

# Value Creation

## History of Value Creation

Arisawa has contributed to society for 114 years by developing its unique technologies of "weaving, coating, and molding".

1900
1950
2000

**First foundation**

**Starting "weaving" technology**

The history of Arisawa began in 1909 with the production and sales of Battenberg lace. As it is said that more than 7,000 people of about 27,000 people of Takada City (presently part of Joetsu City) were engaged in Battenberg lace making, this company's foundation coincided with the trend.

In the same year, the company was renamed Nihon Braid Co. Ltd., which inspired the company's original logo "NB". In 1910, the company established Toyo Braid, a joint-stock company that domestically produces braids (fabric tapes)—the basic material for Battenberg lace—which were imported before then, leading to the invention of "weaving" technology. The company had 800 weaving machines and 600 artisans at its peak and was renamed again to Nihon Braid in 1919.

Affected by the aftermath of the Great Depression, Nihon Braid was forced to be reorganized due partially to the rise of low-priced Chinese Battenberg lace. When Nihon Braid was reorganized to become a privately managed firm, Arisawa Seisakusho, in 1930, Japanese industries were at the bottom. However, as the encouragement policy set by the Japanese government for such domestic products as electrical insulating tapes provided a supportive backdrop, the company gained top-rating clients, such as Toshiba and Mitsubishi, and established the foundation of what Arisawa is today. There was also a time when the company was boosted by fastener tapes --other narrow woven fabrics.

During World War II, the company shifted its main production to electrical insulating tapes and fabrics for military use to get through the tough times.

**Second foundation**

**From "weaving" to "coating" and then to "molding"**

In 1949, Arisawa Seisakusho became Arisawa Mfg. Co., Ltd. and introduced the glass cloth manufacturing equipment, which became a major turning point for the company. After entering the glass tape fabric market, the company started testing the production of glass cloths for laminates in 1951. This helped the company develop its "weaving" technology.




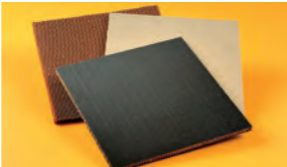
The company launched the testing of "coating" technology around the same time and started the mass production of glass cloth products with silicone rubber applied in 1958, which it can be said was the beginning of its full-scale coating business.

In 1961, immediately after being listed on the 2nd Section of the Tokyo Stock Exchange, the company started producing not only impregnated paper for decorative boards and ski sheets but also products made by applying its "molding" technology such as filament winding and pultrusion. The company also launched the prototyping of reflective aluminum screens at the request of Sony and started their shipments in 1972. They became the company's primary business, which defined one of its key moments.

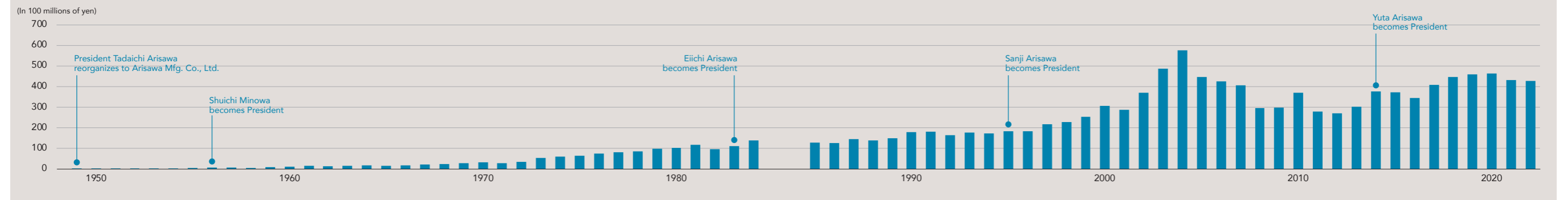
By not only improving the basic technologies of "weaving, coating, and molding" but also integrating them and even introducing another technology of "combining", the company has produced products that meet the requirements of the times. The major products include polarizing films, materials for flexible printed circuit boards, honeycomb sandwich panels for aircraft, Fresnel lenses, and 3D filters.

**History of the major affiliates**

- Arisawa Sogyo 1974
- Arisawa Jushi Kogyo 1966
- Polatechno 1991
- ColorLink Japan 2007
- Protec Arisawa Europe / Protec Arisawa America 2010
- ThinFlex / TopFlex 2009
- Satosan 2017

### Transition of sales





# Value Creation

## Value Creation Process

Arisawa started its business with the making of one braid about 100 years ago. We at Arisawa have supported various kinds of product-making by developing products using glass fiber and other new materials and innovating technologies in response to the needs of the times. With responsibility and pride as a company involved in the initial stage of product-making, we will move forward more smoothly and actively to change product-making around the world for the better in the next 100 years.

Our group's current major product segments include electronic materials, industrial structural materials, electrical insulating materials, and display materials. Through value-creation activities to support these segments, we offer products and services that help people have richer lives. We are committed to creating social and economic values by tackling the four issues "contribution to a decarbonized society", "development of diversified human resources and improvement in job satisfaction", "promotion of circular economy", and "enhancement of governance" through activities to be a strong company that can achieve sustainable growth.

**External environments (social issues)**  
 -Climate change -Resource depletion -Ecosystem collapse  
 -Tightening of regulations -Diversification of values and lifestyles  
 -Aging society -Divisions of the supply chain  
 -Exposure of human rights issues -Mobility of workplaces  
 -Progress of innovation -Exposure of geopolitics and cyber risks

### ⑤ Materiality / ESG Policy

P.19~20

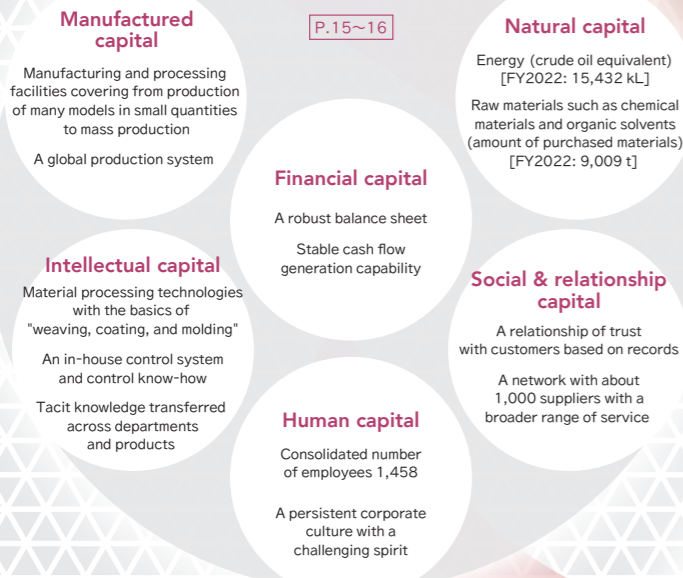


# C I C

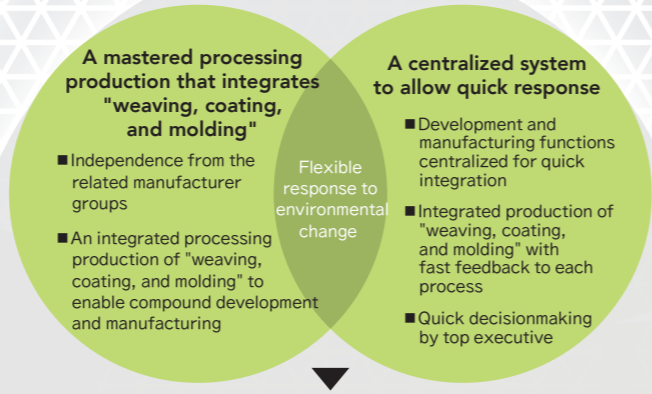
"Create, Innovate, and Challenge"  
 Better today than yesterday better tomorrow than today

### ① Management Capital (Input)

P.15~16



### ② Competitive advantages and business model evolution

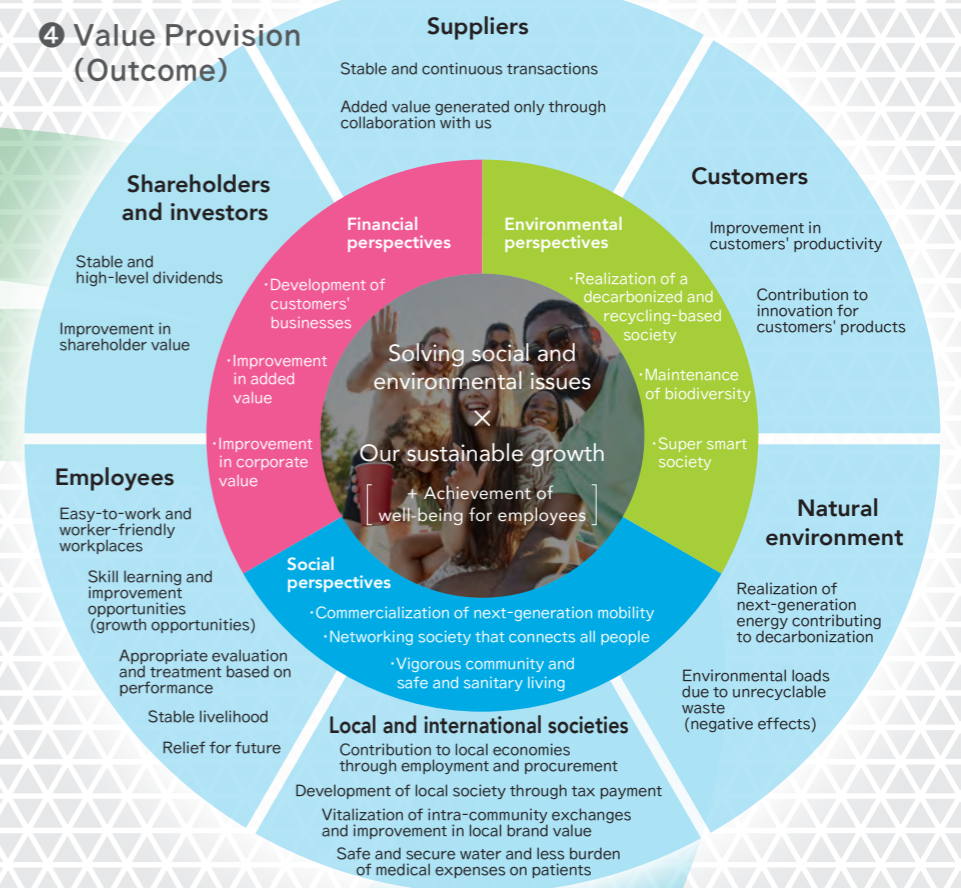


Existing businesses utilizing competitive advantages + Innovative new businesses based on the CIC spirit

Evolution of the mid-term model

- Evolution into a proposal-based business through active discovery of needs
- Evolution into an industry front-runner leading toward a decarbonized society
- Evolution into "weaving, coating, and molding" + "combining"
- Evolution into a global manufacturer from Joetsu to the world

### ④ Value Provision (Outcome)



### ③ Products contributing to a sustainable future (Output)





## Value Creation

### Management Capital to Support Value Creation

With the capital built up through repeated growth as our foundation, we will further increase our competitive advantages. While evolving the value creation process through business strategy management and active initiatives on ESG issues, we raise our corporate value.

#### Financial capital

We have not only working capital but also financial capital that allows stable and flexible operation to implement capital investment, M&A, and DX investment for growth as necessary. Major financial resources are flexibly gained from cash flow from operating activities and borrowings from financial institutions.

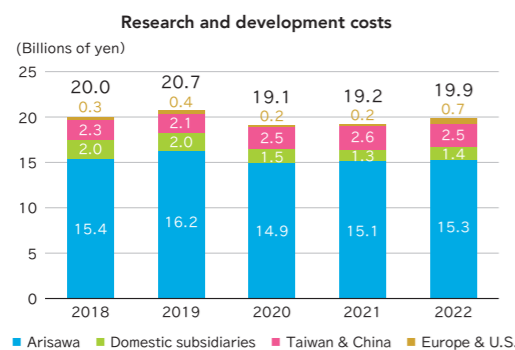
We set an ROIC goal of 6 % in our mid-term management plan, aiming for profitability enhancement and capital efficiency improvement. Specifically, we first maintain a healthy cash flow through business and secure financial soundness, and then actively allocate the capital to new business investment and research and development investment for further growth. We will return the resulting surplus appropriately to our stakeholders.

#### Intellectual capital

Since our foundation, we have improved our core technologies of "weaving, coating, molding", and "combining" through trial and error to fulfill customers' needs. We have many experienced engineers who have been involved in development to highly integrate these technologies and optimize the functions.

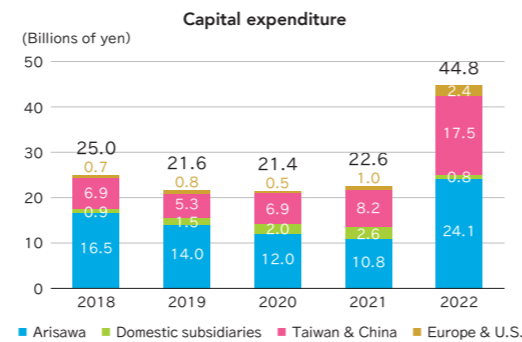
Our unique technologies made through research and development with new innovations based on the experiences passed down from senior employees to junior employees are positioned as important assets that contribute to the growth of customers' businesses. By understanding the characteristics of products required by customers and the in-house manufacturing process and incorporating our core technologies cultivated over the years, we proceed with obtaining an optimized design.

We established a "15 % culture", where employees engaged in development can spend 15 percent of their working hours studying what they like, and also set up a program called "the new product development award", which is one of the incentives to employees who contribute to the development of new products. We will continue to improve the environment so that more new products and businesses are born.



#### Manufactured capital

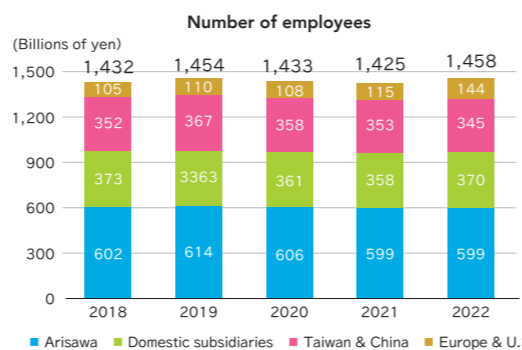
We use facilities that can produce many models in small quantities to better cater to various customers' needs. With facilities that can handle medium to mass production to respond to the expansion of the scale of customers' businesses and an integrated production system, from earlier and post-processes to inspection, we deliver advanced quality control and stable supply. In addition, in-house development of a control system for production facilities achieves production efficiency improvement and cost reduction.



#### Human capital

Our executives and employees are traditionally serious, sincere, honest, patient, and hungry for challenges, which we can say has supported more than 100 years of our history. By integrating knowledge and technologies cultivated since our foundation step by step through trial and error, we have offered highly reliable products to customers.

We have multi-skilled operators who can handle various products, trained operators with adapting capabilities, and development specialists, and many of them have been long employed. Turning tacit knowledge into explicit knowledge helps us build a stronger human network.



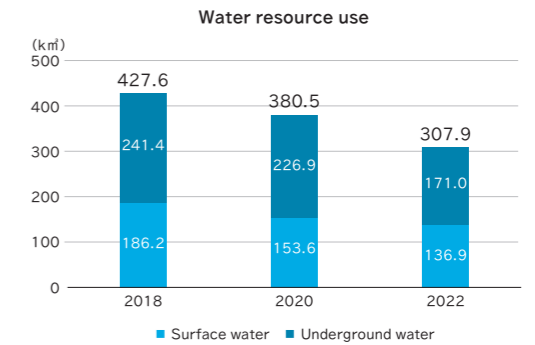
#### Social capital

Based on the relationship of trust with suppliers, we grasp the circumstances of each industry and take such measures as advanced procurement of risk materials. We have also diversified suppliers to establish a stable supply chain. Promoting CSR procurement with respect for human rights, labor rights, and the environment while ensuring material quality and stable supply allows high-quality and stable product-making. With the importance placed on continuous partnership with suppliers based on trust, we conduct procurement for mutual sustainable growth.

At the time of our entry into the FRP field, when we only had weaving technology, we sincerely focused on prototype-making to materialize requests while being given technical advice by heavy electric manufacturers. These experiences helped us build a strong relationship of trust with clients. A person from a trading company once told me, "Mr. Arisawa, your company is a department store of prototypes." We would like to cherish the relationship with clients who contact us first in the consideration or prototyping phase, which is a great asset to us.

#### Natural capital

In the manufacturing process, we introduce renewable energy, improve energy use efficiency, and reduce CO<sub>2</sub> emissions, water resource use, and waste disposal.



### Rebranding

On April 1, 2023, Arisawa renewed its logo and announced the brand message shown below. The company produces and develops "future pieces" to create its own value.

LOGO

Before ( ~2023.03 )

"NB" is the design logo of its former company Nihon Braid. The company stayed long with this logo for about 100 years.

After ( 2023.04~ )

The triangle is designed like "A" of Arisawa. Its three sides represent the company's core technologies of "weaving, coating, and molding", and its three colors represent "cherry blossoms", "sky and sea", and "mountains and fields" of Joetsu City. We put our thoughts into the logo, hoping to produce something new and unique to Joetsu based on these three technologies.

CORPORATE MESSAGE

### Where Future Pieces Arise

The value of a great invention or a great product serving our daily life may vary significantly, depending on the comprising material or parts. The responsibility of a player in the first stage of manufacturing is huge and heavy. Arisawa is fully aware of this.

We manufacture a variety of pieces of material and parts for finished products that are not visible to many consumers. But they certainly exist as indispensable part of our daily life. Our products shore up the continuing advancement of technology, by providing the basis for cutting-edge technology and the footing for further technological development. Arisawa, in a way, is the first runner in a relay of manufacturing who helps blaze a path to the future.

Such future-oriented pieces will be produced here and form distinctive shapes.

Weaving, coating and molding. That is what we basically do to manufacture our products. While boosting technological innovation, we strive to be a corporation that pays keen attention to the realization of a society friendly to people and the earth. When the first step of manufacturing becomes advanced, the world of manufacturing will undergo vast changes.

Located at Takada in Joetsu City, an area under severe winter weather but otherwise blessed with the beauty of nature, Arisawa will continue producing original pieces, dreaming forward to the exciting future.

## Value Creation

### Sources of Value Creation (Business Model)

We aim to create a sustainable society and ensure its growth by creating a business model with originality while tackling social issues and then providing various values to our stakeholders.

#### Initiatives toward business model evolution

##### Improvement in sustainable corporate value

To efficiently operate business portfolio management for further improvement in corporate value, we focus on capital cost-conscious management with ROIC set as an indicator. As it is important that our management direction is properly understood and empathized by our stakeholders, we also provide opportunities for active dialogue.

##### Promotion of human resource strategy

To keep offering products and services that exceed the expectations of customers and society, we deploy a human resource strategy that encourages, supports, and nudges motivated employees for their growth. We also promote a comprehensive organizational strategy so that employees can work lively under the new Arisawa brand.

##### Enhancement of competitiveness for value creation

We enhance our competitiveness by creating new value through the active promotion of carbon neutrality and development activities targeting new growing markets.

##### Quality improvement

Utilizing know-how cultivated through APS (our production management system), we will improve our services and quality including ones in new fields.

##### New value creation and challenge for new fields through co-creation

We will create new value through co-creation by finding more partners who can share the same empathy through open innovation. We will also expand our business into new fields to increase value proposition for further expansion of corporate value.

##### Promotion of coexistence and shared prosperity with the environment

Toward long-term coexistence and shared prosperity with society, we promote eco-friendly product and technology development to actively create new value.

### Direction of business model evolution

We expand the areas of proposal-based business through the active discovery of needs by leveraging the experiences in the existing business fields with competitive advantages. We develop needs with our innovative proposals and high-quality product-making based on the CIC spirit to create new businesses.



### New Initiatives for Value Creation

# ARISAWA INNOVATES!

With eyes on the next 100 years

The Innovation Center is scheduled for completion in December 2024 toward growth for 100 years to come

Our Innovation Center aims to be a base for open innovation where unprecedented new value is created through the integration and co-creation of technologies with other companies and research institutes. To achieve this goal, we introduced a design that stimulates more communication throughout the company.

For example, the office floor for the engineering division is located on the circulation to our cafeteria. To share ideas immediately, a workshop space is installed next to the laboratory. This center with an open and connected space is designed in the image of an igloo. By breaking down silos to share one space with people from different departments and fields, we create a place where people and ideas come and go.



Perspective drawing of the exterior of the Innovation Center (above-ground 3-story building)