumption exceeding 100 GWh (10 percentage is charged on the current variable tariff).

A number of other European countries, including Norway, Germany, and the Netherlands have similar categories for large consumers with a reduced tariff payment.

The balance tariff for consumption: This tariff has been charged as a separate tariff so far, even though it concerns the same costs as the system tariff. As from 2023, the collection will be included in the system tariff to simplify the tariff design.
GRID TARIFF:
LIMITED GRID ACCESS

Today, all demand is connected with full grid access and is also fully included in the planning and dimensioning of the electricity grid. By introducing a grid product, where flexible demand facilities in the transmission grid achieve tariff reductions in return for being interruptible, maximum power levels to be included in grid dimensioning can be reduced. This reduces the need for expansion and thereby the resulting costs for Energinet while utilising the existing grid more efficiently.

The cost savings related to customers with limited grid access should benefit this customer group and therefore, they will get a reduction in the grid tariff. This method means that customers can be connected to the grid on terms of interruptibility and that interruptibility is offset by reduced payment to those parts of the grid tariff covering return, depreciation, operation and maintenance.

Customers with interruptibility contribute proportionally to these costs with 1/3 of what customers with full network access contribute. Tariff payments to cover the costs of transmission losses in the transmission grid will remain the same for all consumers.

Based on the 2020 financial statements, limited grid access results in a net reduction of approx. 50% of total payments to the grid tariff.

In areas of Denmark with a high level of electricity generation, the customer’s risk of interruptibility being activated is expected to be lower than in areas with high consumption and low production. This also gives interruptibility a geographical incentive to appropriate locations of new large consumers in areas with production surplus.
GRID TARIFF:
CAPACITY PAYMENT AND TIME DIFFERENTIATION

CAPACITY PAYMENT

Today, the grid tariff is collected as a fixed price energy payment – DKK per MWh. However, a significant part of Energinet’s grid costs are fixed costs of return and depreciation on the transmission grid. These fixed costs follow grid capacity, which is affected by the customers’ power requirements. It will therefore be possible to collect some of the grid costs in the same way as a fixed annual payment – DKK/MW/year – in relation to the customer’s power requirement (MW), as the costs do not vary with the ongoing energy consumption.

Therefore, Energinet will introduce a capacity payment (fixed payment) relating to the individual customer’s power requirement (DKK/MW/year). Such capacity payment will provide the customer with an incentive to take an interest in power demand, thus affecting the costs incurred in the transmission grid.

The capacity payment will supplement the ongoing MWh payment (DKK per MWh), which is also reduced correspondingly. All in all, this would be a more cost-reflective tariff.

The plan is for the capacity payment to be introduced in the context of the transition to a TSO-DSO model. This means that electricity consumers and DSOs connected to the transmission grid will be met by capacity payments from Energinet. However, in connection with the introduction of direct lines, a tariff model for this must be considered which is expected to include an element of capacity payment. Please see page 20 for more details.

TIME DIFFERENTIATION

Energinet expects to introduce time differentiation of the current tariff, which Energinet will collect from the grid companies in a TSO-DSO model, see the next page.

Energinet have analysed the consumption profiles of the DSOs and see a lower load at night. Energinet therefore expect a low-price zone to be introduced at night.

This will add a greater part of the tariff payment to customers who use the grid when the load is the greatest. This will benefit flexible electricity consumers who are able to shift their consumption for times with the least load on the grid, and it may contribute to more efficient utilisation of grid capacity.
GRID TARIFF:
TARIFFING OF GRID COMPANIES

TSO – DSO MODEL

Today, the grid tariff is collected from all consumers in the electricity system, independent of the point of connection.

This means that Energinet also tariffs the individual household even though Energinet does not set up grids for end users in the distribution grid. The Energinet-owned transmission grid stops at the DSOs, and in this interface, Energinet can provide the most precise and clear price signals related to grid costs.

Therefore, Energinet, in cooperation with the DSOs, have agreed to develop a model where Energinet tariff the DSOs for the grid tariff instead of the DSOs’ customers. This means that in future, the DSOs must cover these costs, which must be paid to Energinet. DSOs will therefore have to collect this from their customers via their own tariff models, instead of Energinet charging end users directly.

Consumption customers directly connected to the transmission grid will continue to be tariffed by Energinet.

The purpose is to provide cost-reflective price signals which underpin the efficient utilisation and expansion of the transmission grid in the best possible way. The transition to a TSO-DSO model requires a review of the regulation to ensure that the financial regulation of the DSOs, among others, is adapted to such new tariffing on the part of Energinet.

Energinet looks forward to continuing the dialogue with DSOs and authorities to work for the introduction of such a model.
PRODUCER PAYMENT
PRODUCER PAYMENT:
STANDARDISED CONNECTION FEE AND GEOGRAPHICAL DIFFERENTIATION

Historically, the producers’ tariff payments have covered a very small share of Energinet’s costs (less than 5%).

The new method for collecting producer payment is an implementation of the Danish Parliament’s amendment of the Danish Electricity Supply Act (El-forsyningsloven) on 21 December 2021.

The purpose of legislation is to support that a larger share of grid costs resulting from the expansion of renewable energy is paid by the power producers themselves and, in addition, that an incentive is provided for building plants in appropriate locations from the point of view of the grid.

Energinet has developed the method in dialogue with stakeholders and, in line with the intention of the legislation, it introduces connection contributions for production and geographically differentiated feed-in tariffs. This means that new RE producers will be able to contribute to covering Energinet’s and thus society’s costs of expanding the electricity grid to a greater extent.

GENERALLY, THE METHOD CONTAINS THREE ELEMENTS:

1. a substation connection fee per bay to cover the average connection costs in Energinet substations, alternatively a transformer fee if the facility is connected to the distribution grid.
2. a standard connection fee per MW based on the size of the connection to cover the average costs in the underlying shallow grid, and
3. an ongoing feed-in tariff per MWh to cover costs in the underlying deep grid.

The substation connection fee applies to transmission-connected generation facilities. The connection fee for the shallow grid and the ongoing feed-in tariff will apply to both TSO and DSO-connected electricity generation, which must take into account that in the future, all electricity producers will contribute to the underlying parts of the transmission grid regardless of which grid level they are connected to.

Moreover, Energinet’s method for new producer payments involves dividing Denmark into production surplus areas and areas dominated by consumption, which are meant to provide incentives for geographically appropriate locations for new RE production from a transmission grid perspective.

The geographical differentiation will influence the connection fee to the shallow grid and the ongoing feed-in tariff, where the prices reflect the fact that there are lower grid costs associated with the categorisation of new generation facilities in areas dominated by consumption.

SUBMITTED FOR APPROVAL WITH THE DANISH UTILITY REGULATOR

The method must come into force on 1 January 2023 or as soon as possible thereafter, subject to the approval of the Danish Utility Regulator.
PRODUCER PAYMENT – MODEL OUTLINE
SEE CURRENT RATES AT: WWW.ENERGINET.DK/EL/ELMARKEDET/TARIFFER/AKTUELLE-TARIFFER

1) Substation costs
2) Shallow grid costs (geographically differentiated)
3) Deep grid costs

A
Standard connection fee (with rule for special cases)

B
Feed-in tariff (geographically differentiated)

C

A CONNECTION FEE – TRANSMISSION-CONNECTED FACILITIES:
- DKK / 150 kV connection
- DKK / 220 kV connection
- DKK / 400 kV connection

TRANSFORMER FEE - DSO-CONNECTED FACILITIES:
In substations with generation surplus (DKK/MW)

B ALL FACILITIES – TSO- AND DSO-CONNECTED:
- Connection fee in generation surplus areas (DKK/MW)
- Connection fee in demand-dominated areas (DKK/MW)

C ALL FACILITIES – TSO- AND DSO-CONNECTED:
- Feed-in tariff in generation surplus areas (DKK/MWh)
- Feed-in tariff in demand-dominated areas (DKK/MWh)
TARIFFING OF UNITS ON ENERGY ISLANDS

In June 2020, the Danish Parliament decided to start preparations for the construction of two energy islands in Denmark – in the North Sea and in the Baltic Sea. The energy island on Bornholm will have a capacity of 2-3 GW, while the energy island in the North Sea will have a capacity of 3 GW in 2030 and 10 GW in the long term.

The establishment of energy islands is completely new and not an aspect of the existing tariff design. Therefore, Energinet has initiated development of a tariff method for energy islands, which takes the complexity of the area into account:

One island – several connections: With energy islands, the power from many offshore wind farms can be gathered and routed directly from the energy island to several countries. This is new because, so far, one offshore wind farm has been constructed with one power connection to one country.

Several types of constructions: Depending on the conditions, an artificial energy island far out to sea could be constructed as a sand island, steel platforms, or as a contained island with concrete or steel lowering boxes filled with, for example, stone material. The energy island in the North Sea will be constructed as a contained island. The energy island in the Baltic Sea uses an already existing island, i.e. Bornholm, as the hub for the power.

Development of a new tariff method will begin in the second half of 2022, and a stakeholder meeting will be arranged on this topic.

Stay tuned on Energinet’s work with energy islands here: https://energinet.dk/Anlaeg-og-projekter/Energioer

METHOD DEVELOPMENT IN SECOND HALF OF 2022
JOINT LOCATION INITIATIVES AND GROSS TARIFFING
CO-LOCATION INITIATIVES:
DIRECT LINES, GEOGRAPHICALLY DIFFERENTIATED CONSUMPTION TARIFFS AND LOCAL COLLECTIVE TARIFFING

An increase in joint locations for electricity generation and simultaneous electricity consumption has the potential to reduce the need for future grid expansions. Framework conditions with more cost-reflective tariffing for stakeholders in the green transition can provide incentives so that stakeholders themselves weigh up the socio-economic balance between the location of electricity and investments in electricity infrastructure in connection with their investment decisions.

The political agreement on a national PtX strategy from 15 March 2022 highlights a) direct lines, b) geographically differentiated consumption tariffs and c) local collective tariffing as three initiatives that can contribute to ensuring better utilisation of the electricity grid and reducing the need for investments in the electricity grid.

a) Direct lines are about facilitating the simultaneous generation and consumption of electricity 'behind the meter' as shown in the figure on the right, reducing the need for access to the transmission grid to less than the total generation or consumption capacity. The concept is expected to be used by new PtX projects and in connection with onshore routing of new offshore wind farms, making it possible to establish more GWs offshore wind power without full exchange capacity with the public transmission grid.

b) With the new method for geographically differentiated producer payment, Energinet sends a signal about the grid-technical appropriate localisation of new electricity-generation facilities. It would also be expedient for new large electricity-consuming units to signal that they will shift generation further through geographically differentiated consumption tariffs and not just the other way around.

c) Local collective tariffing concerns cases where consumption and production are geographically separated and the collective grid is used but is nevertheless located so close that it could potentially have a joint effect.

The legislative amendments are expected to be implemented in autumn 2022. The bill (consultation version June 2022) contains a proposal for applying for the establishment of a direct line from 1 January 2023. Thus, Energinet has started to develop a model for tariffing direct lines and expects to enter into dialogue with stakeholders in the field in autumn 2022. Energinet’s aim is to ensure that tariff terms and conditions are clear before allowing the establishment of direct lines. In particular, Energinet expect the tariffing of direct lines to include an element of capacity payment which is to ensure true-cost tariffing. In the same context, an assessment will be made of whether tariffing of prosumers should also be adjusted.

Energinet will subsequently, when the final legislative amendments are in place, examine the possibilities for geographical differentiation of the consumption tariffs as well as local collective tariffing.

Example of electricity demand and generation 'behind the meter' either as prosumer or direct line.
Historically, Energinet have decided that the tariffing of prosumers using net settlement of electricity should comply with the model for collecting the PSO tax. This meant that the tariff basis was calculated on the basis of the prosumer’s net consumption and not the actual consumption supplied from the grid.

With the introduction of gross tariffs, prosumers must pay on the basis of the actual supply from the grid without netting with the part of their production that is supplied to the grid at other times. This means that Energinet harmonises prosumers’ tariff payment with the other electricity customers’ payment so that all electricity consumption supplied from the grid is tariffed in accordance with the same principles, thereby eliminating discrimination against all other types of consumption.

The expected change brings Energinet’s tariffing of prosumers using net settlement in line with the principles set out in both EU and national rules, and the tariffing method which the grid companies have obtained approval for from the Danish Utility Regulator.

The method must come into force on 1 January 2024 or as soon as possible thereafter, subject to the approval of the Danish Utility Regulator and provided that Energinet have introduced the necessary implementation measures.
## TIME LINE

**VISUAL REPRESENTATION SUBJECT TO DEVELOPMENT TIME WITH ENERGINET AND THE DANISH UTILITY REGULATOR’S APPROVAL AND TIME FOR CONSIDERATION**

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<th>2022</th>
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<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
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<tr>
<td><strong>PRODUCER PAYMENT</strong></td>
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<tr>
<td>New general producer payment model</td>
<td>Stop/go</td>
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<td>Limited grid access for generation</td>
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<tr>
<td>Tariff model for energy islands</td>
<td>Stop/go</td>
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<td><strong>SYSTEM TARIFF</strong></td>
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<td>System tariff collection model</td>
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<td>Local collective tariffing</td>
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- Energinet's method development
- DUR's consideration and implementation in Energinet's systems
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