

Acknowledgements

This publication has been prepared by the Energy Efficiency Division of the International Energy Agency (IEA). The analysis was led and co-ordinated by Jeremy Sung. The main contributors were Ian Hamilton, George Kamiya, Kevin Lane, Luis Lopez, Yannick Monschauer, Michael Oppermann, and Hugo Salamanca. Oliver Carlo provided essential research and statistical support.

Brian Motherway, Head of the Energy Efficiency Division, provided strategic guidance and input to this work. Valuable comments, feedback and guidance were provided by other senior management within the IEA, in particular, Keisuke Sadamori, Laura Cozzi, Laszlo Varro and Mechthild Worsdorfer.

Other IEA colleagues provided important contributions, including: Thibaut Abergel, Heymi Bahar, Simon Bennett, Sylvia Beyer, Joel Couse, Andrea Dertinger, Araceli Fernandez Pales, Alyssa Fischer, Peter Fraser, Kathleen Gaffney, Timothy Goodson, Lilly Lee, Jean-Baptiste Le Marois, Sara Moarif, Hidenori Moriya, Takahiro Oki, Apostolos Petropoulos, Alison Pridmore, Roberta Quadrelli, Michael Waldron, and Daniel Wetzel.

The IEA Communication and Digital Office provided production and launch support. Particular thanks to Jad Mouawad and his team: Astrid Dumond, Chris Gully, Jethro Mullen, Julie Puech, Rob Stone, Isabelle Nonain-Semelin and Therese Walsh. Andrew Johnston edited the report.

The report was made possible by assistance from the Ministry of Economy, Trade and Industry, Japan.

The IEA would like to thank the following experts who reviewed the report and provided valuable contributions:

Alex Ablaza	Asia-Pacific ESCO Industry Alliance
Noura Al-Saud	AEON Strategy
Anne Arquit Niederberger	Enervee
Bob Blain	Natural Resources Canada
Mar Blazquez Gomez	Ministry for the Ecological Transition and the Demographic Challenge, Spain
Jeferson Borghetti Soares	The Brazilian Energy Research Company
Clara Camarasa	Copenhagen Centre on Energy Efficiency
Pierpaolo Cazzola	The International Transport Forum at the OECD

Russell Conklin	US Department of Energy
Chiara Dalla Chiesa	Enel
Shubhashis Day	Shakti Sustainable Energy Foundation
Lynnette Dray	University College London
Gabrielle Dreyfus	Institute for Governance & Sustainable Development
Bilal Duzgun	Turkey Ministry of Energy and Natural Resources
Carlos Eduardo Firmeza	The Brazilian Electricity Regulatory Agency
Christine Egan	CLASP
Mark Ellis	4E TCP
Chae Eun Hwang	Ministry of Trade, Industry and Energy, Korea
Steven Fawkes	EnergyPro
Alessandro Federici	Italian National Agency for New Technologies, Energy and Sustainable Economic Development
Brian Fitzgerald	Energy Efficiency and Conservation Authority of New Zealand
Cristina Gamboa	World Green Building Council
Phil Harrington	Strategy. Policy. Research
Gerben Hieminga	ING Commercial Banking, Economic Bureau
Tauno Hilimon	Republic of Estonia Ministry of Economic Affairs and Communications
Takashi Hongo	Mitsui Group
Rod Janssen	Energy in Demand
Roy Jean-Luc	GE Power
Michale Kiza	The East African Centre of Excellence for Renewable Energy and Efficiency
Saurabh Kumar	Energy Efficiency Services Limited
Skip Laitner	
Stephane Le Gentil	Abu Dhabi Energy Services
Ana Lepure	
Joshua Lim	National Environment Agency under the Ministry of Sustainability and the Environment in Singapore
Jacob Llerena	Ministry for the Ecological Transition and the Demographic Challenge, Spain
Rudiger Lohse	GE Power
Amory Lovins	Rocky Mountain Institute
Tomasz Majszyk	Department of the Environment, Climate and Communications, Ireland
Jack Mayernik	National Renewable Energy Laboratory
Cathy McGowan	Australian Government Department of Industry, Science, Energy and Resources
Vincent Minier	Schneider Electric

Rob Murray-Leach	Energy Efficiency Council, Australia
Manabu Nabeshima	Ministry of Foreign Affairs of Japan
Steve Nadel	American Council for an Energy-Efficient Economy
Stephen Pantano	CLASP
Alan Pears	
Volkmar Pflug	Siemens Energy
Carlos Pimparel	Directorate General for Energy and Geology, Portugal
Gabriela Prata Dias	Copenhagen Centre on Energy Efficiency
Rahul Raju Dusa	Copenhagen Centre on Energy Efficiency
Oliver Rapf	Buildings Performance Institute Europe
Ingrid Reumert	Velux
Ida Riise-Knudsen	Danish Energy Agency
Marc Ringel	Nuertingen Geislingen University
Timo Ritonummi	Ministry of Economic Affairs and Employment of Finland
Karen Roiy	Danfoss
Paul Ruyssevelt	Energy in Buildings and Communities TCP
Paul Ryan	EnergyConsult Pty Ltd
Ashok Sarkar	World Bank
Rahul Sharma	Energy Efficiency Services Limited
Siddarth Singh	IEA Consultant
Samuel Thomas	Regulatory Assistance Project
Fabby Tumiwa	Institute for Essential Services Reform, Indonesia
Timothy Unruh	National Association of Energy Service Companies
Harry Verhaar	Signify
Andrea Voigt	European Partnership for Energy and the Environment
Xianli Zhu	Copenhagen Centre on Energy Efficiency