



Using Scenarios to Inform Policy Decisions IEA ETSAP Experience

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IRENA CEM-LTES Campaign Webinar January 17 2019





Disseminating Results



- > 100 publications per annum (including 50 peer-review journal papers) from:
- i) Global Models: incl. IEA ETP model, original TIMES Integrated Assessment Model (TIAM), derived TIAM models, ETSAP-TIAM model
- ii) Regional Models: Pan-European TIMES model, MARKAL-TIMES Models for Europe, Asia and North America. *Multi-regional models*

iii) National Models of 32 countries (including China).

iv) **Sub-National Models:** Western China, Reunion Island (France), Lombardy (Italy), Pavia (Italy), and Kathmandu Valley (Nepal).

v) Local Models for rural areas and cities in Austria, Germany and Italy, other bigger cities such as Madrid (Spain), Beijing, Guangdong and Shanghai (China), Johannesburg (South Africa) and New York City (United States).

https://iea-etsap.org/finreport/ETSAP_Annex-XIII_Report.pdf



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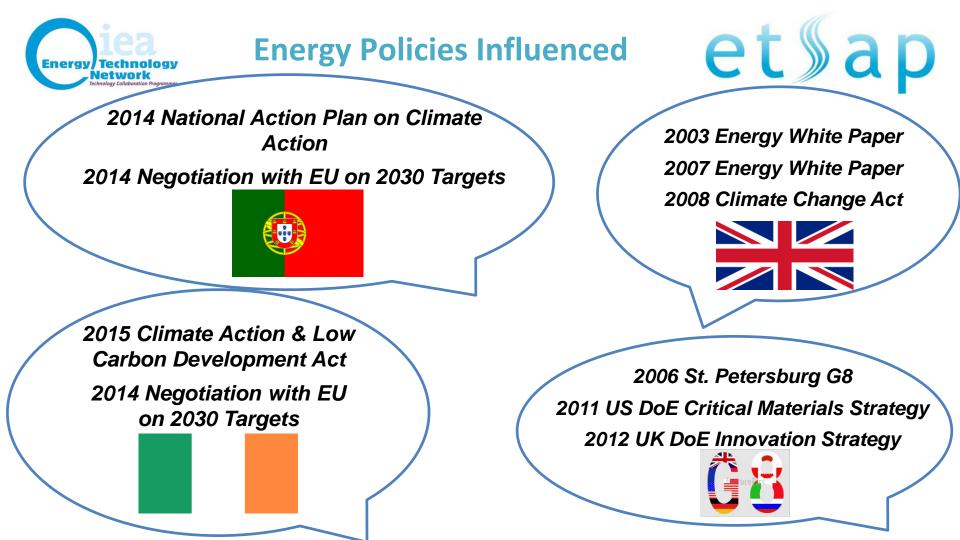
Lecture Notes in Energy 30

George Giannakidis Maryse Labriet Brian Ó Gallachóir GianCarlo Tosato *Editors*

Informing Energy and Climate Policies Using Energy Systems Models

Insights from Scenario Analysis Increasing the Evidence Base







Enerav

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IEA-ETSAP Book 2018

- explores feasibility of a well-below-2°C world
- energy system pathways and technology innovations
- behaviour change and the macro-economic impacts
- chapters directly related to the NDCs <u>www.springer.com/gp/book/9783319744230</u>





Lecture Notes in Energy 64

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Limiting Global Warming to Well Below 2 °C: Energy System Modelling and Policy Development



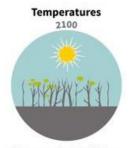






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 Keep warming "well below 2 degrees Celsius".
 Continue all efforts to limit the rise in temperatures to 1.5 degrees Celsius" CLIMATE POLICY 2019, VOL. 19, NO. 1, 30–42 https://doi.org/10.1080/14693062.2018.1464893

RESEARCH ARTICLE



Zero carbon energy system pathways for Ireland consistent with the Paris Agreement

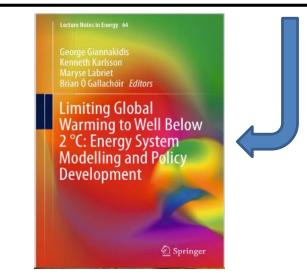
James Glynn ^(a,b), Maurizio Gargiulo ^(a,b,c), Alessandro Chiodi ^(b,a,b,c), Paul Deane ^(b,a,b), Fionn Rogan ^(b,a,b) and Brian Ó Gallachóir ^(b,a,b)

^aMaREI Centre, Environmental Research Institute, University College Cork, Cork, Ireland; ^bSchool of Engineering, University College Cork, Cork, Ireland; ^cE4SMA S.r.I., Turin, Italy

ipcc Intergovernmental pares on climate chance Global Warming of 1.5°C

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty

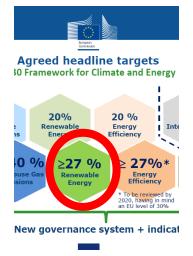






Increasing EU RE Ambition







Energy Strategy Reviews journal homepage: www.elsevier.com/locate/esr Planning the European power sector transformation: The REmap modelling framework and its insights Seán Collins ^{a,b,*} , Deger Saygin ^{c,1} , J.P. Deane ^{a,b} , Asami Miketa ^c , Laura Gutierrez ^c , Brian Ó Gallachóir ^{a,b} , Dolf Gielen ^c	Energy Strategy Reviews journal homepage: www.elsevier.com/locate/esr Planning the European power sector transformation: The REmap modelling framework and its insights Seán Collins ^{a,b,*} , Deger Saygin ^{c,1} , J.P. Deane ^{a,b} , Asami Miketa ^c , Laura Gutierrez ^c ,	Energy Strategy Reviews Journal homepage: www.elsevier.com/locate/esr Planning the European power sector transformation: The REmap modelling framework and its insights Seán Colling ^{6, h,*} , Deger Saygin ^{c,1} , J.P. Deane ^{6, h} , Asami Miketa ^c , Laura Gutierrez ^c , Board Odallachóir ^{4, h} , Dolf Geielen ^c Partitional Mediation Company Metric Concernence Research Instance, University College Cord, Ireland *board Mediation Concernence Research Instance, University College Cord, Ireland	<image/>	<image/> <image/> <image/> <text><text><text><text><text><text></text></text></text></text></text></text>		Energy Strategy Reviews 22 (2018) 147–165 Contents lists available at ScienceDirect	ENER
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FINAL REPORT

European Commission

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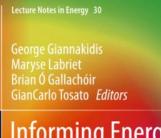
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Limiting Global Warming to Well Below 2 °C: Energy System Modelling and Policy Development

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