



## What power do you charge your electric vehicle with? How you can say no to coal in your EV?

Per Ribbing

Uppsala University, Sweden

### Abstract:

In the old outdated way of regarding the Product Electricity and the Electric Grid as a system of water pipes carrying water, the claim “All power mixes on the grid!” was true. But from a market and consumer power point of view, from the economic view of a product that we consume daily (i.e. the Product Electricity), this is a false statement. Electricity that has an audit being made; Consumption vs Production, doesn’t mix at all. Only electricity without an audit being made does mix. The anonymous agents which are the carriers of the purchased Product Electricity, i.e. the kWh:s, they are mixed. But the product itself (the electricity) is not mixed.

This new paradigm is regrettably not easy to grasp, especially not for engineers in the power sector or anyone working with electricity. Nevertheless, it is the scientifically published correct way to understand the new situation with deregulated electricity markets offering different “colours” of power, i.e. electricity with different environmental loads.

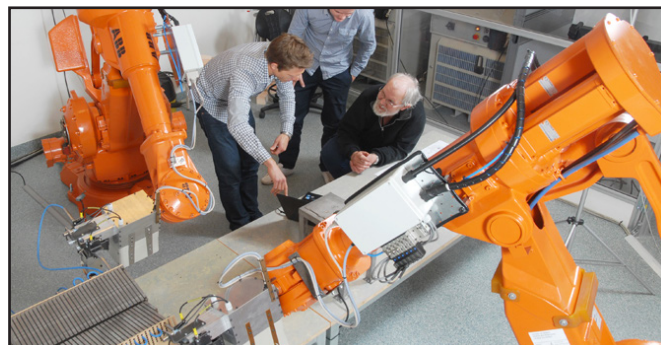
In this new situation the new perspective on the product electricity shows that there exists a possible choice of not consuming any coal power.

However, the power industry itself has obvious problems in accepting this new way of understanding the product they are selling. For instance, major power utilities do not know what Product Electricity they are supplying their electric charging stations with. When questioned they fall back to the “All power mixes on the grid” reply and that is just plain wrong.

Especially when charging your Electric Vehicle you do not want coal power to charge your batteries. That is an assumption I can assert very well after driving EVs since 1997.

### Biography:

Per Ribbing received his Licentiate degree in April 2019 after publishing his licentiate thesis: “Climate Change



Leadership – the case for Electrification” and is currently writing his doctoral thesis on the same subject: Climate Change Leadership and the role of Green Power in the sustainable transition from fossil to renewable energy. As a Keynote Speaker on the New Paradigm on Electric Power, Ribbing has had a number of international missions. To all of these conferences he goes by train. “Use your brain – go by train”. In 2008 he was invited Keynote Speaker at TIEF-6 in Tsuruga, Japan. He took the train from Stockholm to Japan. Sir Per Ribbing has a Master of Science degree from Linköping Institute of Technology year 1989, but it was not until 1994 he became aware of the Climate Crisis and the imminent threats it is posing on his own children. He dedicated his licentiate thesis to his children.

### Publication of speakers:

1. Ribbing P (2018) “On the Analogy Between the Electric Grid and Our Banking System: Investigating “Consumer Power” in Deregulated Power Markets.” Int J Earth Environ Sci 3: 154.
2. Ribbing P, Leijon M (2020) “Historic Perspective on the Analogy between the Electric Grid and our Banking System.” J Nucl Ene Sci Power Generat Technol 9:2.
3. Ribbing P (2020) “Reporting Purchased Product Electricity - A suggested Development of the Present EU Audit of Guarantees of Origin.” J Nucl Ene Sci Power Generat Technol 9:3.

[Webinar on Earth Science | November 07, 2020 | Dubai, UAE](#)

**Citation:** Per Ribbing, What power do you charge your electric vehicle with? How you can say no to coal in your EV?; Waste Management 2020; November 07, 2020; Dubai, UAE