



June 12, 2020

Towards the creation of a Solar Energy Society for 2050

Start of initiatives based on a Vision Co-Creation Partnership with Tohoku University

Sumitomo Metal Mining Co., Ltd. (SMM) and National University Corporation Tohoku University (TU) have begun initiatives aimed at 2050 based on a Vision Co-Creation Partnership. We will foster the minds of researchers who engage in their work with ambition through joint research, all with the aim of achieving our vision for the creation of a Solar Energy Society. We will also make contributions to solutions for energy and environmental problems that are global in scale through the creation of innovative materials science.

The Vision Co-Creation Partnership is an initiative with the goal of achieving a future society (ideal state) that Japan and the world should aim at, as well as fulfilling our role (vision). TU has previously engaged with other companies in similar endeavors. Giving consideration to the long-term approach they will be taking in their activities, it was decided they would begin this initiative with SMM, given the cooperative results we've had in research & development and the development of human resources over many years.

Through the discussions we have had over the past two years starting from the 2018 fiscal year, we have formulated our "ideal state" and "vision" for 2050. Backcast from that, we have laid out steps through which we are aiming at creating new value by engaging in the joint research & development of new materials and their commercialization and societal implementation.

Vision: Create a Solar Energy Society through the creation of innovative materials science Ideal state: Meet the world's energy demands with solar energy

[See attached drawing]

We already took the first step in April 2020 when we started to engage in joint research, and will continue to make progress to achieve our vision with the following three steps.

- ① Fostering research "seeds":
 - Perform joint research by engaging with promising research "seeds" from young TU researchers, utilizing the strengths of SMM. Consider expression of function, possibility of practical implementation.
- ② Research & development for practical implementation:

 Perform necessary practical research for usage of developed materials' in end-use.

Additionally, plan for the mediation aimed at end-use, including collaboration with other universities, national research & development corporations, etc.

③ Societal implementation:

Collaborate with downstream industries and aim at societal implementation and the creation of a solar energy business.

We will progress this initiative utilizing TU's strengths in materials science, broad knowledge and inventiveness, and SMM's strengths in the 3-business collaboration of mineral resources development, non-ferrous metal smelting and refining and advanced materials, as well as in metal material research & development.

Additionally, we're aiming at achieving our vision and contributing to society with the development of innovative materials, and we anticipate contributions to increases in motivation for young researchers and the development of human resources through ambitious research that isn't limited by short-term results.

End

Address inquiries concerning this News Release to:

[attached drawing]

Vision

Create a Solar Energy Society through the creation of innovative materials science

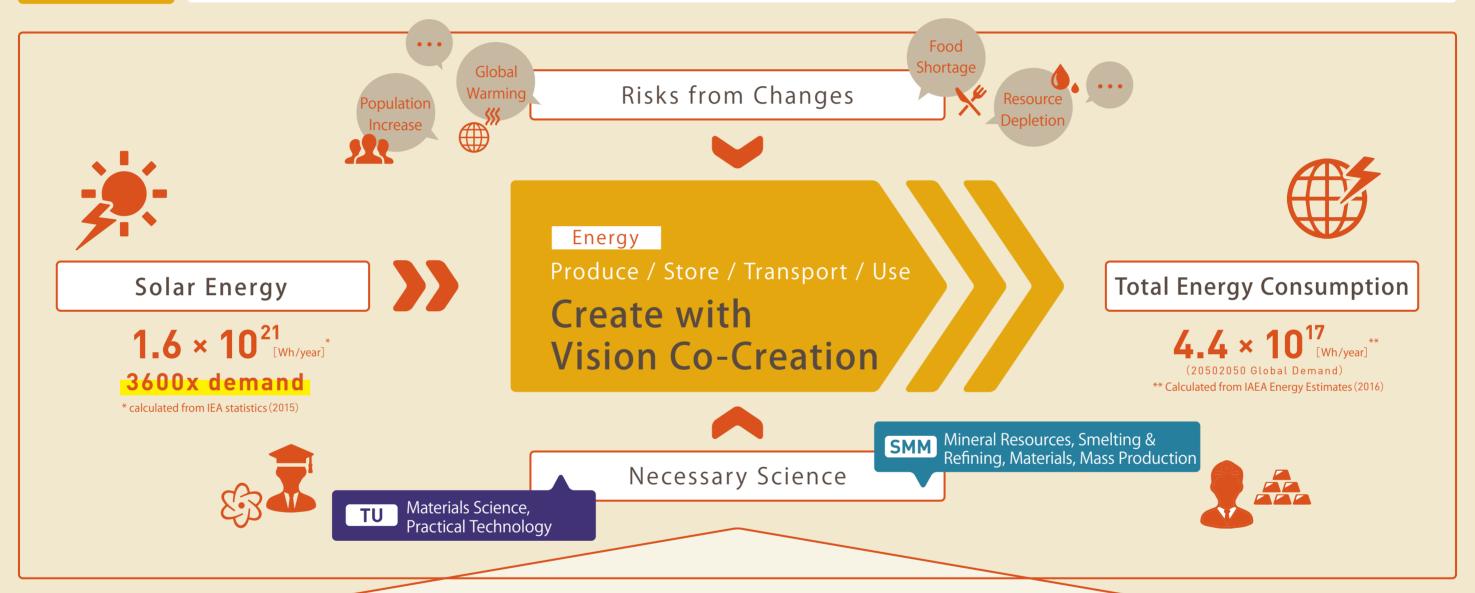
Ideal State

Meet the world's energy demands with solar energy

Contribution to SDG's







Broadly debate our Ideal State for the Future (2050) with steering committee

