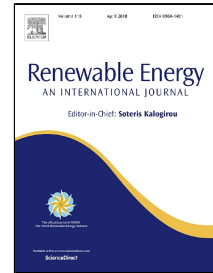


# Accepted Manuscript

Barriers to Investment in Utility-scale Variable Renewable Electricity (VRE)  
Generation Projects

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PII: S0960-1481(18)30102-2  
DOI: 10.1016/j.renene.2018.01.092  
Reference: RENE 9697  
To appear in: *Renewable Energy*  
Received Date: 12 April 2017  
Revised Date: 13 November 2017  
Accepted Date: 22 January 2018

Please cite this article as: Jing Hu, Robert Harmsen, Wina Crijns-Graus, Ernst Worrell, Barriers to Investment in Utility-scale Variable Renewable Electricity (VRE) Generation Projects, *Renewable Energy* (2018), doi: 10.1016/j.renene.2018.01.092

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# 1 **Barriers to Investment in Utility-scale Variable Renewable Electricity** 2 **(VRE) Generation Projects**

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## 7 **Abstract**

8 To effectively mitigate climate change, variable renewable electricity (VRE) is expected to  
9 substitute a great share of current fossil-fired electricity generation. However, VRE investments  
10 can be obstructed by many barriers, endangering the amount of investments needed in order to  
11 be consistent with the Paris 2°C target. To help policy-makers better understand and assess  
12 these barriers, an integrated framework was developed. It establishes a clear connection  
13 between barriers identified in literature and the investment decision-making process, based on  
14 the project life of VRE assets. Barriers in this framework are defined as factors hindering the  
15 realization of a positive final investment decision (FID), which can lead to investment  
16 withdrawal.

17 Based on this research, we argue that addressing so-called “symptomatic” barriers alone is  
18 hardly effective when the “fundamental” barriers remain untouched. It also demonstrates that  
19 monetary and fiscal policies can have side-effects on VRE investments. We suggest that a  
20 comprehensive policy framework to support VRE should not be solely limited to the narrow  
21 context of climate and energy policy, and the electricity market. It should be incorporated in a  
22 broader context including monetary and fiscal policies. When re-designing these  
23 macroeconomic policies, their potential negative impacts on VRE investments should be  
24 considered.

25  
26 Key words:

27 Variable renewable electricity; Barrier; Investment; Decision-making; Energy policy  
28  
29  
30

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