

What does the parliament decision October 21st mean?

After a spring and summer of uncertainty, the conditions have been clarified for the TGC system in Sweden supporting renewable electricity. The Parliament decision accepted the proposed adjustments to the demand quotas for the remaining years. As such both the existing owners and new investors can expect stabilizing income levels.

The support system has been successful in terms of securing a renewable expansion at a low cost for the consumers. New renewable capacity has been added more or less as planned, but lately investments have come to a halt as income levels have decreased. This is mainly due to the fact that the certificate prices could not compensate for the low electricity prices. The low certificate price levels are mainly due to the certificate excess that has accumulated over the last couple of years linked to forecasting errors.

The adjustments

The quota adjustments themselves can be split up in two parts, technical adjustments to secure target fulfillment at the planned expansion rate and an increase of the target level for 2020.

1. Technical adjustments linked to forecast differences. The old quotas were defined five years ago and as there have been relatively large differences between actuals and forecasts in the underlying assumptions a certificate excess has accumulated. The excess itself mainly consists of a demand part (actual electricity usage lower than forecasted), but also a supply part (more existing capacity than expected was transitioned into the joint system). Temporary excesses and deficits are expected in a TGC system as it relies on forecasts of both production and usage, and differences between actuals and forecasts will always occur. These temporary imbalances are handled through technical adjustments at defined times – so called checkpoints.

Since the production was higher than expected and the electricity usage was lower, a double effect demanded an upward adjustment in the yearly quota levels. Had the electricity usage forecast been too low, the quotas would need to be adjusted downwards instead.

2 Target increase. The Government wanted to increase the target within the system, which requires additional quota increases. The old Swedish target was 25 TWh by 2020 based on 2002, the new target is set at 30 TWh. In reality this is just an increase of 2 TWh as the amount transitioned into the joint system was 3 TWh more than expected. I.e. 3 TWh of the 5 TWh increase is not linked to new installations in the joint system between 2012 - 2020.

<i>Swedish targets 2020</i>	Targets
2003-2020	25 TWh
2003-2020 <i>NEW!</i>	30 TWh
<i>Numerical target increase</i>	5 TWh
<i>Extra production transitioned into joint system</i>	3 TWh

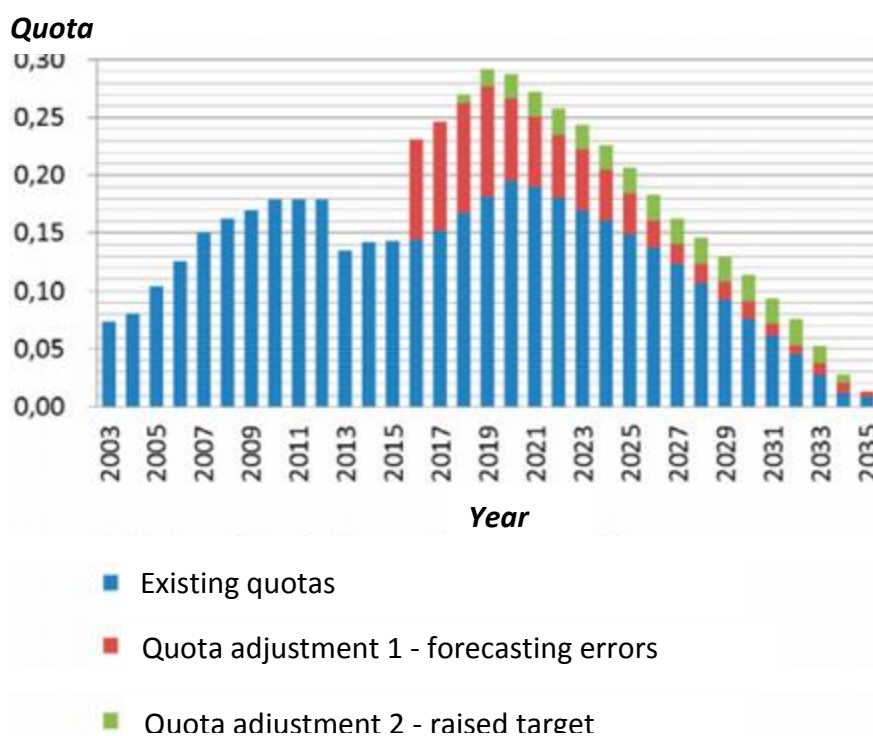
<i>New installations in target</i>	<i>2 TWh</i>
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This has the following effect on the national targets in the joint system with Norway:

Split targets 2020	<i>Swedish targets</i>	<i>Norwegian targets</i>	<i>Total targets</i>
2012-2020	13,2 TWh	13,2 TWh	26,4 TWh
2012-2020 NEW!	15,2 TWh	13,2 TWh	28,4 TWh
<i>Target increase</i>	<i>2 TWh</i>		

As the targets are financing targets, no consideration to location is made. Sweden is to finance 15,2 TWh and Norway 13,2 TWh regardless if this is installed in Sweden or Norway. Sweden can as such account for new installations in Norway, and the other way around.

The graph below shows the old quota levels and the decided adjustments on top. These adjustments enable a decrease of the certificate excess which should restore price levels and as such have a positive effect on investments – both existing and new.



Worth noting is the size of the adjustments, where the technical adjustments have the major impact.

Decision process and timeline

The decision on quota adjustments related to forecasting errors was expected already early summer and was not considered a political risk as the adjustments are technical in nature, i.e. aimed at reaching the already defined and agreed target. Due to the incorporation of additional adjustments to reach a raised target, the decision became more political and the proposition had to be reworked. It should be mentioned that the Swedish Government does not have a majority in the Parliament.

The underlying contract with Norway is also to be updated, as the raised ambition in Sweden was accepted by Norway on condition that tax exemptions related to power production by

users in Sweden were reduced. This contract was however removed from the original proposition and is now incorporated into the budget proposition. This is to be voted on end of November / beginning of December. We have no reason to believe other than that this should be accepted.

Short introduction to the TGC system

The system is designed in the following way. Producers of renewable electricity are rewarded on certificate per megawatt hour (MWh) produced, this makes up the supply side. The producers sell the certificates and as such get an additional revenue. The buyers are the electricity users, often represented by a power company, who yearly need to purchase a certain amount of certificates per consumed MWh – this is expressed in a quota. If the quota is set to 15 percent, they need to acquire 0,15 certificates per MWh. This makes up the demand side. The certificates are traded on a market through bilateral agreements, and provide an additional revenue for producers of renewable electricity. The power companies forward the cost to the end-consumer.

The quotas run the system. The electricity usage combined with the quotas should correspond to the production over time. As the usage is fixed, the quotas secure system balance and ensure target fulfillment. The certificates can be saved for future years, the equality between production and electricity usage with quota is not true for individual years, but holds aggregated over time.

When the system started in Sweden in 2003, there were a number of existing installations that were transitioned into the system, i.e. included and awarded certificates. These are not included in the target fulfillment. In 2012, the system became a joint system with Norway. The joint system includes transitioned installations in both countries, these existing installations are excluded from target fulfillment where only new installations are included.

November 2015