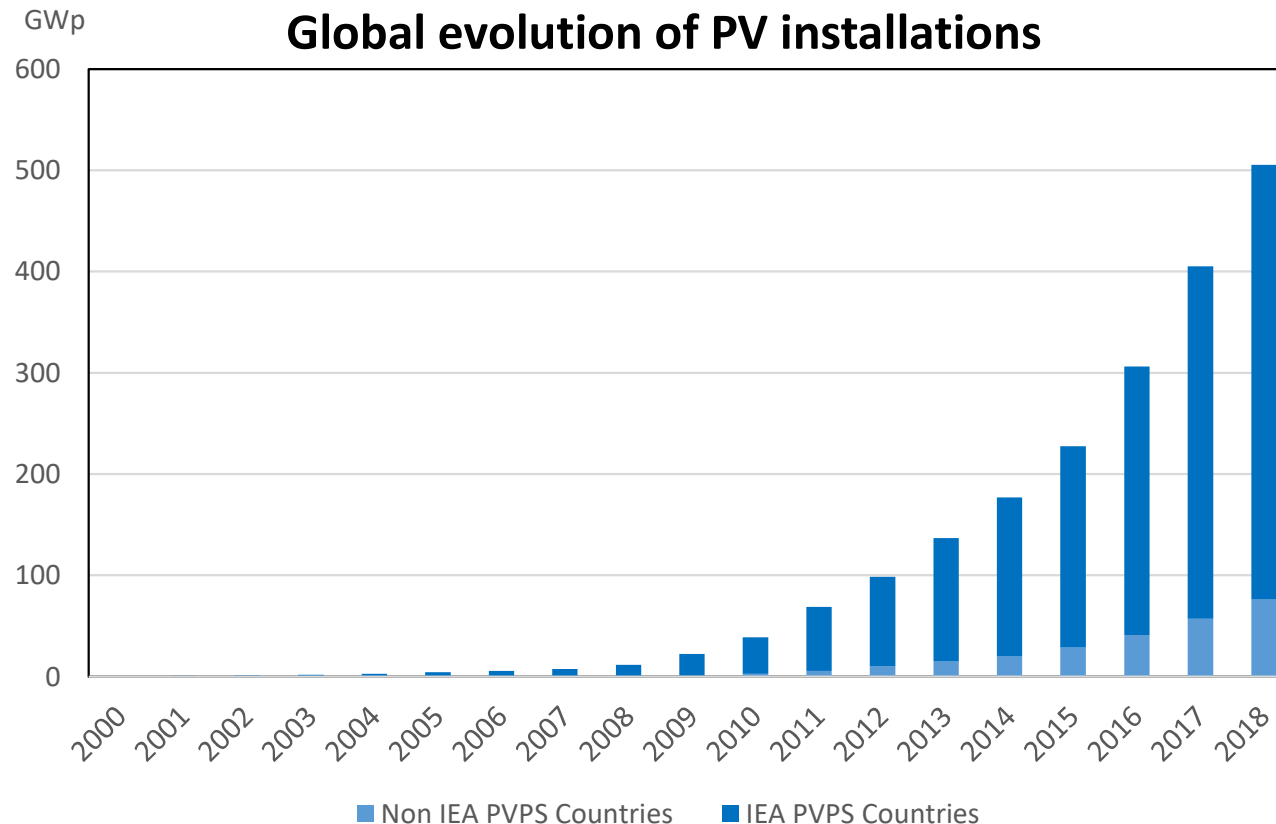


Evolution of PV Market

太陽光発電市場の発展



Izumi Kaizuka, Principal Analyst, RTS Corporation/ Deputy OA, IEA PVPS Task 1

(株) 資源総合システム/ IEA PVPSタスク1副代表・貝塚 泉

TEL:03-3551-6345 E-mail : kaizuka@rts-pv.com URL: <http://www.rts-pv.com>

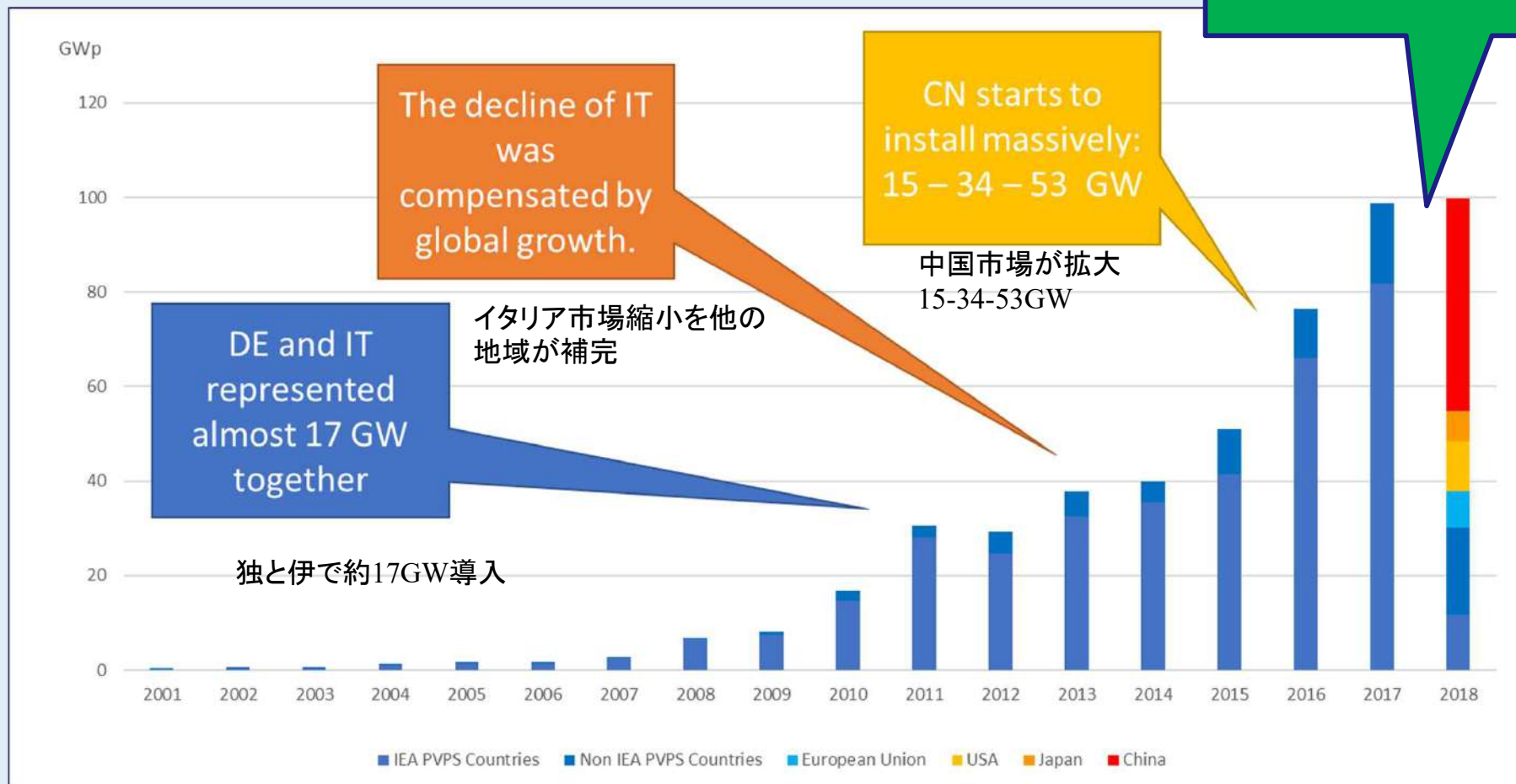




中国市場の縮小をその他の地域が補完

Annual installed capacity 年間導入量の推移

CN declines, compensated by global growth.

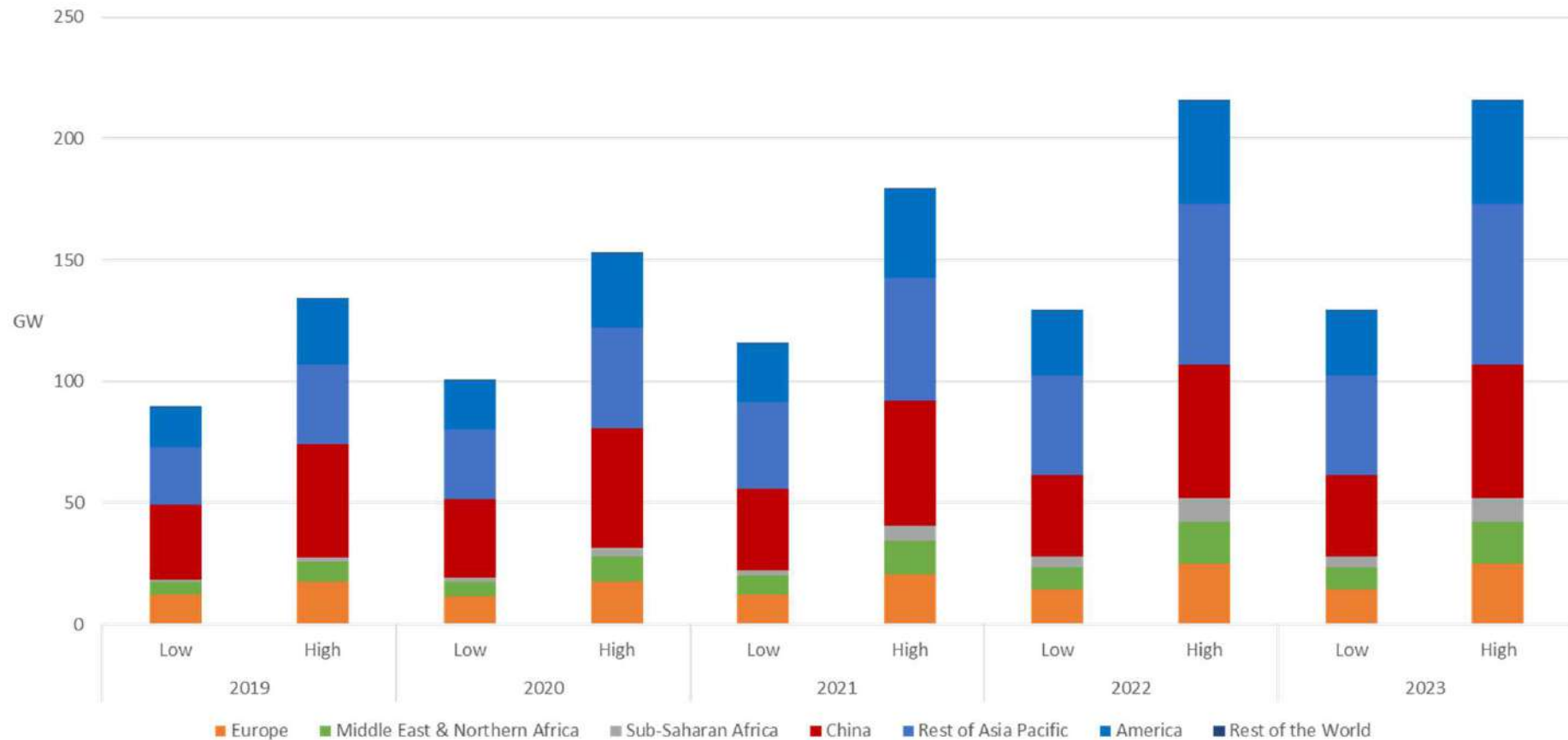


世界導入量の短期見通し

The PV Market Alliance

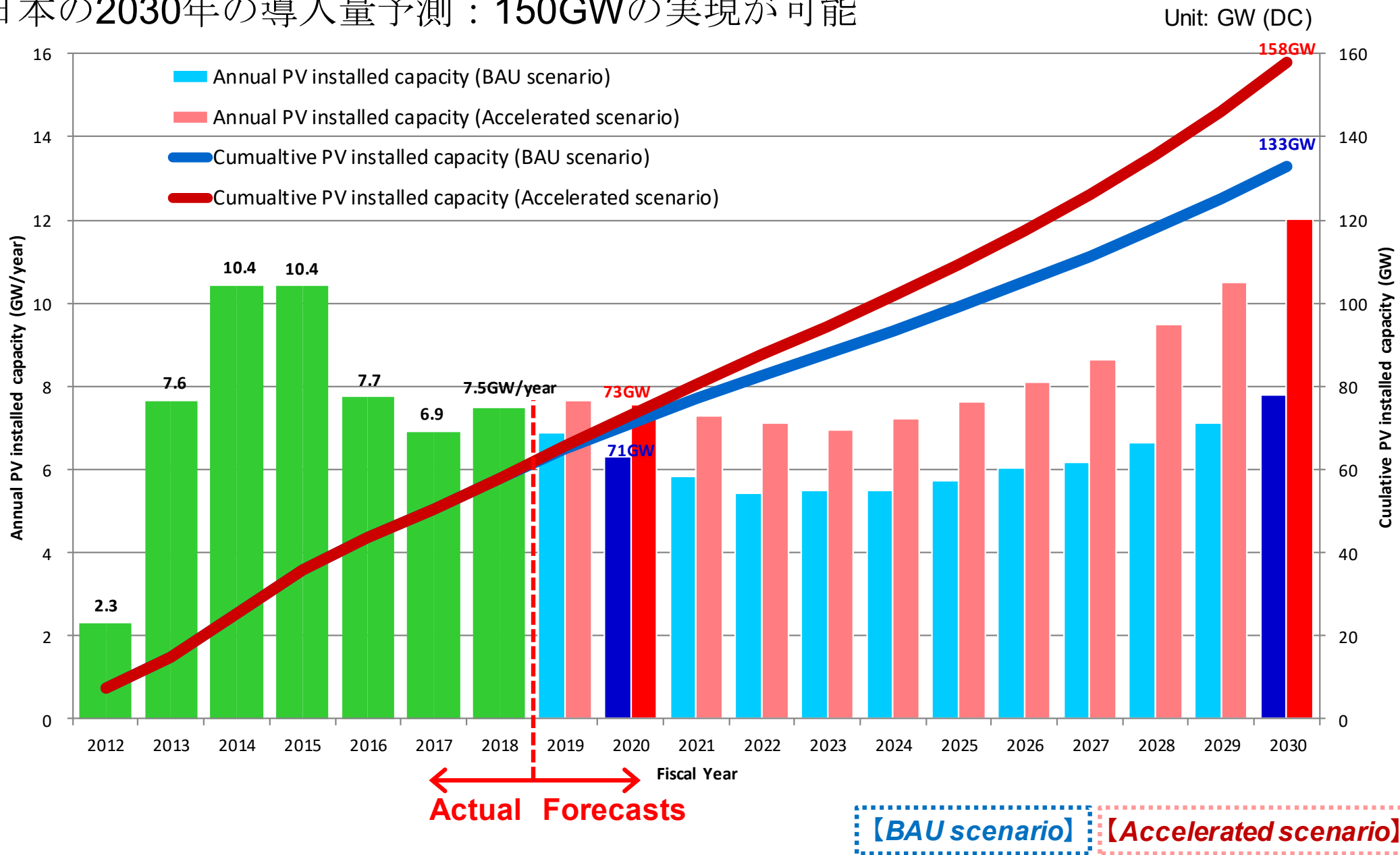


PV installations forecast



Forecast of annual and cumulative PV installed capacity in Japan toward FY 2030 (DC-based, **BAU scenario** and **Accelerated scenario**)

日本の2030年の導入量予測：150GWの実現が可能



[2030年日本の太陽光発電導入量150GWを実現するための行動計画 \(PV150行動計画\)](https://www.rts-pv.com/downloads/180225_rts_pv150_action_plan)

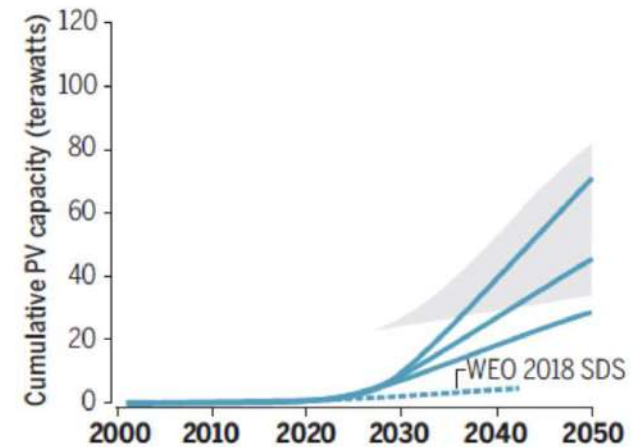
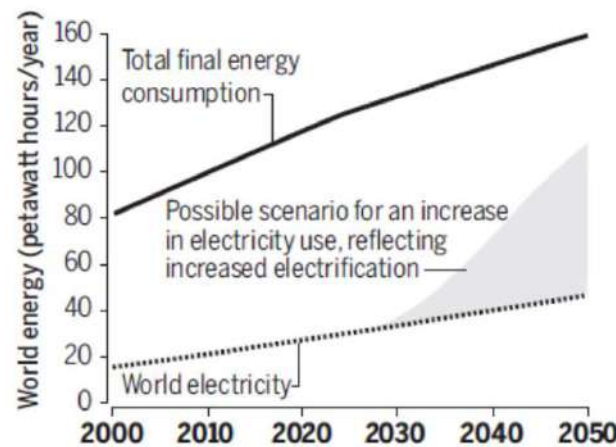
Discussion in the 2nd TW Workshop (NREL·AIST·FhG-ISE)

- Cumulative PV can reach 10 TW by 2030 and 70TW by 2050 2030年に累積導入量は70TWに
- PV LCOE dropped to 2.5 US cent/kWh by 2018 and PV has competitiveness in various region of the world 多くの地域で太陽光発電は競争力を発揮。2.5米セント/kWh
- 5 Key topics were identified for TW era TW時代の重要なトピックス
 - Grid and power electronics: technologies to match generation and consumption in wider area 広域での需給を実現する系統技術
 - Storage : Cost reduction and dissemination of Li ion batteries and pumped hydro have potential ストレージ
 - Sector coupling : Renewable energy for transportation and heating and cooling of the building セクタカップリング
 - Power-to-X and Power-to-Gas : Technologies to produce, store and use of Hydrogen, CH4 and other hydrocarbons 電力での水素やメタン生成
 - R&D and Manufacturing: Continue efforts to increase PV efficiency by R&D 研究開発と製造

Terawatt-scale photovoltaics: Transform global energy

Improving costs and scale reflect looming opportunities

By Nancy M. Haegel, Harry Atwater Jr., Teresa Barnes, Christian Breyer, Anthony Burrell, Yet-Ming Chiang, Stefaan De Wolf, Bernhard Dimmler, David Feldman, Stefan Glunz, Jan Christoph Goldschmidt, David Hochschild, Ruben Inzunza, Izumi Kaizuka, Ben Kroposki, Sarah Kurtz, Sylvère Leu, Robert Margolis, Koji Matsubara, Axel Metz, Wyatt K. Metzger, Mahesh Morjaria, Shigeru Niki, Stefan Novak, Ian Marius Peters, Simon Philipps, Thomas Reindl, Andre Richter, Doug Rose, Keiichiro Sakurai, Rutger Schlatmann, Masahiro Shikano, Wim Sinke, Ron Sinton, B.J. Stanbery, Marko Topic, William Tumas, Yuzuru Ueda, Jao van de Lagemaat, Pierre Verlinden, Matthias Vetter, Emily Warren, Mary Werner, Masafumi Yamaguchi, Andreas W. Bett



出典: Nancy Haegel, et. al, “Terawatt-Scale Photovoltaics: Transform global energy”, *Science* 31 May 2019, Vol. 364, Issue 6443, pp. 836-838