

Full Disclosure in the Netherlands



1. Purpose

This report will briefly introduce the topic of full disclosure, show how the Netherlands has implemented its full disclosure policy, and evaluate how successful the implementation has been based upon market statistics and the experience of the Dutch Issuing Body CertiQ.

2. Background

Energy Attribute Certificates (EACs) markets, such as those for RECs, GOs, and I-RECs were established because electricity is not a tangible product that can be physically transported between producer and consumer. When we buy power, we are not buying physical electricity, we are buying the right to remove a given amount of charge from the grid. Therefore, the only way to claim the use of a given megawatt-hour of power, along with its attributes, is through a book & claim accounting system. These systems allow generators to book the attribute certificates when they inject power into the grid, intermediaries can then transfer those attributes to consumers, who then cancel them as proof that they paid for and used a given type of electricity.

Most often, EACs are used in renewable energy markets, but they can also be used to track non-renewable energy. An EAC system that is used by end-consumers for making claims about electricity usage from all energy sources is called full disclosure. There can be important differences between full disclosure schemes, which are covered in [this report](#). RECS International supports full consumption disclosure with a universal supplier mandate and has set out how its inclusion in the updated Renewable Energy Directive III could [boost EU renewable energy markets](#).

3. Introduction of full disclosure in the Netherlands

The Dutch full disclosure policy was officially announced in July 2019¹ and came into force on January 1st, 2020, following a 6-month transition phase for the affected organisations. The Netherlands was already [required by EU Law to issue guarantees of origin](#) (GOs) in response to a request from a producer of renewable energy. The same law, the recast Renewable Energy Directive (RED-2), also allows EU Member States to arrange for GOs to be issued for energy from non-renewable sources. The Netherlands makes use of this provision and has

¹ <https://zoek.officielebekendmakingen.nl/stcrt-2019-37126.html> (in Dutch)



implemented a full consumption disclosure scheme for electricity with certificates for non-renewable energy called Certificates of Origin (COs).

Changes for Suppliers

Under the Dutch full consumption disclosure scheme, in place since January 1st, 2020, all licenced suppliers must cancel a Guarantee of Origin (GO) or a Certificate of Origin (CO), regardless of the vintage as long as the certificate is not expired, for every MWh of electricity they supply to a Dutch end-consumer within a month of its delivery². This policy is a good example of full consumption disclosure with a mandate on licensed supplying companies.

However, it is important to note that while there is only a legal mandate on licensed companies supplying power in the Netherlands, these are not the only entities that can cancel GOs and COs in the Dutch registry. Any entity could open an account and voluntarily cancel certificates on behalf of end-consumers. This practice is supported by RECS International and is explained in more detail in section 4.2 below.

Limited changes for Producers

The Dutch full consumption disclosure scheme requires the cancellation of a certificate for every MWh of electricity supplied. This may be in contrast to other schemes that mandate the issuance of a certificate for every MWh of electricity generated. A mandate on issuance for generation, especially without also requiring cancellation for all consumption, could result in an oversupplied market. Many more certificates would come into the market without a requirement on anyone to use them. However, requiring the cancellation of a certificate for every MWh consumed has the logical consequence of a greater percentage of total generation being certified, including generation from non-renewable sources, in order to meet the demand mandated under full consumption disclosure.

4. Two years of full disclosure in the Netherlands

4.1 The numbers

With suppliers having to disclose all supplied electricity, the issuance and cancellation of GOs and COs have understandably risen ([figure 1](#)) since the Dutch full disclosure policy was implemented. As Dutch renewable generation could already be certified, the greatest impact of full disclosure in the Netherlands can be seen with the much higher issuance and cancellation of COs. In addition to the rising issuance and cancellation of GOs and COs, the installed capacity of renewable generation registered with the Dutch issuing body CertiQ

² <https://zoek.officielebekendmakingen.nl/kst-34627-43.html> (in Dutch)



went up from 7.82 GW to 20.39 GW between 2018 and 2021. For non-renewables for the same time period, registered installed capacity rose from zero GW of registered devices to 20.09 GW. This shows generators clearly understood that there would be increased demand for certificates which they could help to meet.

As a result of the full consumption disclosure policy, total cancellation in the Dutch registry is coming close to the total electricity consumption. To put figure 1 in perspective, the total amount of electricity consumed was 113 TWh in 2018 and 2019, and 111 TWh in 2020.³

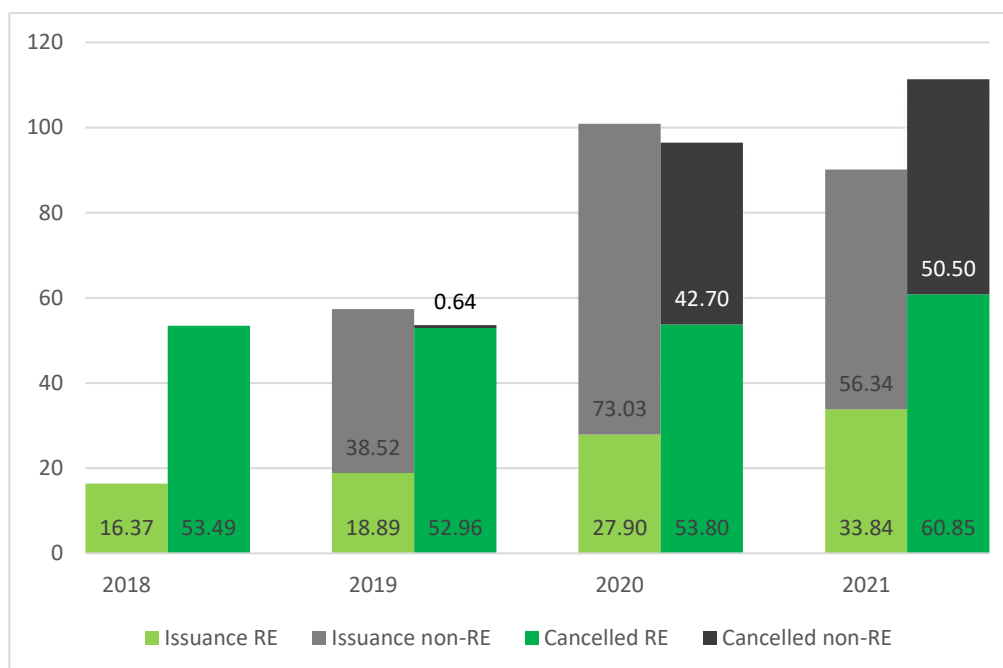


Figure 1 - Issuance and Cancellation in Dutch Registry (TWh)

Total issuance fell by around 10TWh between 2020 and 2021 whilst cancellation simultaneously grew by almost 15TWh. This discrepancy is principally explained by the net surplus of GOs and COs in the Dutch registry from the previous year, as shown in figure 2 below. In other words, issuances from 2020, keeping in mind the 12 month validity, were used for redemptions in 2021 leading to a lower need for issuance in 2021. Net surplus or deficit in a GO/CO is a result of inflows (issuance and imports) against outflows (cancellation, export, and expired certificates). As the import and export of certificates to and from the Netherlands did not change significantly in this period (figure 3), the likely explanation for the lower issuance in 2021 is the use of left-over certificates from 2020. While not visible in figure 2, the net mutation from 2016 and 2017 was close to zero suggesting that the net surplus in 2019 and 2020 was caused by the full disclosure implementation. The net mutation will likely stay around zero in the coming years.

³ <https://www.cbs.nl/nl-nl/nieuws/2021/09/elektriciteitsproductie-stijgt-in-2020-naar-recordhoogte> (in Dutch)



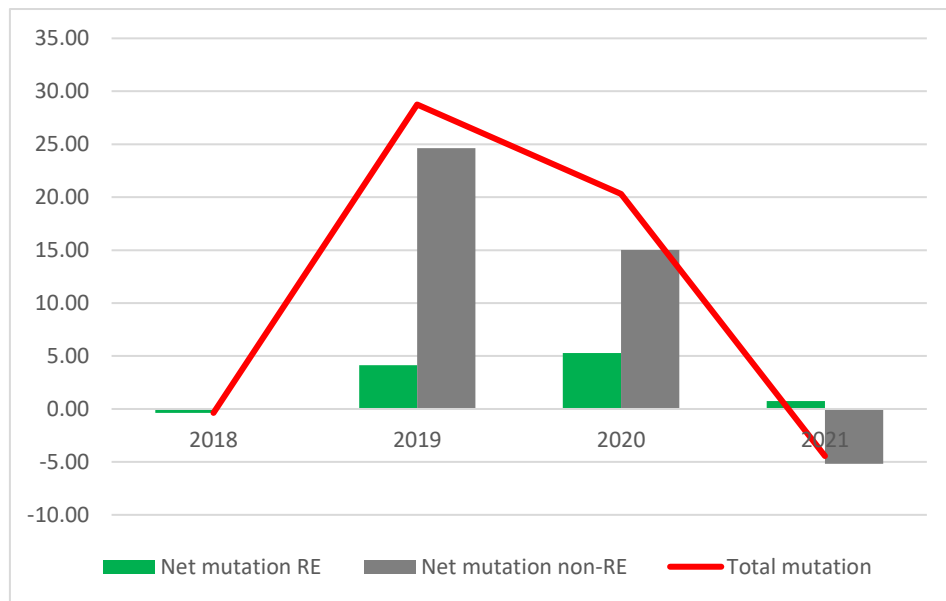


Figure 2 – End year balance of certificates in Dutch registry (TWh)

One interesting observation is that the volume of certificate imports has not increased following the implementation of full disclosure. This means that Dutch suppliers are covering most of the additional demand using domestic certificates.

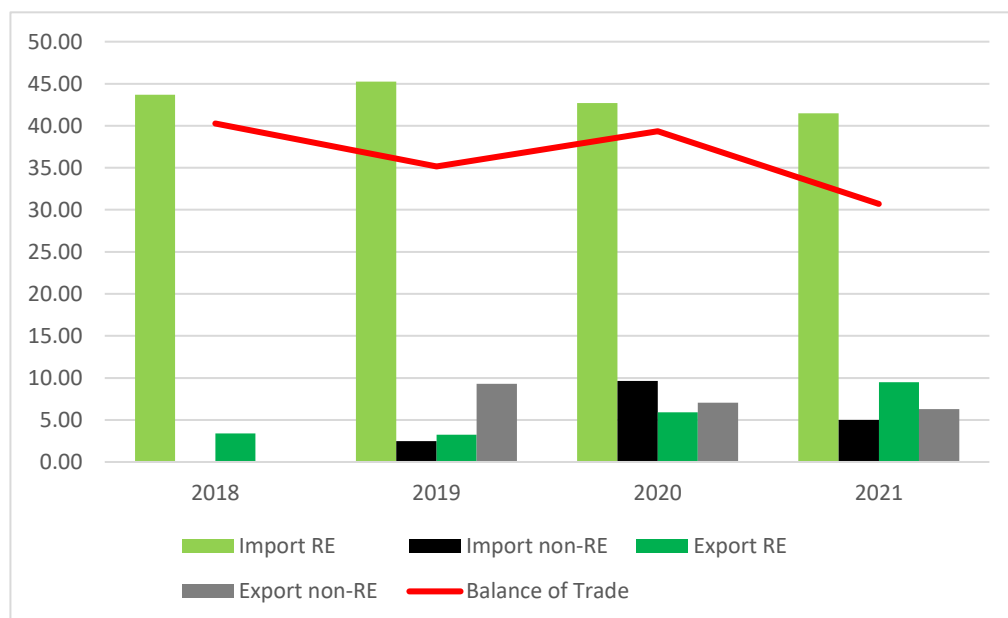


Figure 3 – External trades on the Dutch registry (TWh)



4.2 Effects of full disclosure

The implementation of full disclosure in the Netherlands made it easier for Dutch end-users to understand the electricity products available to them, and to choose what kind of electricity they want to buy. All suppliers, whether they supply renewables, non-renewables, or a mix of the two, must use the same mechanism to disclose what they are selling to their customers. According to Dutch market participants, this has led to increased trust in the system as a whole. Also, Dutch environmental and consumer organizations that have historically been critical towards international trade of GOs are positive about the implementation of full disclosure due to the transparency it provides⁴.

As noted, full disclosure in the Netherlands introduced a new mandate on all suppliers to cancel GOs or COs for each MWh of power they supply. Before this mandate was introduced in 2020, the Dutch system was similar to that implemented in other EU Member States and EEA countries. Namely, that all purchases of GOs were voluntary and could be done through a supplier, a trader, or on one's own account. Some Dutch consumers may continue with this model of procuring and cancelling (or having cancelled on their behalf) their own GOs, while their Dutch power supplier is also cancelling certificates for these consumers' electricity consumption. This may result in two certificates being cancelled for one MWh of electricity consumed - one voluntarily by the end-consumer and one by the supplier to comply with the full disclosure rules. Where this happens, fewer certificates are being added to the market through issuance than are being taken out through cancellation, which could impact the supply-demand dynamic and related price curves. The impact of this phenomenon can be, and in some cases is already being limited by end-consumers, especially large energy consumers communicating the cancellation statements from their voluntary certificate purchases to their supplier. This means suppliers no longer have to cancel other certificates on behalf of that consumer.

The implementation of full consumption disclosure in the Netherlands has also had impacts in other countries. For example, end-users in other countries with a form of full disclosure, such as Austria, now have more competition for certain certificates. Whereas the Netherlands exported 5.4 million COs to Austria in 2019, this decreased to 3.2m and 2.8m in 2020 and 2021 respectively. This shows that the more countries introduce full consumption disclosure, the more demand will rise to meet available supply. As shown in [this paper](#), the demand for certificates from solar and wind generation already outstrips supply, and if more countries implement full consumption disclosure, RECS International would expect total demand for GOs to quickly outstrip supply. A textbook example of demand-driven growth in the renewables market.

⁴ <https://wisenederland.nl/full-disclosure-komt-eraan/> (in Dutch)



4.3 CertiQ's experience with full disclosure in the Netherlands

Following a brief conversation with CertiQ, the Issuer of GOs for electricity and heating and cooling in the Netherlands, it became clear that full disclosure has indeed become a success in the Netherlands.

*“As Issuer in the Netherlands, we are responsible for implementing the full disclosure policy that went into force on January 1st, 2020. Since then, we have registered many more devices and we have seen increased activity, both in terms of issuance and cancellation. As can be read in our 2020 **annual report**, full disclosure provides consumers and businesses with a better insight into where their electricity is coming from and we look forward to continuing to provide this service in the Netherlands. If other Issuers have questions regarding the implementation of full disclosure policy, they can always reach out to us.”*

5. Conclusions

The Dutch full consumption disclosure policy has been successful in bringing more trust in the system, creating a level playing field in the market, and providing greater transparency for all consumers. It is important to highlight that this is due to the mandate on the cancellation of certificates, which is how RECS defines full consumption disclosure. Having the possibility for all energy sources to receive issuance without any mandate on the usage of certificates is not a full disclosure system according to this definition.

The overall success of full disclosure for the GO system is expected to increase as more countries implement the mandatory use of GOs/COs for all disclosure. When countries implement full disclosure, RECS International believes the following two aspects are important to consider

1. Full consumption disclosure is the goal and the allowance of issuance for all energy sources only serves this goal. Full production disclosure is not a goal in itself.
2. Opening an account with the national registry must remain open to anyone, not only to a limited group.

