Energy Union, renewable energy and the 'Winter Package'

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1. Summary
The European Commission wants the EU to achieve global leadership in renewable energies. To reach this goal, the Commission has published a significant amount of material, such as legislative proposals, communications, factsheets and memos. Its latest publication, from November 2016, is the ‘Winter Package’. This policy brief examines the Winter Package with regard to renewable energy sources and, in particular, to renewable energy support schemes. Increasing the share of renewable energy and achieving the goals set in the Paris Agreement requires the adoption of new legislation by the EU and the Member States. It is therefore important to understand how the legislative proposals contained in the Winter Package will affect the role of renewable energy sources in the EU.

The Winter Package emphasises EU level support schemes for renewable energy instead of national ones. The aim is to increase cross-border trade in electricity, which is considered important given that the share of variable renewable energy (i.e. wind and solar) is on the rise. While some of the proposals in the Winter Package are incompatible with national sovereignty and incumbent social and economic interests, they also open up new business opportunities. The EU’s interest in strengthened coordination in relation to energy policy is understandable in the context of the challenge renewable energy sources pose to European electricity markets and the reluctance of some Member States to implement EU legislation during the 2010s.
2. Problem: how to increase the role of renewables whilst simultaneously developing the EU energy market

One of the ten priorities of the current Commission is to make 'Europe's Energy Union the world number one in renewable energies'.\(^1\) To turn this objective into reality, the Commission has put forward a large number of legislative proposals, together with an equally significant number of communications, factsheets, memos and other material, the latest of which appeared in November 2016 in the form of the Winter Package.

This policy brief examines the Commission's Winter Package and the associated proposals on electricity from renewable energy sources and in particular, renewable energy support schemes. References to ‘renewable energy’ in this brief denote electricity generated from renewable sources of energy. The issue the brief seeks to address concerns the legislative measures the EU and Member States need to adopt with a view to meeting the climate commitments agreed in Paris in 2015. For Finland, the milestones involved in meeting its own political commitments for fully decarbonised electricity generation by 2050 as part of Nordic energy cooperation are also at issue.\(^2\) Although the Paris Agreement set a long process in train, and 2050 also represents a long time horizon, several measures in the field of renewable energy need to be adopted given that the existing energy systems are subject to significant inertia that hampers change. Sunk cost investments are examples of such inertia, as are the direct and indirect support schemes for the use of fossil fuels, which in Finland alone involve over 2 billion euros annually.\(^3\) Several stakeholder groups and crucial political, economic and societal interests are affected.\(^4\) At the same time, the Commission is the watchdog in respect of markets in the EU and is highly committed to developing the energy markets. In principle, similar preferences for market mechanisms characterise the development of energy policy in Finland. In short, if the Commission and most Member States want eventually to switch to a system where renewables constitute the bulk of the market, it is crucial to evaluate how the present package of legislative proposals alters the position of renewables.

3. Methods and material

This brief critically reviews and assesses the impressive number of legislative proposals under the Winter Package. It contains eight proposals:

1. a revised Directive on the Internal Market for Electricity (the ‘Revised IMED’);
2. a revised Electricity Market Regulation (the ‘Revised Market Regulation’);
3. a revised Renewable Energy Directive (the ‘Revised RED’);
4. a Regulation on the Governance of the Energy Union (the ‘Governance Regulation’);
5. a new Regulation on Electricity Sector Risk-Preparedness;
6. a recast Regulation on the Agency for the Cooperation of Energy Regulators (the ‘ACER Regulation’);
7. a Directive amending the existing Energy Efficiency Directive; and

4. Renewable energy support schemes

4.1 Current support mechanisms under EU energy law and policy – the Renewable Energy Directive

When examining support for electricity from renewable sources, it is necessary to distinguish between EU level and national level measures. EU level measures to promote renewable energy have ranged from requiring Member States to

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\(^3\) O. Honkatukia (2013), 'Fossiilisten polttoaineiden tuet Suomessa', presentation 17.4.2013 (available in Finnish only).

provide priority access to electricity networks in respect of electricity produced from renewable sources to setting mandatory national targets for the share of renewable energy in the total energy mix for all Member States.\(^5\)

Without going so far as to create an EU-level scheme to support renewable energy production, the EU has allowed and encouraged Member States to set up support mechanisms for electricity generation from renewable sources.\(^6\) It has been left to individual Member States to decide on the content of their support mechanisms.\(^7\) However, in practice each new national support mechanism is examined at EU level while Member States also anticipate the likely position of the Commission whilst formulating proposals for their national mechanisms.

In the EU’s energy law and policy terminology, ‘support scheme’ means

any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased. This includes, but is not restricted to, investment aid, tax exemptions or reductions, tax refunds, renewable energy obligations, support schemes including those using green certificates, and direct price support schemes including feed-in tariffs and premium payments.\(^8\)

As such, the EU definition allows for flexibility at national level in setting up support schemes. In addition to straightforward support, it also allows for tax breaks and other similar measures that support renewable energy generation.

Under the current legislative framework, each Member State has a nationally binding renewable energy target. Article 3(1) of the Renewable Energy Directive provides as follows:

Each Member State shall ensure that the share of energy from renewable sources, calculated in accordance with Articles 5 to 11, in gross final consumption of energy in 2020 is at least its national overall target for the share of energy from renewable sources in that year, as set out in the third column of the table in part A of Annex I. Such mandatory national overall targets are consistent with a target of at least a 20% share of energy from renewable sources in the Community’s gross final consumption of energy in 2020. In order to achieve the targets laid down in this Article more easily, each Member State shall promote and encourage energy efficiency and energy saving.

In order to reach the national targets Member States may take several measures. First, they may set up renewable energy support schemes. These measures may be taken nationally or in cooperation with other Member States or even third countries. In relation to this right to make a decision on acting alone or in cooperation, Article 3(3) of the Renewable Energy Directive specifically allows Member States to decide ‘to which extent they support energy from renewable sources which is produced in a different Member State’. This right to restrict foreign participation in national support schemes has been used by many Member States including Finland and Sweden. In the Swedish case, Norwegian generators have been, since 2012, within the scope of the renewable energy


\(^6\) The current EU level regulation for renewable energy is primarily, though not exclusively, based on Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and


\(^8\) Article 2(k) of the Renewable Energy Directive.
certificate scheme maintained by Sweden. The Norwegian parties also contribute to the costs of the scheme, but will cease to support new projects after 2021. Further to a legal challenge by a Finnish producer located in the Åland Islands which was refused the right to participate in the Swedish renewable energy support scheme (green certificate scheme), the European Court of Justice upheld the right of the Member State under Article 3(3) to restrict participation by producers located in other Member States, despite its rather clear violation of one of the fundamental freedoms under the EU Treaties: the free movement of goods pursuant to Article 34.9

Second, in order to promote the production of green electricity, Article 16(2) of the Renewable Energy Directive provides that ‘Member States shall also provide for either priority access or guaranteed access to the grid-system of electricity produced from renewable energy sources’.

So far, we have focused on the EU level energy regulation affecting the production or distribution of renewable energy. Further measures in the legal regime for renewable energy support at the EU level pertain to competition law and policy applicable to renewable energy support schemes. In this respect, the relevant instruments are the Commission Guidelines on State aid for environmental protection and energy for 2014 to 2020 (Guidelines)10 and the revised General block exemption Regulation (GBER).11 The following section briefly examines the main content of these competition law and policy instruments.

4.2. Support in the context of EU competition law and policy - State aid for renewable energy: towards the markets

The current law and policy regime has delivered a rapid increase in renewable energy, particularly that based on wind and solar power. During 2003 and 2013, the amount of renewable energy produced within the Member States increased overall by 84.4%.12 However, feed-in-tariffs, which are a form of support recognised under the current Renewable Energy Directive, have effectively protected investors from the markets having any impact on their investments. This means that investors do not have economic incentives to adapt the project in question to features such as location and supply and demand.13 As such, feed-in-tariffs have significantly reduced market-related investment risks. Given the growing maturity of renewable energy technologies and the price reductions they bring, such protection may not always be necessary or fair. This was well explained in a speech by Joaquin Almunian, the Commissioner for Competition Policy:

It is time for renewables to join the market. The new guidelines provide a framework for designing more efficient public support measures that reflect market conditions, in a gradual and pragmatic way. Europe should meet its ambitious energy and climate targets at the least possible cost for taxpayers and without undue distortions of competition in the Single Market. This will contribute to

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making energy more affordable for European citizens and companies.\textsuperscript{14}

This is the point of departure for the Guidelines, which envisage that:

These Guidelines apply to the period up to 2020. However, they should prepare the ground for achieving the objectives set in the 2030 framework. Notably, it is expected that in the period between 2020 and 2030 established renewable energy sources will become grid-competitive, implying that subsidies and exemptions from balancing responsibilities should be phased out in a degressive way. These Guidelines are consistent with that objective and will ensure the transition to a cost-effective delivery through market-based mechanisms.

The Guidelines also provide for the introduction of market-based instruments to support renewable energy production. They require the gradual introduction of competitive auctioning or bidding processes to allocate public funding and to determine the level of support to be provided to different types of support scheme. From 2017 onwards competitive bidding will become compulsory for all planned renewable energy capacity.

Similarly, feed-in tariffs are to be gradually replaced by feed-in premiums, which are considered to represent a more market-oriented form of support scheme. Feed-in tariffs are, however, allowed for small-scale renewable energy production and a competitive bidding process is not required for small installations.

In essence, the Guidelines aim to increase competition between different renewable technologies, which should be the main method of allocating support.\textsuperscript{15} However, the bidding processes may be limited to specific technologies when this is justified on the grounds listed in the Guidelines. These include, among other things, the long-term potential of a given new and innovative technology, the need to achieve diversification and network constraints and grid stability.\textsuperscript{16}

Furthermore, these market-based instruments, such as auctioning or bidding processes, should be open to all generators producing electricity from renewable energy sources which are competing on an equal footing within the European Economic Area in order to reduce market fragmentation.\textsuperscript{17} The Guidelines state that ‘[t]he Commission will consider positively schemes that are open to other EEA or Energy Community countries’.\textsuperscript{18} Naturally, the cross-border feature of the support schemes does not need to be applied when foreign companies cannot physically access the market, or when there are no cooperation mechanisms\textsuperscript{19} in place.

The Winter Package and the Proposal for a new Renewable Energy Directive build on the approach adopted in the Guidelines. The next section examines and discusses the Proposal for the Renewable Energy Directive, with emphasis on renewable energy support schemes. Given the interlinkages between different elements of the Winter Package, other regulatory instruments of the package are also discussed.

5. The Winter Package and renewable energy support

On the basis of the legislative proposals contained in the Winter Package, the Commission seeks to ‘lead the clean energy transition’ and

\textsuperscript{14} European Commission Press Release, State aid: Commission adopts new rules on public support for environmental protection and energy, 9 April 2014, IP 14/400.
\textsuperscript{15} Guidelines, paras. 109 and 126.
\textsuperscript{16} Guidelines, para. 126.
\textsuperscript{17} Guidelines, para. 109.
\textsuperscript{18} Guidelines, para. 122.
\textsuperscript{19} The Renewable Energy Directive includes provisions on measures of cooperation. See Articles 5 to 8 and 11. Production from installations situated in other Member States will only count towards a Member State’s national renewable energy target after a cooperation agreement is concluded.
provide 'clean energy for all Europeans'. The Commission both continues the more market-based approach of the Guidelines and adds new elements to make national renewable energy policies and support schemes more market-based, more European in scope and better integrated with other policy areas. The sections that follow discuss some elements of these proposals relevant to support for renewable energy.

5.1. The path towards markets continues

Article 4 of the Revised RED is entitled 'Financial support for electricity from renewable sources', and Article 4(1) provides that the new 'support schemes for electricity from renewable sources shall be designed so as to avoid unnecessary distortions of electricity markets and ensure that producers take into account the supply and demand of electricity as well as possible grid constraints'. These support schemes must be designed so as to integrate electricity from renewable sources in the electricity market and ensure that renewable energy producers respond to market price signals and maximise their market revenues.

Under Article 4(3), renewable energy support must be granted in an open, transparent, competitive, non-discriminatory and cost-effective manner. The effectiveness of the support schemes must be evaluated at least every four years.

In part, the proposal continues along the line of the Guidelines in pushing renewables towards the markets. In addition, it takes a step further in eliminating the priority or guaranteed access regime for electricity from renewable sources (Article 11 of the Revised Market Regulation) and introduces balancing obligations for those renewable energy producers that are energy market participants (Article 4 of the Revised Market Regulation).

Under the proposed new regime, dispatching of power generation facilities and demand response will be non-discriminatory and market-based. As such, as a main rule the currently existing priority or guaranteed access regimes are to be eliminated for new installations. However, priority dispatch will be maintained for certain projects. Article 11(2) provides as follows:

When dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources or high-efficiency cogeneration from small generating installations or generating installations using emerging technologies to the following extent:

(a) generating installations using renewable energy sources or high-efficiency cogeneration with an installed electricity capacity of less than 500 kW; or

(b) demonstration projects for innovative technologies.'

In certain situations, such as saturation of the markets by renewable energy technology (priority dispatch for over 15% of total installed generation capacity) or in any case from 1 January 2026 onwards, the derogation only applies to 250 kW, or to 125 kW if the 15% threshold has been reached.

While renewable energy will often be preferential in dispatch order, given that the marginal costs of operation can be almost zero, there are certain situations where the most economic option from the system perspective is not necessarily that with lowest marginal costs. An oversupply situation could be an example of this, as wind power can be turned on and off much more

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22 This means that small-scale producers of energy that are not energy market participants are exempted from this regulation.

23 Article 11 of the Revised Market Regulation.
quickly than many other types of generation unit. In these situations, it may sometimes be more efficient from a system perspective to limit the dispatch of wind-based power. However, as fossil fuel savings from renewable electricity are high, these situations should be limited to special start-up cost cases. In particular, moving to a situation in which wind and solar power plants also provide system services means that only a proportion of them need to be operated in a deloaded mode, which in turn means that plants fired by fossil fuels can be shut down.

Article 4 of the Revised Market Regulation deals with ‘balancing responsibility’. Its starting-point is as follows:

All market participants shall aim for system balance and shall be financially responsible for imbalances they cause in the system. They shall either be balance responsible parties or delegate their responsibility to a balance responsible party of their choice.

Renewable energy is therefore also subject to these balancing responsibilities and market participants must take responsibility for the related costs. It is important to note here that the balancing costs need to be transparent and cost-reflective – the cost taken for imbalances must be the actual balancing cost at that moment and it must be taken into account that only generators that cause imbalances pay extra. This makes the imbalance costs moderate for wind and solar power, especially in cases where balancing power is also traded between neighbouring areas.\(^\text{24}\)

Member States have the option – as opposed to the obligation, which is the case in respect of priority dispatch – to derogate from this rule. This possibility exists in respect of demonstration projects, generating installations using renewable energy sources or high-efficiency cogeneration with an installed electricity capacity of less than 500 kW, and in respect of existing installations that benefit from support approved by the Commission under the EU State aid rules and commissioned prior to the entry into force of the Revised Market Regulation. From 1 January 2026, the threshold for generating installations using renewable energy sources or high-efficiency cogeneration will drop to 250 kW.

In relation to both Articles 4 and 11 of the Revised Market Regulation, the need to consider the retroactive impact of the changes are taken into account, in line with Article 6 of the Revised RED. In both cases, the possibility of retroactive application is excluded (this issue is further discussed in section 5.5).

5.2. The Europeanisation of support schemes

While the Commission has hinted at the Europeanisation of the support schemes, its proposal fell short of full harmonisation of national schemes. Instead, Article 5 of the Revised RED now proposes the opening of support schemes for renewable electricity. Article 5(1) provides that ‘Member States shall open support for electricity generated from renewable sources to generators located in other Member States under the conditions laid down in this Article’.

This is further specified in Article 5(2): ‘Member States shall ensure that support for at least 10% of the newly-supported capacity in each year between 2021 and 2025 and at least 15% of the newly-supported capacity in each year between 2026 and 2030 is open to installations located in other Member States.’

\(^{24}\) M. Milligan, H. Holttinen, L. Soder, C. Clark, ‘Market structures to enable efficient wind and solar power Integration’, IEEE Power and Energy Society General Meeting 2012. Article number 6345591. doi:10.1109/PESGM.2012.6345591; H. Holttinen, A. Stenberg, ‘Wind power balancing costs for different size actors in the Nordic electricity market.'
Under this new regime, renewable energy installations located in Member States may participate in support schemes in other Member States. In order to ensure that the renewable energy produced in this manner counts towards the Member State funding the installation, a cooperation agreement setting out rules for the cross-border disbursement of funding is in place.

Here the proposal attempts to push towards the Europeanisation of support schemes by opening national schemes to cross-border participation. This will allow for the investments to go where it is thought that they will achieve the best return and also have a beneficial impact. On the other hand, national control over the focus of investments will, of course, be reduced. The Commission’s proposal must be understood in the context of the support provided by the EU for European energy infrastructure projects, including interconnectors enhancing market integration. These have been priorities in EU energy policy for a long time and their importance has been reinforced in recent years. Due to Member States’ varying ability to develop and build renewable generation facilities, policy measures are needed in order to achieve higher market penetration for renewables.

5.3. From a national renewable energy action plan to an integrated national energy and climate plan

Currently Member States are under an obligation to provide the Commission with a national renewable energy action plan. These plans set out Member States’ national targets for the share of energy from renewable sources consumed in respect of transport, electricity generation, and heating and cooling in 2020.

Under Article 3 of the proposed Governance Regulation, Member States must draw up and submit to the Commission integrated national energy and climate plans. The content of these plans will be regulated under Article 3(2) and Annex I of the Governance Regulation. Compared to the renewable energy action plans, the content of these energy and climate plans are much more comprehensive (for example, they are to contain a description of the national objectives, targets and contributions for each of the five dimensions of the Energy Union, their treatment at national level and progress in each area), inclusive (from renewable energy to security, market integration and so on) and detailed (most of the Governance Regulation will focus on these plans and their treatment). The first plan is to cover the period from 2021 to 2030 and subsequent plans are to cover the ten-year period immediately following the end of the period covered by the previous plan.

The Governance Regulation also proposes to delegate to the Commission the power to modify the required content of the national energy and climate plans. This proposal can be seen as response to the problem of non-compliance on the part of Member States with EU directives and common targets of EU energy policy. For example, the Commission became party to 15 referrals to the European Court of Justice, as a result of its opening 38 infringement cases against 19 Member States in 2011.

5.4. The simplification of administrative procedures

Building on the model introduced in the context of the 2013 PCI Regulation, which aimed at facilitating the timely implementation of certain projects of common interest by streamlining,
coordinating more closely and accelerating permit-granting processes, and by enhancing public participation in these projects, the Revised RED contains rules on the national administrative procedures. Article 16 of the Revised RED provides for a single administrative contact point, a manual of procedures and a maximum duration (three years) for the administrative procedures for permitting renewable energy projects. A simplified notification procedure is envisaged for demonstration projects and small-scale installations under Article 17.

The basic idea of the single administrative contact point is that this will ‘coordinate the entire permit granting process for applicants for permits to build and operate plants and associated transmission and distribution network infrastructures for the production of energy from renewable energy source’.

Compared to the details of the PCI Regulation, the streamlining of administrative procedures related to renewable energy represents an improvement. In particular, it provides an explanation of the role of the manual of procedures. The PCI Regulation’s failure to do this led to very different approaches being taken in different Member States.

5.5. Finally, lessons from past litigation

In order to take into account past experiences with changes in support schemes and the heavy litigation that followed, Article 6 of the Revised RED addresses the question of stability of financial support:

Without prejudice to adaptations necessary to comply with State aid rules, Member States shall ensure that the level of, and the conditions attached to, the support granted to renewable energy projects are not revised in a way that negatively impacts the rights conferred thereunder and the economics of supported projects.'

This provision clearly relates to the nearly 30 disputes initiated under the Energy Charter Treaty in situations where the efforts to meet binding national quotas for renewable energy, together with miscalculations concerning the costs of national renewable energy support schemes and the resulting changes have led to multiple cases against Spain, Czech Republic, Italy and Bulgaria.

6. Scheduling of legislative processes

The record number of legislative proposals presented to the legislator for consideration naturally raises the question of how soon these proposals can be turned into law in one way or another. In this context, earlier legislative proposals in the Energy Union context must also be considered. One would assume that there might be a fairly significant delay before legislation could be passed, partly because of the number of simultaneous proposals but also due to their challenging content. The proposed legislation includes regulations to open up national capacity mechanisms for cross-border participation, new institutions, the creation of new rights for the Commission and much more. The Member States are not likely to find all of these proposals easy to accept.

However, as part of the new commitment to streamline and expedite certain legislative priorities the presidents of the Parliament, Council and Commission have committed to streamlining the efforts of their respective institutions to ensure swift legislative progress on these priority initiatives and, where possible, were initiated by investors who have no recourse to the international investment dispute systems (which is only applicable to foreign investors from other ECT countries or countries with a bilateral investment treaty (BIT) with the relevant state): around 380 claims have been brought before various courts in Spain and over 900 before the Italian courts.
One of the priority areas in this respect is ‘Delivering on our objective of an ambitious Energy Union and a forward looking climate change policy - through the 2030 climate and energy framework, the Paris Agreement and the Clean Energy for all Europeans package’. Nevertheless, one could argue that the large number of these proposals means that not all Member States have the capacity to process all of the Energy Union proposal swiftly.

7. Conclusions and recommendations

7.1 Observations

- Building on synergies between energy and competition policies, the Winter Package consolidates several core principles of support to renewable energy in EU legislation.
- The package moves away from national schemes, introduces progressive cross-border opening of support schemes, puts an end to retroactive changes in support and further simplifies administrative procedures.
- The changes proposed to bring about cross-border opening of support schemes acknowledge the need to prepare for greater cross-border trade in electricity and balancing power, taking into account the highly variable nature of solar and wind power production in particular, which are the two most rapidly expanding forms of renewable production.
- These proposals entail a degree of conflict with issues of national sovereignty and with certain economic and social interests. However, they respond to some of the problems that result from the higher penetration of renewables in the market and offer new business opportunities for countries with rich renewable resources, such as the Nordic states including Finland.

7.2 Recommendations

- Among the issues that the Winter Package throws up for Finland is the need to open up the national support scheme. The new scheme, which is emerging very slowly, must now offer rights of participation to generators in other EU Member States. Pursuant to this requirement, between 2021 and 2025 at least 10% of the newly-supported capacity must be opened up every year between to installations located in other EU Member States, with the percentage increasing to 15% in the years following that period. While the government working group for renewable energy seems to have reservations about this, such Europeanisation seems inevitable and also presents an opportunity to maximise the cost-benefit of future renewable energy investments. As such, the opportunity should be seized.
- Similarly, the suggested move towards a more market-based renewable energy system should be implemented as soon as possible. It is also likely that adopting policy and regulatory measures to this

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30 Commission Press release, A Union that delivers swifter and better results: Three Institutions sign Joint Declaration on the EU’s legislative priorities for 2017 (IP 16/4360, Strasbourg, 13 December 2016).
effect may lessen some of the concerns stakeholders in the production segments of the energy system currently express to the effect that the current playing field is rather less than level and as regards the balance between the costs and output of the renewable energy subsidy system. A key issue in this respect is to provide stability for the new tendering schemes. While it is clear that the details of the policy and regulatory measures may require fine-tuning once lessons are learned, the big picture of a more competition based system should remain constant.

The EL-TRAN Consortium examines what a resource-efficient electric energy system means, how to implement such a system, what sort of policy problems are likely to arise and how to resolve them. The Consortium is coordinated by the University of Tampere. The research partners are Tampere University of Applied Sciences, Tampere University of Technology, the University of Eastern Finland, the University of Turku, and VTT Technical Research Centre of Finland Ltd. The Consortium (project number 293437) is funded by the Strategic Research Council (SRC).

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