

Mid-term Management Policy INNOVATION PLAN 2021

We have formulated "Mid-term Management Policy" for FY2019 - FY2021 in order to make clear the direction of management and contribute to society furthermore through a sustainable growth in future with enhancement of corporate value.

Mid-term Management Policy (FY2019 – FY2021)

In past few years, we have suffered hard situation we have never experienced before because the demand of graphite electrode remained sluggish and sales price fell sharply due to breaking down of the balance between supply and demand at steel industry.

We have put priority on price as the sales strategy of graphite electrode with review of the production system and increased share of carbon fiber products to overcome the hard situation. In FY2018, we achieved large improvement in earnings due to recovery of demand and price for

graphite electrode. However, market situation in the future is unpredictable.

Through the hard experience, we decided to formulate Mid-term Management Policy

"INNOVATION PLAN 2021" aiming to establish "Stable and profitable business base under any economic situation."

In the Mid-term Management Policy, "Reformation of business portfolio" and "Reinforcement of business base" are core target and we will aim to enhance profitability and corporate value with efforts of all Nippon Carbon Group.

At the same time, we have decided "Environment Policy" and are improving environment management system. We are taking environmental protection into account for our business operation and contribute to energy saving, realization of law carbon society through our products.

Surrounding Environment and Products of Nippon Carbon Group

Electrification of power train at the automotive industry is proceeding at full swing. 3-key components for electrification are battery, motor and inverter so it is expected that anode materials for lithium ion battery as well as magnet as main parts of motor and power semiconductor industry used for inverter will grow.

Moreover, semiconductor and its related industries are growing faster than ever because of socalled 4th Industrial Revolution namely IoT, AI and Big Data.

Aircrafts which silicon carbide continuous fiber composite materials are used for its engines are increasing production favorably and it is scheduled that 2000-units engines will be manufactured in CY2020. Furthermore, it is decided that silicon carbide continuous fiber composite will be used for new type engine which will be commercially operated in CY2020.

Our carbon, graphite materials and silicon carbide continuous fiber are indispensable materials for the aforementioned customers and our products are supporting advanced industries as important parts for the production facilities and raw materials.



Nippon Carbon Group Policy

1. Reformation of business portfolio

We will execute strategy suitable for each business portfolio and aim to ensure stable earnings.

- (1) Expansion of carbon fiber products business
 - Focusing on growing industries and executing sales promotion
 - Development of global market for C/C composite
 - Reformation of production process and expansion of production capacity by active investment in production facilities
- (2) Development of anode materials for lithium ion battery as a main business category
 - Development of new EV grade anode material
 - Establishment of innovative technology for production
- (3) Maintaining the optimal system of production for graphite electrode business
 - Building the best production system according to market situation
 - Improvement of facilities and securing raw materials according to the flexible production system
- (4) Increase profitability of specialty carbon business
 - Shifting to high value-added products
 - Restructuring of production system
- (5) Action to an active demand for silicon carbide continuous fiber
 - Complete maintenance of production facility
- (6) Expansion of industrial machinery business
 - Promotion to the field of fine chemical and medical supplies
 - Entry into plant designing business

2. Reinforcement of management base

In order to maximize the synergy effect in Nippon Carbon Group, we will push ahead with development of new materials and cooperative work between production and sales stronger than ever.

We will put priority to secure excellent personnel necessary for management base in the future and study new personnel management system.

- (1) Strengthening group synergy effect
- (2) Securing and training of personnel
- (3) Complete corporate governance and compliance