KOMMISSIONEN
FÖR SKATTENYTTA

Vad får vi för pengarna?

Risker inför framtiden?

14 december 2022

Energimyndigheten

ANSÖKAN OM FINANSIERING AV FORSKNING OCH INNOVATION

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Koordinator

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Hybrits ansökan till Energimyndigheten

- Man konstaterar själva i ansökan om fem miljarder från Energimyndigheten i november i år att ...
  - Produktionen är 25 procent dyrare än vanlig produktion – även på sikt.
  - Det är oklart vilka elpriser detta konstaterande gäller vid, men sannolikt inte vid dagens höga nivåer – problemen är alltså ännu större.
  - Produkten går inte att sälja utan stora statliga subventioner – detta utöver systemet med utsläppsrätter med mera.
- “On strictly market terms in today’s regulatory environment, such a steel production would not be profitable.”
- Därför ansöker Hybrit om fem miljarder i statligt stöd. Detta trots stora EU-stöd till forskning med mera och en välvilligt inställd regering.

Är hybrit lönsamt på lång sikt?

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HYBRIT
FOSSIL-FREE STEEL

information, relating to the deployment of a H2-DR as a new technology. The market failures are further explained in the coming sections.

Environmental externality

The market failure for The HYBRIT H2-DR demonstration project is mainly attributable to a negative environmental externality on the current steel market in the form of insufficient internalization of CO_2 emissions costs within the

The significant investment in the H2-DR demonstration plant has the key purpose to demonstrate the H2-DR technology, in order to reduce CO_2 emissions in the steel industry. However, the steel market and the European carbon market (ETS) do not provide sufficient incentives to make this investment profitable on its own.

More specifically, HDAB's pre-feasibility study show that a transition to a H2-DR based process will entail production costs that, even beyond the demonstration phase and at optimal scale, are approximately 25% higher than a BF/BOF-based process.

On strictly market terms in today's regulatory environment, such a steel production would not be competitive. The reason is that the steel price is set on a global market, on which most producers do not internalise any of the costs to society that its blast furnace greenhouse gas emissions entails. This is in particular the case for steel producers in China, who provide more than 50% of the world's steel production.

Through the EU/ emission costs. Thus, resolving t

400
300
200
100
0
20

Coordination fail

Between demand

The European market for green hydrogen is only embryonic. It is yet to be consolidated. Thus, green hydrogen cannot be considered a commodity. As a consequence, there is no obvious commercial way for a green hydrogen user to be supplied for a given quantity at a given date and for a given price. Similarly, a green hydrogen provider cannot easily find customers on a market for the product it supplies, based on clear price signals. This is a key difficulty for a very large hydrogen-based industrial project such as HDAB's H2-DR demonstration plant, requiring large quantities of hydrogen over a long period of time.