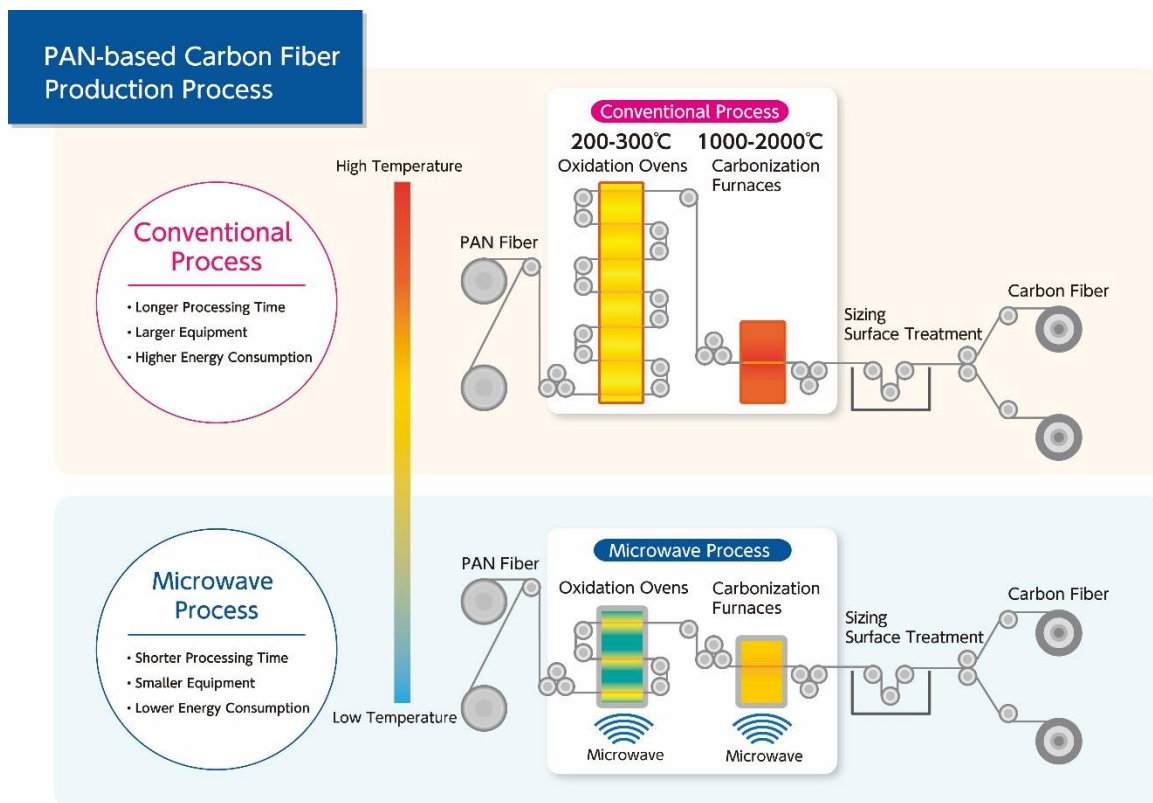


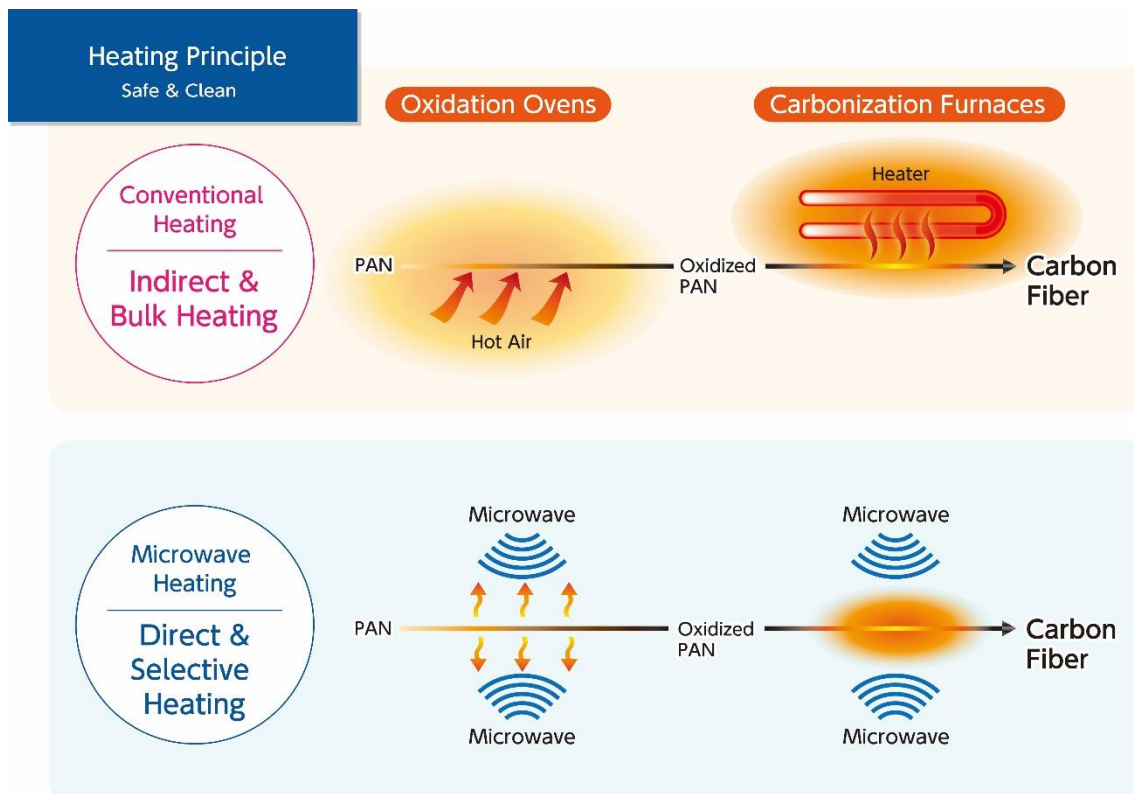
## Mitsui Chemicals and Microwave Chemical Establish an innovative Eco-Friendly CF manufacturing basic technology using microwave

Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: HASHIMOTO Osamu) and Microwave Chemical Co. Ltd. (Suita, Osaka; CEO: YOSHINO Iwao) have established an innovative Eco-Friendly Carbon Fiber (CF) manufacturing basic technology using microwaves.

This is an innovative CF manufacturing basic technology based on using microwaves to heat the fibers, both during the oxidation process – the most energy-intensive part of CF production – and also during the subsequent carbonization process. As well as employing more compact equipment, the new technology cuts energy consumption by approximately 50 percent and offers a substantial reduction in processing time compared with the conventional method. While using renewable energy would yield a reduction in CO<sub>2</sub> emissions. In order to further advance the technical verification, we will also consider the introduction of demonstration equipment.

Pursuing decarbonization throughout the value chain via life cycle assessments (LCAs), both Mitsui Chemicals and Microwave Chemical intend to continue meeting the need to promote carbon neutrality in the industries where CF will be applied in the future, such as the mobility sector.





For further details, please refer to the news release dated November 18, 2021.

[https://jp.mitsuichemicals.com/en/release/2021/2021\\_1118.htm](https://jp.mitsuichemicals.com/en/release/2021/2021_1118.htm)

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