

Outline of NGCPV Project



【Background】

2008.6: The agreement was reached at a ministerial level* to promote EU–Japan cooperation in the field of **energy-related technologies**.

*the Minister of Economy, Trade and Industry of Japan and the EU Commissioner for Science and Research

2009.9: The agreement of coordinated call for collaborative project of **CPV**

【Purpose】

- address **climate change** and enhance **energy security**
- to develop concentrator photovoltaic cells aiming to achieve a cell conversion efficiency of more than **45%**

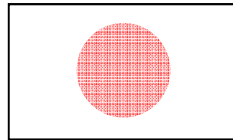
【Period and Budget】

2011.6.1 ~ 2014.11 (42months)

Japan : 650 million Yen (about 6.2 million Euro)

EU : 5million Euro (about 525 million Yen)

Scheme of NGCPV Project



METI



Funding



European Commission



Funding



【Principal researcher】

Professor Masafumi Yamaguchi
(Toyota Technological Institute)

- Toyota Technological Institute
- The University of Tokyo
- National Institute of Advanced Industrial Science and Technology
- Sharp Corporation
- Daido Steel Co., Ltd.

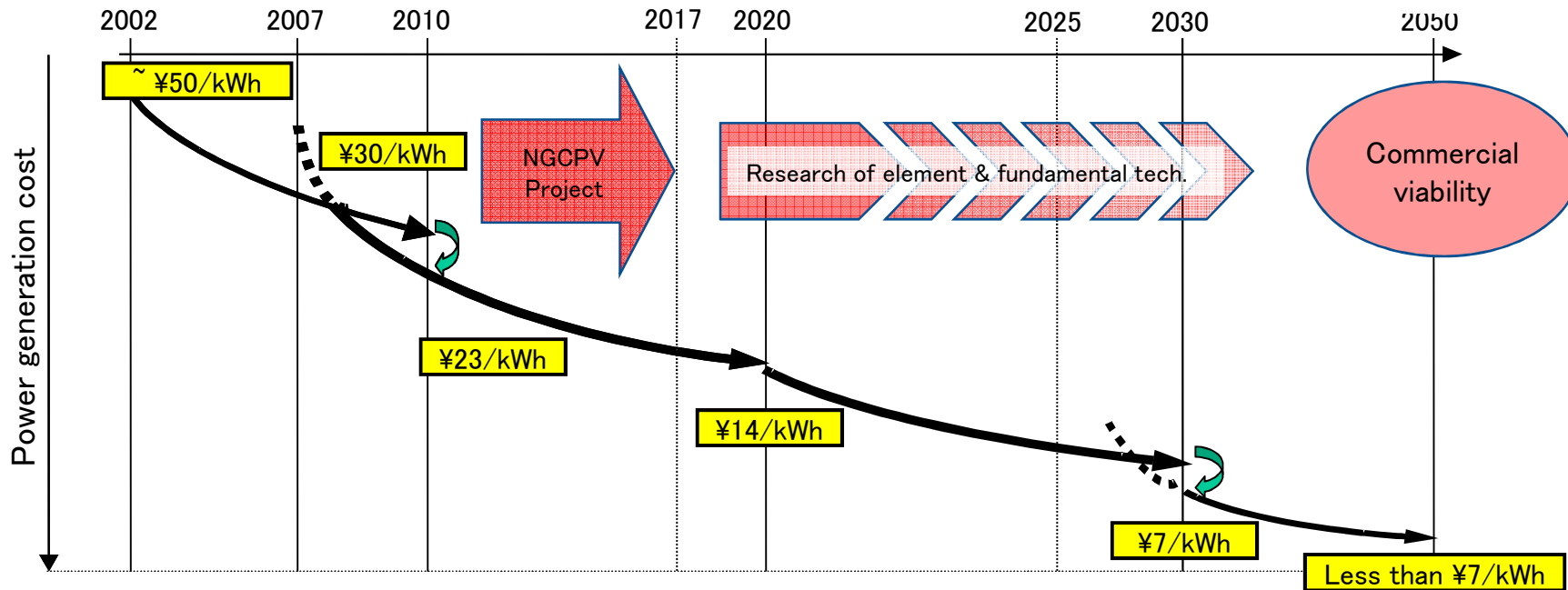
Coordinated
Projects

【Principal researcher】

Professor Antonio Luque
(Technical University of Madrid)

- Technical University of Madrid (Spain)
- Fraunhofer Institute for Solar Energy Systems (FhG-ISE)(Germany)
- Imperial College London (United Kingdom)
- Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) (Italy)
- BSQ Solar, SL. (Spain)
- PSE AG (Germany)
- French National Institute for Solar Energy (CEA-INES) (France)

Positioning of NGCPV in PV R&D Roadmap



Target (completion of development)	2010 or later	2020 (2017)	2030 (2025)	2050
Power generation cost	Equivalent to household electric rates (¥23/kWh)	Equivalent to commercial electric rates (¥14/kWh)	Equivalent to power generation costs (¥7/kWh)	Used as general power source (less than ¥7/kWh)

Source: NEDO PV R&D Roadmap (PV2030+), 2009



Expectation of NGCPV Project

- This joint project is the most important project since it is thought to be the core of “R&D on Innovative Solar Cells” program by NEDO.
- We aim to cause “innovation” in the technology development of PV through this project, and to make PV a main energy source.
- CPV technology is expected to have the biggest potential to realize high energy conversion efficiency among the other PV technologies.
- We will create the most advanced PV technology in the world with you, highest-level researchers from Europe and Japan.
- With study and successful result from this project, we can stimulate the development of the PV industry, and can also solve the current energy problems and the global warming issue.