

## Energy behind SDGs

### Hitachi City: Home to Great Chimney and Cherry Trees

After leaving Daiichi High School to attend Tokyo Imperial University, Naosaburo Takao, Counsellor of Hitachi, Ltd. when it was founded, spent time during 1908 undertaking practical work at Hitachi Mine. This was the same year Soseki Natsume, his high school English teacher, began publishing his novel *"Kofu (The Miner)"* as a newspaper serial.

Modeled on the Ashio Copper Mine, the novel depicted the harsh conditions that prevailed at mines. Ashio, Besshi, and Hitachi were known at the time as Japan's three main copper mines, and were also responsible for a variety of environmental damage.

The Ashio Copper Mine became known as Japan's first source of pollution, which included sooty smoke and mine waste. The Besshi mine, too, faced a lot of opposition from the community due to the air pollution it produced.

Nor was Hitachi Mine an exception. On starting work at the mine in 1909, Takao wrote the lines, "Windy days bring a sulfurous haze, winding coils with bated breath"<sup>\*1</sup>. While he chose the phrase "windy days" for the sake of poetry, his recollection is of suffering from soot on a daily basis.

The difference, however, was that Fusanosuke Kuhara, founder of Hitachi Mine, chose engagement with the community over conflict, gambling the future of the company on a variety of investments intended to eradicate soot. These included a comprehensive survey of nearby villages, paying farmers who had been harmed, and setting up an agricultural research station to study plants' resistance to soot. Based on this work, an estimated 2.6 million soot-resistant wild cherry trees were planted in areas where forest cover had been lost. A meteorological station was also set up in the surrounding mountains that used weather balloons and other such techniques to monitor the spread of soot, high-altitude wind directions, and so on. Despite Kuhara investing large sums in the construction of three smokestacks, none of these were able to prevent the smoke pollution. This led to his decision to construct a 156-m-high chimney, a specification that was based on meteorological observations. Once in operation, this succeeded in significantly reducing smoke pollution and led to local residents affectionally referring to the structure as the "Great Chimney."

\*1 Naosaburo Takao, "Hitachi Memoir," p. 139 in Japanese.

#### [1] Cherry Trees in Heiwa-dori, Hitachi City



Photograph courtesy of Hitachi City Tourism & Products Association

These efforts by Hitachi Mine to protect the environment have come to be recognized internationally, with Professor Kenneth E. Wilkening describing them as an enlightened example of action to overcome the world's environmental problems at the "International Symposium on Acidic Deposition and its Impacts" held in Tsukuba, Ibaraki Prefecture in 1996.

Hitachi Mine supplied cherry saplings free of charge to anyone in the local area who wanted them, with the total number distributed reaching around five million by 1937. Takao had deep respect for Yataro Kado, the person responsible for putting anti-soot measures into action at Hitachi Mine, and commemorated his achievements by establishing Sakurazuka monument, a planting of cherry trees, in Hitachi City. To this day, Hitachi City is known for its cherry trees [1].

### London: City of Smog and Finance

Soseki spent the two years from 1900 studying in Britain before going on to his job at Daiichi High School. Britain was coming to the end of the Victorian era, a time when the technical innovations of the Industrial Revolution were starting to spread beyond industry and into people's lives. The skies of London, a city of fog, were hazy with soot coming from the chimneys of factories and private homes, prompting Soseki to record in his diary that, "Attempting to expectorate while strolling through the streets of London, I was astonished to see that what came out was pitch black."<sup>\*2</sup>

\*2 Toshio Hiraoka (ed.) "Soseki Diary," p. 26 in Japanese.

The first use of the term “smog” for a smoky fog was at the Public Health Congress held in London in 1905, the year Kuhara acquired Hitachi Mine. Chimneys and smoke featured in the movie Mary Poppins that was set in the London of 1910, the year Hitachi was founded, not least in its song Chim Chim Cher-ee that put a bright face on the work of chimney sweeps.

The movie also has a scene where a prominent banker asserts that when finance is safe and sound, so too is England. Although Britain was at the vanguard of the Industrial Revolution and had become known as the factory of the world, it in fact suffered from chronic trade deficits, a hole that was filled by the finance industry of London.

Britain was one of the major trading nations of the mercantile era, and when the East India Company, the world’s first joint-stock company, was set up in 1600, a variety of financial institutions emerged to invest in joint-stock companies. Lloyd’s of London emerged out of a coffee house where shipping agents would gather and led to the establishment of a modern-style insurance market. In time, Lloyd’s went on to establish a telegraph network linking ports around the world to collect shipping information. This is an example of how many of the financial systems and technologies essential to

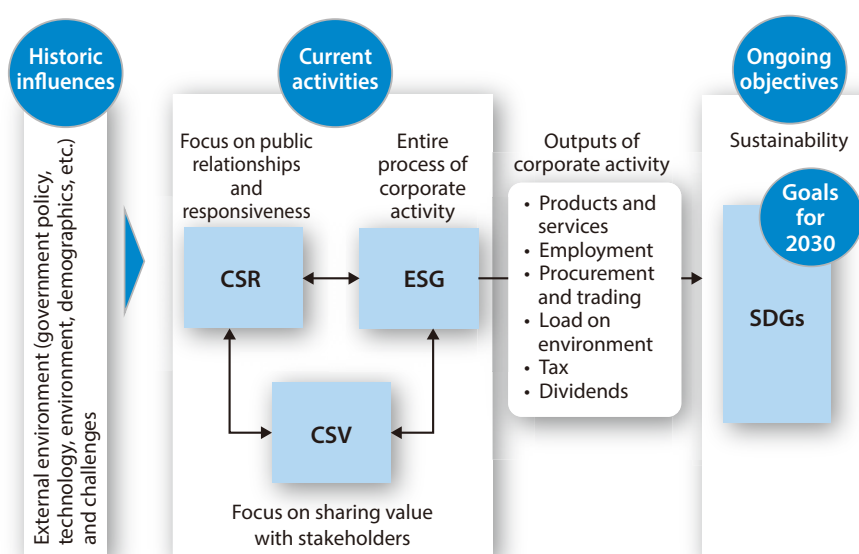
modern capitalism have their origins in London. While the current trend is for financial institutions to shift their operations from London to the Continent in response to the vagaries of Brexit, it remains unlikely that the near future will see a rival center emerging to replace the financial cluster that had been built up in London over a very long period.

## ESG and London

As indicated by the choice of “Stakeholders for a Cohesive and Sustainable World” as the theme of the World Economic Forum’s 50th Annual Meeting in Davos held in January 2020, sustainability has become one of the world’s leading concerns in recent years. It goes without saying that the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 are emblematic of this.

The concept of companies maintaining good relationships with stakeholders in terms of environmental, social, and governance (ESG) considerations is another area of rising concern. These ESG considerations can also serve as a guide for action by companies aimed at achieving the SDGs [2].

### [2] Respective Roles of ESG Investment and SDGs



Source: M. Murakami & T. Watanabe, "Guide to the SDGs," Nikkei Business Publications, Inc. in Japanese.

CSR: corporate social responsibility ESG: environment, social, governance CSV: creating shared value SDGs: Sustainable Development Goals

## [3] ESG Investment Practices

Investment practice	Description
Negative screening	Block investment in industries and companies deemed problematic by ESG criteria
Positive screening, best in class	Invest only in companies with excellent ESG performance
Screening based on international norms	Block investment in companies that do not comply with international norms such as those of the OECD or United Nations
ESG integration	Explicitly include ESG factors along with financial analysis when making investment decisions
Investment in sustainability	Invest in particular areas that relate to sustainability such as clean energy or green technology
Impact investment in the community	Invest in projects that seek to overcome the challenges facing communities beset by social or environmental issues
Engagement and exercise of voting rights	Encourage companies in investment portfolio to pursue ESG considerations through measures such as engaging with them or exercising voting rights

OECD: Organisation for Economic Co-operation and Development  
Prepared with reference to Global Sustainable Investment Review 2018

The basis of ESG comes from ideas put forward in 2006 by then United Nations Secretary-General, Kofi Annan, on how financial institutions should choose where to invest, as laid out in the Principles for Responsible Investment (PRI). In Japan, the volume of ESG investment has risen dramatically since 2015 when the Government Pension Investment Fund (GPIF) became a signatory to the PRI.

The PRI organization is headquartered in London. A major reason for this was that London's financial cluster was a center of expertise in socially responsible investment (SRI), a concept that predated PRI but was aligned toward the same goals.

ESG investment practices include things like negative screening and integration [3].

The area where the volume of ESG investment is greatest is negative screening, the practice of choosing not to invest in businesses that are deemed problematic by ESG criteria. The first instance of this practice is generally considered to be the Methodist Church's management of investments for building and maintaining church facilities in the USA and UK in the 1920s. Based on the moral strictures of the Bible, the church avoided investment in industries such as alcohol and gambling. Pension funds are among the major proponents of ESG investment and can take a long-term perspective because of their long investment horizons. Just as Europe has cathedrals that took centuries to complete, religious organizations are able to take the long view on where to put their money.

As an aside, the cost of building and maintaining St. Peter's Basilica in Rome was funded by papal indulgences given out by Pope Leo X in 1515. Martin Luther, meanwhile, grew up in the German mining town of Mansfeld as the son of a father who had started out as a miner but had gone on through his

own efforts and thrift to make his fortune running a copper smelter. It was Martin's religious doubts about these papal indulgences that led to his publishing his Ninety-five Theses. This marked the beginning of the Reformation. While it was the divorce of Henry VIII that triggered the Reformation in England, its underlying significance was that it made England a sovereign nation free from papal influence. The feudal lords on the Continent who converted to Protestantism were also prompted by a desire for independence from the papacy. This history is of great interest in the context of the fluctuating centripetal forces acting on Brexit and the European Union (EU).

Returning to the topic of negative screening, the thinking of the Methodist Church had its origins in "The Use of Money," one of the sermons contained in a collection published in 1760 by John Wesley, a priest in the Church of England who led a revival movement known as Methodism. In the sermon, Wesley warned against alcohol and gambling and advised "Earn all you can," "Save all you can," and "Give all you can." His sermon drew from the idea of stewardship as found, for example, in "The Parable of the Shrewd Manager" in the Bible (Luke 16). He preached that, as God created mankind to have stewardship over the world, we should accept that responsibility and fulfill it well.

The influence of John Wesley's words has passed down to the present day. Stephen Timms, the Minister of State for Pensions in the Blair government, quoted "The Use of Money" at a meeting during the 2000 reforms to UK Pensions Act that spurred on SRI, while the 2008 global financial crisis prompted the UK to formulate a stewardship code to strengthen governance by financial institutions.

## The Roaring Twenties: A Century-old Tale of Two Cities

Technical innovation was bringing major changes to life in the USA during the 1920s when ESG investment was getting its start. Infrastructures such as power grids and highways were being put in place, skyscrapers were being constructed in New York, and the country was becoming more urbanized. It marked the arrival of the consumer society as people were left giddy by the emergence of new technologies and products such as automobiles, movies, and radio. While this time of the “Roaring Twenties” saw women taking an increasingly prominent role in society, gaining the right to vote thanks to the 19th Amendment to the US Constitution, anti-immigrant sentiment was also on the rise leading to the passing of the Immigration Act.

An unflinching account of these times was given in “The Great Gatsby,” the 1925 novel by author F. Scott Fitzgerald. It describes all-night parties where lavishly dressed guests would congregate each weekend at the mansion of enigmatic millionaire Gatsby. Although Gatsby appeared to personify the American dream, having earned his fortune through hard work at a young age, the truth was he had made his money as a bootlegger. Following lobbying by Methodists and other strict Christians, the USA adopted the National Prohibition Act in 1919 prohibiting the sale of alcohol.

The novel tells of how Gatsby secretly modeled himself on Benjamin Franklin, one of the Founding Fathers of the USA and someone who presented many different faces, including those of businessman and politician.

In “*Die protestantische Ethik und der ‘Geist’ des Kapitalismus* (The Protestant Ethic and the Spirit of Capitalism)” (1905), German sociologist Max Weber included Franklin among his examples of successful people who embodied this ethic and spirit. Weber put forward the idea that modern capitalism emerged from the abstemious and hard-working ethical outlook of Protestants, who were Calvinists, and those known as the Puritans including Methodists who had been influenced by the Calvinists’ doctrines.

Gatsby, however, having made his fortune from bootlegged alcohol, lacked Franklin’s religious morality. Weber’s thesis can also be found in this example. In his book, Weber summed up his own view by quoting John Wesley’s concern that greater wealth will lead to a diminution in the quality

of religion<sup>3</sup>, going on to reference “The Use of Money.” He also regretted how, in America where capitalism was more advanced than anywhere else, for-profit activities had lost their religious and ethical significance, in some cases being undertaken more in the spirit of a sport.

The Roaring Twenties were not a good time for everyone, with many people turning to religious ethics in response to the social upheaval. It was from that milieu that ESG investment was born in the USA.

In Britain, meanwhile, having gone through the First World War and having handed over global hegemony to the USA, the crucial coal industry was showing signs of decline due to the transition from coal to oil as a source of energy. While the two main parties, the Conservatives and Liberals, had long maintained a constitutional government, a change came in 1922 when the resignation of Lloyd George heralded the usurpation by the Labour Party of the role of the Liberal Party, which had been unable to keep up with the demands of workers, a somewhat ironic outcome given that it was the Liberals who had worked hard to expand workers’ rights during the Industrial Revolution.

The scandal that accompanied “Lady Chatterley’s Lover,” published in 1928 against this social backdrop, was not only for its daring sexual content, but also for how it portrayed an affair that crossed the class divide, between Constance, wife of Sir Clifford Chatterley, and their gamekeeper, Oliver Mellors. Although it had been possible for Lloyd George to rise to become prime minister despite being born a Puritan of common stock and not the Church of England, and to become a lawyer through his own hard work and study after leaving primary school, Britain at that time remained a class-based society.

The novel’s author, D. H. Lawrence, was raised in a mining town, being born to a miner father and devout Methodist mother. He set out to write the book after coming to realize the wretchedness of life for miners during the general strike of 1926.

Although Sir Clifford made efforts to have the local coal pit in Tevershall village reopened, he took the opposite approach to Kuhara and failed to interact with the community, considering the miners to be equivalent to the slaves of ancient Rome. Constance meets Mellors in the woods and thereby reclaims her life. While England’s forests had been cut down for fuel

<sup>3</sup> Max Weber, “*Die protestantische Ethik und der ‘Geist’ des Kapitalismus* (The Protestant Ethic and the Spirit of Capitalism)”

in the 17th Century, they were able to regenerate thanks to the spread of coke in the 18th Century. Lawrence saw these forests as symbolic of life.

Although Lawrence, reacting to Puritan austerity, had sympathy for the conditions of the miners, he had no sympathy for those who had heard about the excesses happening in the USA and adopted their extravagance ways. Using Mellors as a mouthpiece, he talked about the differences between living and consuming, claiming that it is possible to be happy by living a simple life.

Not everyone in Britain got caught up in this bubble, however, with some choosing to face up to things like class discrimination and environmental damage and seeking a more natural way of life. It was from such times that ESG investment was born in Britain.

## Energy for Pursuing SDGs

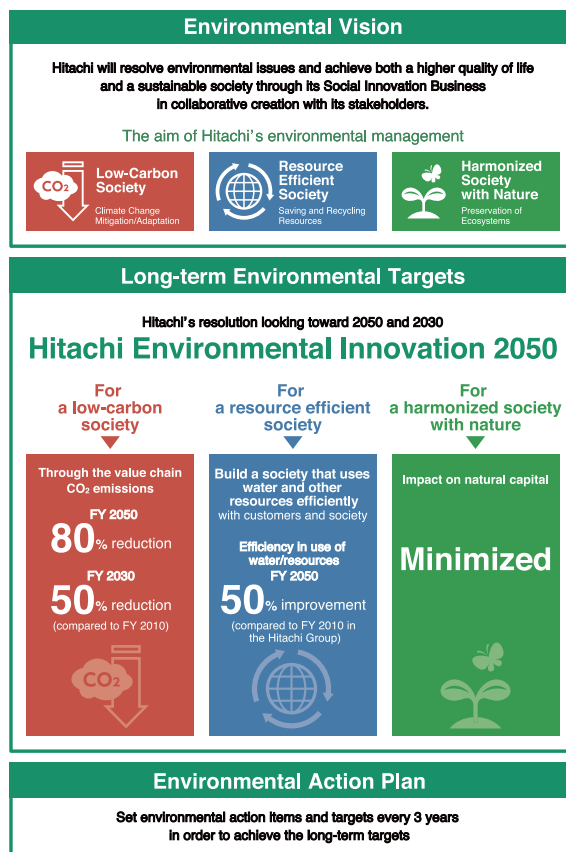
The UK published its revised Stewardship Code 2020 in October 2019. The code makes explicit reference to ESG, including climate change, and calls for even greater consideration of how the companies in investors' portfolios perform on ESG. As noted above, the origins of ESG investment lie in the Bible. While it is easy for us to take on the thinking of John Wesley, Hitachi is a company of around 300,000 employees from a diverse range of backgrounds and has relationships with a wide variety of stakeholders. Consideration of diversity and inclusion tells us that people need to relate to ESG in their own language.

The Corporate Credo of Hitachi is "contribute to society through the development of superior, original technology and products." Similarly, it has a Founding Spirit of "harmony," "sincerity," and "pioneering spirit." Naosaburo Takao identified "harmony" as first among these. Speaking at a time when the term diversity did not yet exist, he emphasized the importance of harmony by saying, "In a company, people from all corners of society and with all their different characteristics and personalities need to recognize what makes us all distinct, show respect for others, and join hands to go about our work in friendship and harmony"<sup>4</sup>.

In the Hitachi Integrated Report 2019, President Toshiaki Higashihara, wrote, "I have for some time been saying, 'Show me the cash!' to our employees, in part as I feel it is necessary

<sup>4</sup> Naosaburo Takao, "Hitachi Memoirs," p. 144 in Japanese.

## [4] Hitachi's Environmental Vision and Long-term Environmental Targets



Source: Hitachi Integrated Report 2019

to focus on what comes before profit," and also "If you spend more than half your life at work, then it is through that work that you have the opportunity to feel the happiness of people and society. It is through the job in front of you that you can help people and society. In other words, I think contributing to building social and environmental value is a major driver behind our personal growth and our job satisfaction."<sup>5</sup>. I believe that these words are in step with the thinking of John Wesley and can be empathized with by many regardless of their particular background and other circumstances.

Hitachi's intention to work through its Social Innovation Business to improve social, environmental, and economic value is stated in its 2021 Mid-term Management Plan. On the subject of the environment, Hitachi has also formulated its Environmental Vision that involves a management strategy of taking account of the expectations of global society for

<sup>5</sup> Hitachi Integrated Report 2019, p. 13

reducing the load on the environment. Published in 2016 in "Hitachi Environmental Innovation 2050," Hitachi has, based on this vision, set long-term environmental targets that look ahead to 2030 and 2050 with the aim of creating "a low-carbon society," "a resource-efficient society," and "a harmonized society with nature" [4].

On the subject of woodland conservation, Hitachi has since 2017 been engaging in forest maintenance work in woodlands from which water supplies are drawn, having signed up with the "Tokyo Water Supply – Corporate Forest" activity plan as part of an implementation plan of the Tokyo Metropolitan Government Bureau of Waterworks for collectively establishing forests to serve as water sources. The wider Hitachi group is also participating in a range of tree planting and woodland conservation activities in Japan, China, Association of Southeast Asian Nations (ASEAN), UK, USA, Germany, and elsewhere.

This year (2020) will see Hitachi marking the centenary of its establishment as a separate entity independent of Hitachi Mine. As it happens, ESG investment was also born around the same time. Along with appreciating the cherry trees planted in Hitachi City by Kado and his colleagues, I want to spare a thought also for how, a hundred years ago, Hitachi's parent company Hitachi Mine and the team of Fusanosuke Kuhara and Yataro Kado, who had a major influence on Namihei Odaira, Naosaburo Takao, and the other Councillors of Hitachi, went about engaging with stakeholders and for what purpose they made their investments.

The great achievements of our forebears who lived a century ago amid turbulent times like those we are experiencing today should provide the energy that drives Hitachi as it seeks to pour its own strengths along with those of stakeholders into the good things sought by the people of the world to contribute to a sustainable society.

Hitachi Social Innovation is POWERING GOOD!

## References

- 1) R. Aiura, "Soseki's Studies in Britain : Results and Consequences," Bulletin of Shiga University of Medical Science, Vol. 11 (Mar. 2001) in Japanese.
- 2) T. Kawasaki, "England and Forests," Heibonsha Inc., Tokyo (May 1987) in Japanese.
- 3) T. Kitagawa et al., "New Roadmap of Governance Revolution," Toyo Keizai Inc., Tokyo (Jul. 2017) in Japanese.
- 4) K. Kuroda, "ESG Textbook for Businesspeople," Nikkei Business Publications, Inc., Tokyo (May 2019) in Japanese.
- 5) Japan Energy Inc., Nippon Mining & Metals Co., Ltd., "Record of a Great Chimney: History of Smoke Pollution Measures of Hitachi Mine," (Feb. 1994) in Japanese.
- 6) N. Takao, "Hitachi Memoir," Hitachi Printing Co., Ltd. (Feb. 1985) in Japanese.
- 7) S. Natsume, "Kofu (The Miner)," Shunyodo Publishing Co., Ltd., Tokyo (Sep. 1908) in Japanese.
- 8) Hitachi, Ltd., Hitachi Integrated Report 2019 (Sept. 2019).
- 9) Hitachi City Bulletin, March 5, 2018, Public Relations Department, Mayor's Office, Hitachi City, Ibaraki Prefecture in Japanese.
- 10) T. Hiraoka (ed.), "Soseki Diary," Iwanami Shoten, Publishers, Tokyo (Feb. 1990) in Japanese.
- 11) T. Miura, "Natural and Artificial Environment: Folklore of Comfort State of Environment," J. Science of Labour, Vol. 67, No. 4 in Japanese.
- 12) M. Murakami et al., "Guide to the SDGs," Nikkei Business Publications, Inc., Tokyo (Jun. 2019) in Japanese.
- 13) P. Clarke, "Hope and Glory: Britain 1900–2000," Penguin Books Limited, London (Apr. 1996).
- 14) F. S. Fitzgerald, "The Great Gatsby," Charles Scribner's Sons, New York (Apr. 1925).
- 15) D. H. Lawrence, "Lady Chatterley's Lover," Tipografia Giuntina, Florence (Apr. 1928).
- 16) R. Rhodes, "Energy: A Human History," Simon & Schuster, Inc., New York (May. 2018).
- 17) M. Weber, "Die protestantische Ethik und der 'Geist' des Kapitalismus (The Protestant Ethic and the Spirit of Capitalism)," Archiv für Sozialwissenschaft und Sozialpolitik, Germany (1905) in German.
- 18) K. E. Wilkening, "Acid Rain Science and Politics in Japan: A History of Knowledge and Action toward Sustainability (Politics, Science, and the Environment)," The MIT Press, Cambridge (May 2004).
- 19) Global Sustainable Investment Alliance, "Global Sustainable Investment Review 2018" (Mar. 2018).
- 20) Hitachiota Tourism & Products Association, "Learning about the Environment through Hitachi's Great Chimney (an Anti-pollution Measure) (Hitachi City)," <http://www.kanko-hitachiota.com/sp/page/page000549.html> (viewed Jan. 2020) in Japanese.