

Environmental / R&D Strategies Web Conference

Intellectual Property Strategy

IP activities that increase values

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Yuji Toda

General Manager, Intellectual Property Division
Hitachi, Ltd.

1

Strengthen IP globally

- IP has been strengthened globally by welcoming Hitachi ABB Power Grids and Hitachi Astemo to the Hitachi Group

2

Strengthen environment-related inventions and expand business opportunities

- Visualization with "IP library" that links IP to environmental value, and scaling to society

3

100th anniversary of IP activities: Towards the next 100 years

- Utilize accumulated IP knowledge for business growth and social contribution

Intellectual Property Strategy

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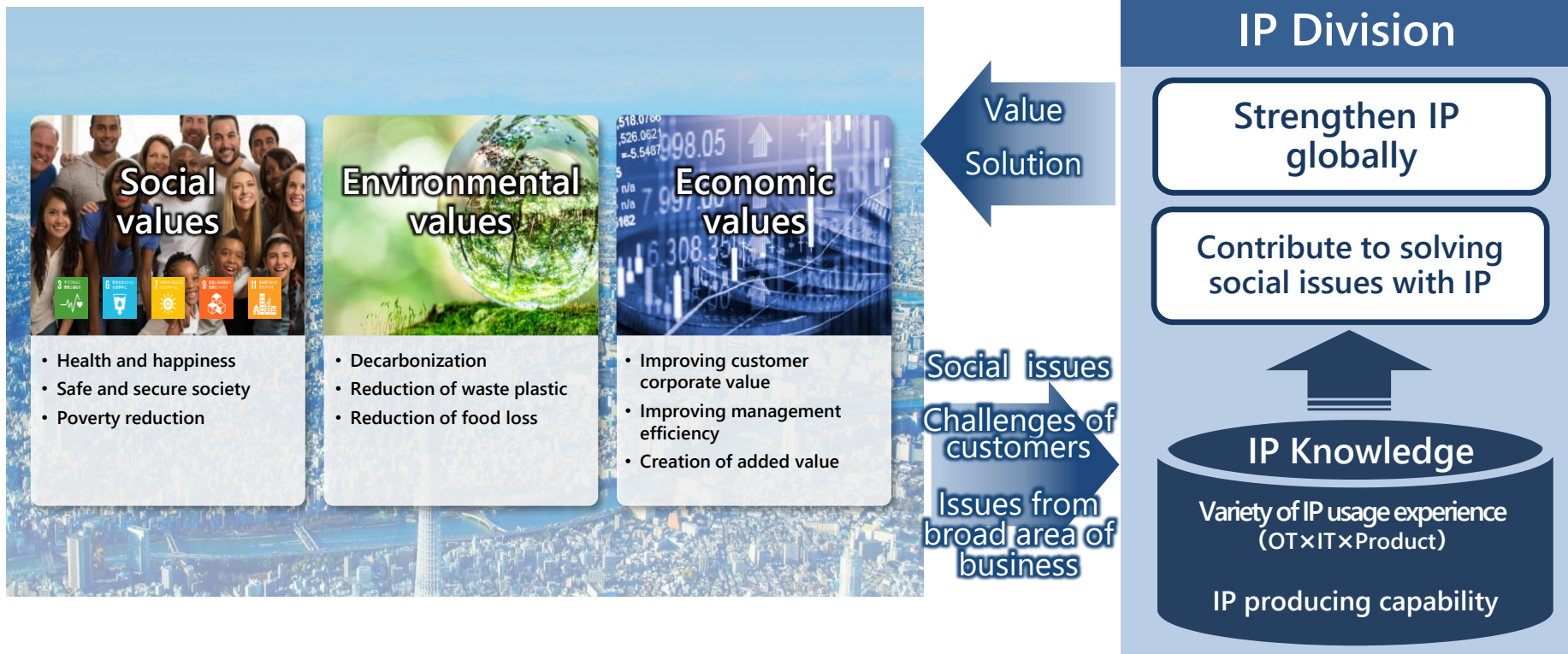
1. Strengthen IP globally
2. Strengthen environment-related inventions and expand business opportunities
3. 100th anniversary of IP activities: Towards the next 100 years

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Become a global leader through IP activities that increase values



1-2. Expansion and achievements of IP activity fields

Promote IP activities of competitive strategy, collaboration strategy, and IP for society

Competitive strategy

[Role of IP]

- Enhance competitiveness



**"Minister of Economy, Trade and Industry Awards"
at FY2020 IP Achievement Awards**

First award for IP activities such as
competitive strategy and collaboration strategy

Collaboration strategy

[Role of IP] - Promote partnership



Hitachi Hokkaido University Lab

Declared license-free patent for
"Mother and Child Health Survey"
invented with Hokkaido-U. and Morinaga^{*4}

IP for society -Contribution to society-

[Role of IP] - Design future society



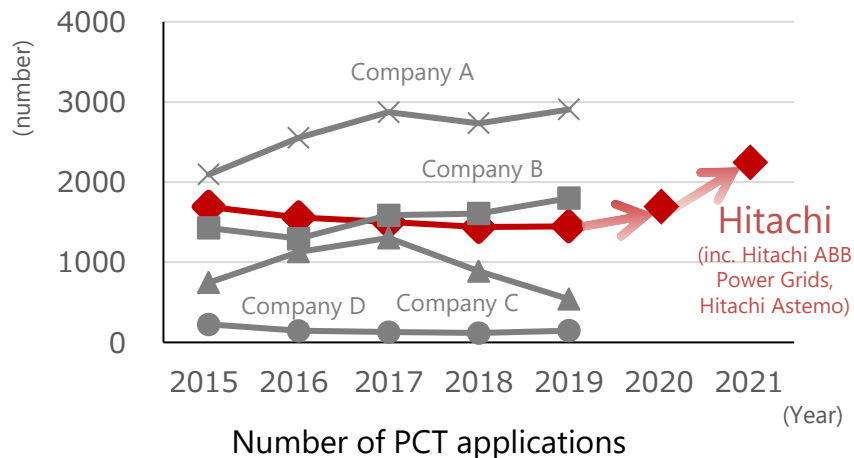
*1 JP patent 6767353 *2 JP patent 6397581 *3 WIPO: World Intellectual Property Organization, WIPO GREEN: Environmental Technology Transfer Platform

*4 These patents were obtained through the project that was demonstrated in Iwamizawa, Hokkaido.

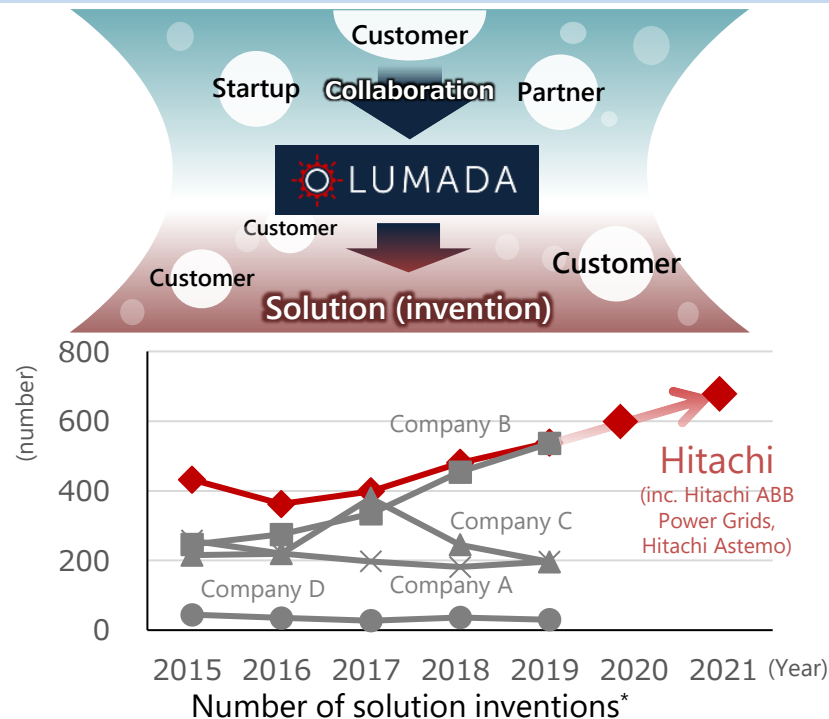
1-3. Strengthen IP globally (1)

Strengthen Patent Cooperation Treaty (PCT) applications and solution inventions to become a global leader in social innovation companies

PCT applications: From decrease to increase due to strengthening measures



Solution inventions: to become global No. 1 in quantity and quality



Top 100 Global Innovator Awarded for 10 consecutive years

Evaluated by Clarivate based on patent data held by Clarivate and presented to the world's most innovative companies and institutions

Evaluation item (patent): **Number** **Global** **Impact** etc

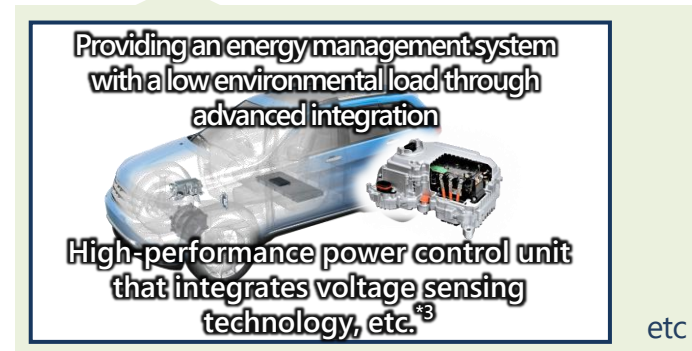
* Internal investigation. Number of patent publications in Japan, US & Europe with IPC:G06Q, G06F17 & G06N etc. The number of cases other than Hitachi is predicted from the application tendency of each company

1-4. Strengthen IP globally (2)

IP has been strengthened globally by welcoming
Hitachi ABB Power Grids and Hitachi Astemo to the Hitachi Group*1



Patent portfolios are strengthened in the field of xEV, AD / ADAS, advanced chassis, etc.



*1 About 10,000 cases increased by Hitachi ABB Power Grids, about 4,000 cases increased by Hitachi Astemo (both are the total number of existing patents and patent applications in the world) *2 EP patent 3114802, US patent 10574480, and CN patent 106134133 *3 US patent 9693476
xEV: Electric Vehicle AD/ADAS: Autonomous Driving/Advanced Driver-Assistance Systems

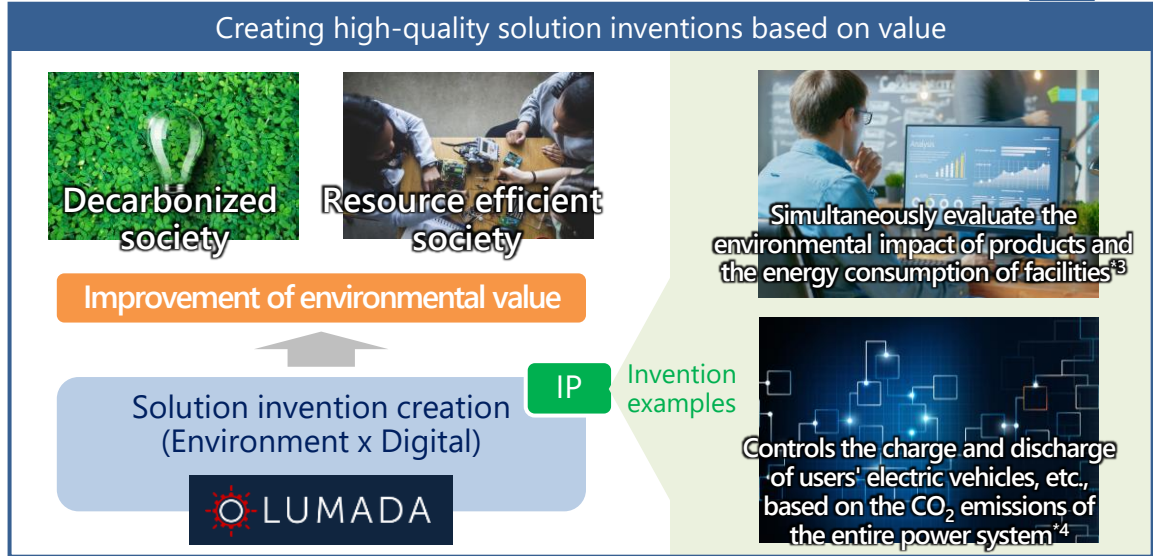
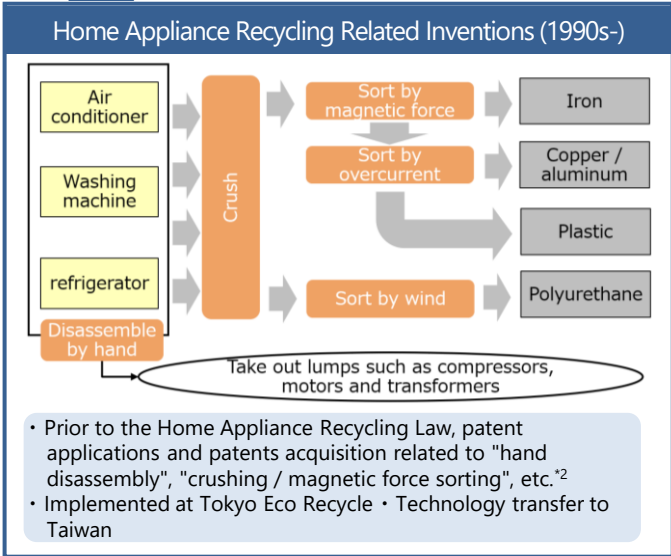
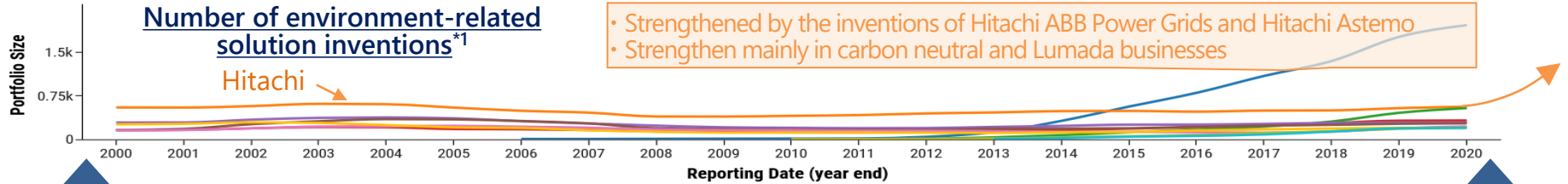
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2-1. Strengthen environment-related inventions and expand business opportunities

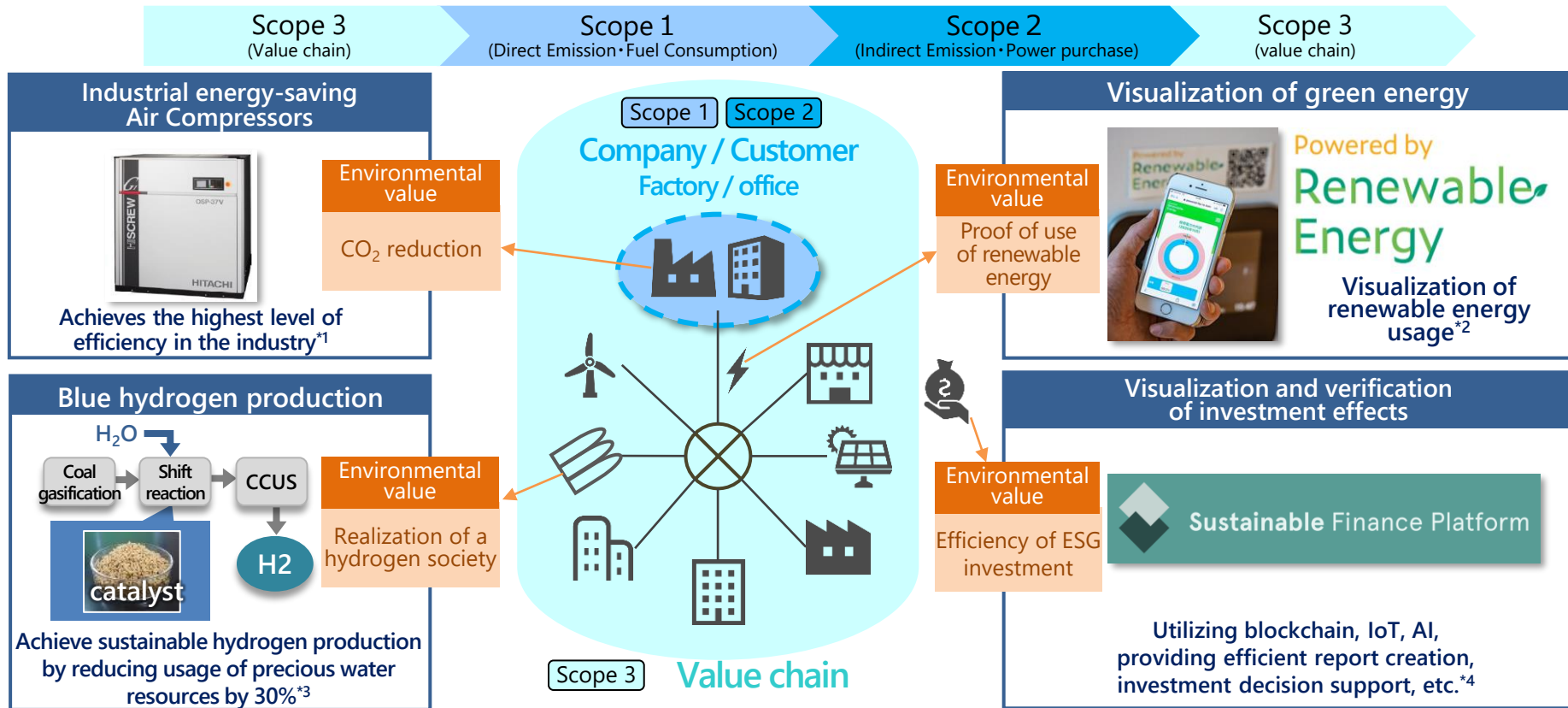
Strengthening the invention of environment-related solutions through value-based collaboration with an awareness of the circular economy



*1 Created by Hitachi IPD using PatentSight of LexisNexis. Search by "Common Patent Classification (CPC) is Y02" and "International Patent Classification (IPC) is G06Q" *2 JP patent 3206586, 3234939, etc *3 JP patent 4160457 *4 US patent 8330415

2-2. Example of solution invention based on environmental value

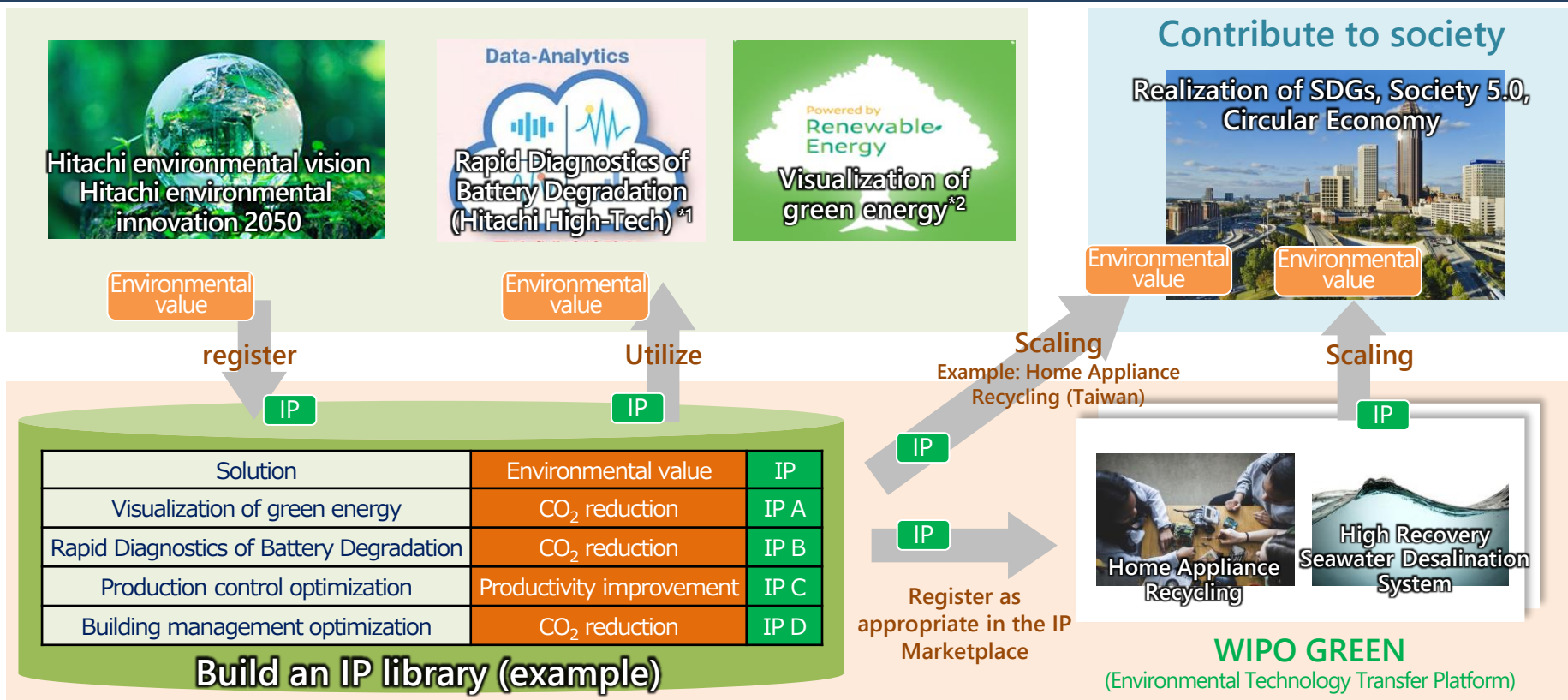
Creation of inventions that contribute to carbon neutrality, corresponding to scopes 1, 2 and 3



*1 JP patent 6767353 *2 JP patent application 2019-073173 *3 JP patent 5535990 *4 EP patent application 19196341.2

2-3. Contribute to the expansion of business opportunities with IP

Visualization with "IP library" that links IP to environmental value, and scaling to society



*1 PCT application JP2020/028961 *2 JP patent application 2019-073173

2-4. Challenge to form a global ecosystem using IP

Based on the concept of IP for society, we will form an ecosystem that improves environmental value using IP as a catalyst.

OSS Community

"Open Invention Network"

Participated as TAC^{*1}

Recommendation to add OSS protection

United Nations agency

WIPO | GREEN

Participation as a core member
Leading the creation of
a mechanism to expand

Academia

Hitachi Kyoto University Lab
Social value recommendations of
universities and companies towards
social issues and their resolution of 2050

International standardization agency

ISO/TC268/SC1

"Smart Community Infrastructures"
Take the initiative as International Chair
(Disaster Risk Reduction, etc)

Start-ups

HITACHI
INNOVATION
CHALLENGE
FOR
CIRCULAR
ECONOMY

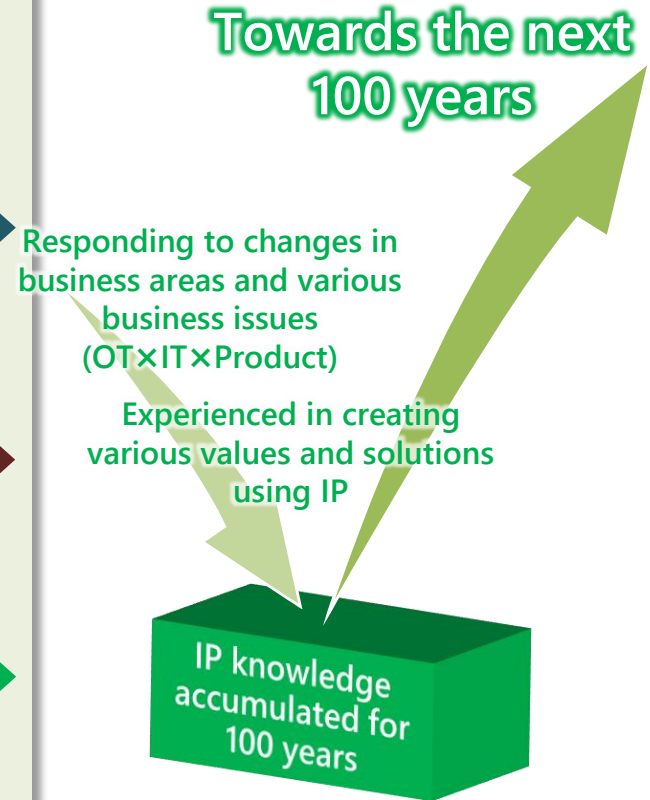
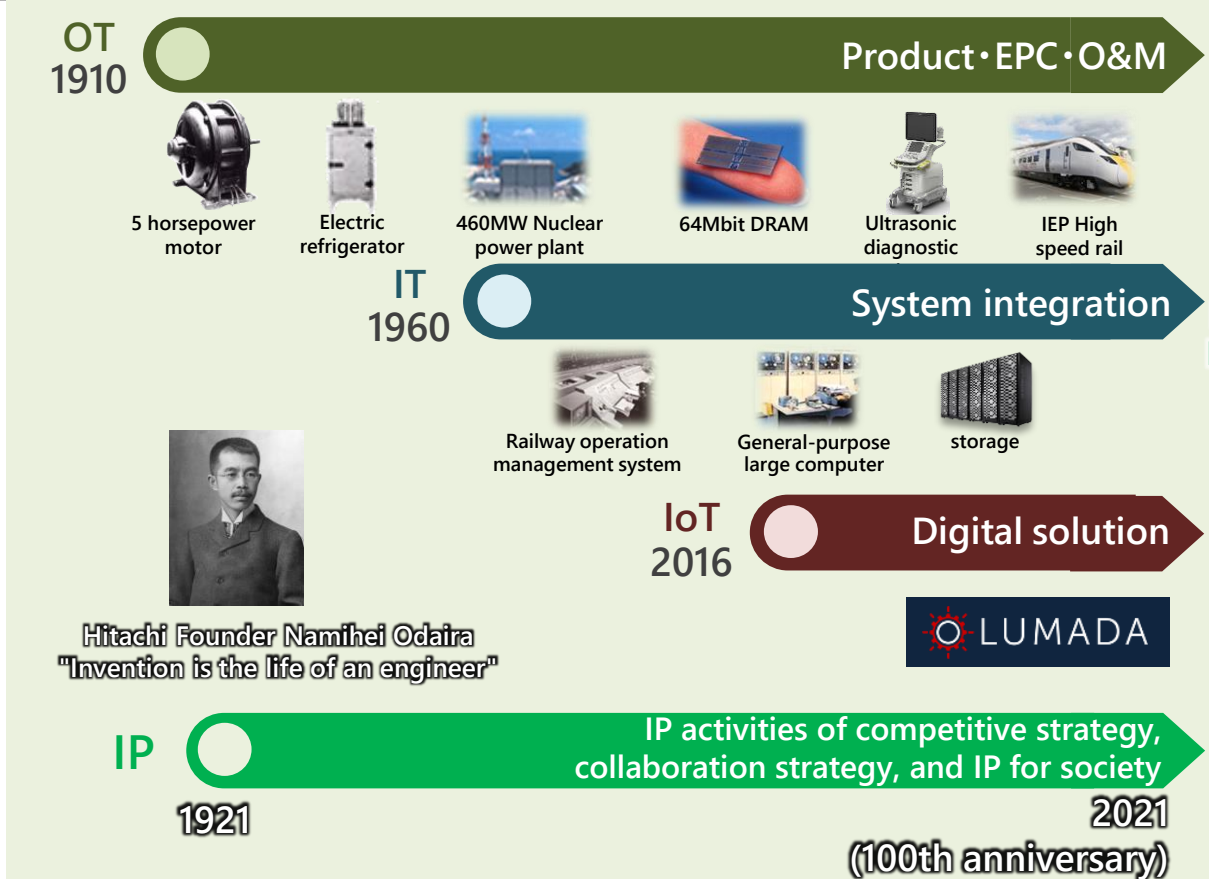
Supporting business contests with
the theme of circular economy^{*2}

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3-1. 100th anniversary of IP activities



"Environment" "Resilience" "Safety and security"

Contribute to business growth and society through IP activities that increase values

SUSTAINABLE DEVELOPMENT **GOALS**

Society 5.0



Cautionary Statement

Certain statements found in this document may constitute “forward-looking statements” as defined in the U.S. Private Securities Litigation Reform Act of 1995. Such “forward-looking statements” reflect management’s current views with respect to certain future events and financial performance and include any statement that does not directly relate to any historical or current fact. Words such as “anticipate,” “believe,” “expect,” “estimate,” “forecast,” “intend,” “plan,” “project” and similar expressions which indicate future events and trends may identify “forward-looking statements.” Such statements are based on currently available information and are subject to various risks and uncertainties that could cause actual results to differ materially from those projected or implied in the “forward-looking statements” and from historical trends. Certain “forward-looking statements” are based upon current assumptions of future events which may not prove to be accurate. Undue reliance should not be placed on “forward-looking statements,” as such statements speak only as of the date of this report.

Factors that could cause actual results to differ materially from those projected or implied in any “forward-looking statement” and from historical trends include, but are not limited to:

- exacerbation of social and economic impacts of the spread of COVID-19;
- economic conditions, including consumer spending and plant and equipment investment in Hitachi’s major markets, as well as levels of demand in the major industrial sectors Hitachi serves;
- exchange rate fluctuations of the yen against other currencies in which Hitachi makes significant sales or in which Hitachi’s assets and liabilities are denominated;
- uncertainty as to Hitachi’s ability to access, or access on favorable terms, liquidity or long-term financing;
- uncertainty as to general market price levels for equity securities, declines in which may require Hitachi to write down equity securities that it holds;
- fluctuations in the price of raw materials including, without limitation, petroleum and other materials, such as copper, steel, aluminum, synthetic resins, rare metals and rare-earth minerals, or shortages of materials, parts and components;
- estimates, fluctuations in cost and cancellation of long-term projects for which Hitachi uses the percentage-of-completion method to recognize revenue from sales;
- increased commoditization of and intensifying price competition for products;
- uncertainty as to Hitachi’s ability to attract and retain skilled personnel;
- uncertainty as to Hitachi’s ability to continue to develop and market products that incorporate new technologies on a timely and cost-effective basis and to achieve market acceptance for such products;
- fluctuations in demand of products, etc. and industry capacity;
- uncertainty as to Hitachi’s ability to implement measures to reduce the potential negative impact of fluctuations in demand of products, etc., exchange rates and/or price of raw materials or shortages of materials, parts and components;
- credit conditions of Hitachi’s customers and suppliers;
- uncertainty as to Hitachi’s ability to achieve the anticipated benefits of its strategy to strengthen its Social Innovation Business;
- uncertainty as to the success of acquisitions of other companies, joint ventures and strategic alliances and the possibility of incurring related expenses;
- uncertainty as to the success of restructuring efforts to improve management efficiency by divesting or otherwise exiting underperforming businesses and to strengthen competitiveness;
- general socioeconomic and political conditions and the regulatory and trade environment of countries where Hitachi conducts business, particularly Japan, Asia, the United States and Europe, including, without limitation, direct or indirect restrictions by other nations on imports and differences in commercial and business customs including, without limitation, contract terms and conditions and labor relations;
- the potential for significant losses on Hitachi’s investments in equity-method associates and joint ventures;
- uncertainty as to the success of cost structure overhaul;
- the possibility of disruption of Hitachi’s operations by natural disasters such as earthquakes and tsunamis, the spread of infectious diseases, and geopolitical and social instability such as terrorism and conflict;
- uncertainty as to the outcome of litigation, regulatory investigations and other legal proceedings of which the Company, its subsidiaries or its equity-method associates and joint ventures have become or may become parties;
- the possibility of incurring expenses resulting from any defects in products or services of Hitachi;
- uncertainty as to Hitachi’s ability to maintain the integrity of its information systems, as well as Hitachi’s ability to protect its confidential information or that of its customers;
- uncertainty as to Hitachi’s access to, or ability to protect, certain intellectual property; and
- uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its employee benefit-related costs.

The factors listed above are not all-inclusive and are in addition to other factors contained elsewhere in this report and in other materials published by Hitachi.

Hitachi Social Innovation is

POWERING GOOD

HITACHI
Inspire the Next 