AIB Press Release
Results for 2018 Electricity Residual Mixes published by AIB
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AIB publishes the Residual Mixes and European Attribute Mix of 2018. The calculation was carried out by Grexel Systems Ltd on behalf of AIB, assisted by Ostfoldforskning and Ecoinvent.

A residual mix represents the mix of uncertified electricity and is a key ingredient of a reliable disclosure system. A residual mix is needed for reliable disclosure of electricity consumption where Guarantees of Origin (or in some cases other legally accepted tracking instruments) are not used. Due to the international nature of both the power market and the Guarantee of Origin (GO) market, centrally calculated residual mixes and the European Attribute Mix (EAM) are needed. Energy authorities use the results of the calculation either directly or to calculate the residual mix for their respective country using national rules.

Key findings of the 2018 calculation are:
- The volume of explicitly tracked consumption grew from 962 TWh to 988 TWh meaning more certification of consumed electricity, using e.g. GOs.
- The share of untracked consumption continued to shrink being 70% in 2018. The lowest shares of untracked consumption (apart from Austria that has implemented full disclosure) were in Ireland (11.9%) and Sweden (16.1%). The low share of untracked consumption indicates the willingness of the power consumers to favour green over generic power products.
- On average, the residual mixes of 2018 have 12.4% (17.3) renewable, 33.0% (23.8) nuclear and 54.6% (58.9) fossil (2017 figures in brackets).
- Volume of total deficit in national residual mixes before balancing via EAM grew from 277 TWh to 287 TWh indicating stronger polarization between importing and exporting countries and hence greater need for centrally coordinated residual mix calculation.

Figure 1: Final Residual Mixes 2018

See the complete results of the calculation
The presence and use of reliably calculated Residual Mixes make the entire disclosure system trustworthy, by determining and correctly disclosing the origin of consumed electricity to consumers who are purchasing a non-specific type of electricity. The concept of Residual Mix is also recognised, and its role explicitly mentioned and further strengthened by the RED II Directive.

To avoid inflation of the available energy attributes in all cases where GOs are exported, a coordinated European Attribute Mix needs to be calculated and applied. AIB’s coordination of the EAM calculation complements the AIB HUB service extremely well: it informs countries of the origin of the energy they receive in return, when GOs are exported via the AIB HUB. This is a prerequisite for a complete and reliable electricity disclosure and closes the loop for the HUB service.

At the same time, it is important to remember that Residual Mixes can be seen as an intermediary step towards a full disclosure system in which all consumed electricity is certified by cancelled GOs. Indeed, if all electricity was explicitly tracked through GOs (as it is done in Austria), no residual mix would be needed – which would improve the reliability, accuracy, efficiency and credibility of the disclosure system.

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AIB represents European certificate system administrators, and is the leading enabler of international energy certificate schemes throughout Europe, and in particular those relating to guarantees of origin under Directives 2009/28/EC and 2012/28/EC. The AIB has developed, uses and promotes a standardised system: the European Energy Certificate System - EECS – which ensures the reliable operation of international certificate schemes. These schemes satisfy the criteria of objectivity, non-discrimination, transparency and cost effectiveness in order to facilitate the international exchange of certificates. In order to further facilitate the international exchange between of energy certificates, the AIB operates an inter-registry telecommunications Hub. The AIB also provides a knowledge centre for energy certificate authorities across Europe, providing and sharing advice and guidance.

Grexel is the leading energy certificate registry provider in Europe headquartered in Helsinki with an annual transaction volume of over one billion MWhs. The registries are used by over ten thousand active account holders in 15 countries. As part of EEX Group, Grexel also helps its customers to design new certification schemes and cope with changing requirements set by international legislation and standards.