SUMITOMO QUARTERLY

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Surviving the "With Corona" Era



住友グループ広報委員会 Sumitomo Group Public Affairs Committee

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How to live in a world in which COVID-19 is a

コロナと共生する新たな世界を

fact of life

どう生きるか

Photo: Getty Images

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OurAspirations

叶えたい未来がある

World-renowned frontrunner in regenerative medicine and cell therapy products

世界のトップランナーとして 再生・細胞医薬品の実用化に貢献

Regenerative medicine caught the world's attention in 2012 when Dr. Shinya Yamanaka, Professor and Director of the Center for iPS Cell Research and Application (CiRA) at Kyoto University, was awarded the Nobel Prize in Physiology or Medicine. With the backing of the Japanese government, research into regenerative medicine, primarily at universities, received a powerful boost.

An important development in this up-and-coming field was the completion in 2018 of Sumitomo Dainippon Manufacturing Plant for Regenerative Medicine and Cell Therapy (SMaRT), the world's first facility dedicated to the commercial manufacture of regenerative medicine and cell therapy products derived from allogeneic iPS cells. Sumitomo Dainippon Pharma is preparing for commercial production of products for the treatment of Parkinson's disease, age-related macular degeneration, and retinitis pigmentosa, with sales expected to start in 2022 at the earliest.

Kenji Komeda, Senior Director of the plant, comments on the significance of tackling production of regenerative medicine and cell therapy products: "Regenerative medicine products have already been commercialized to some extent but mainly for autologous transplantation using the patient's own stem cells, which means they are tailor-made for the individual patient. We aim to provide products for more patients by producing cell therapy products derived from allogeneic iPS cells, that is, by using cells from healthy donors."

Sumitomo Dainippon Pharma has earned recognition as a world-renowned pioneer in the manufacture of regenerative medicine and cell therapy products by tenaciously promoting research, having focused on regenerative medicine since the 1990s. The company has also cultivated a fruitful network of relationships with academia, including with Nobel Laureate Professor Yamanaka.

"All of us in the team are excited by the prospect of a future in which patients who are unable to recover with conventional medicine can be cured," says Komeda. They are determined to make this dream come true as soon as possible.

Kenji Komeda An aseptic environment is indispensable for production of regenerative medicine and cellular therapy products. A glovebox (left) and an automatic conveyor (right) for 米田 健二さん

OVID-19 has brought about dramatic change in our lifestyles. Although tremendous efforts are being made to develop therapeutic drugs and vaccines, success has so far proved elusive. During the next several years we will likely find ourselves in the "With Corona" Era, compelled to coexist with the virus. Each of us will have to consider the circumstances and figure out the best course of action as responsible members of society.

The Sumitomo Group is already addressing the needs of the "With Corona" Era in various fields, ranging from COVID-19 prevention measures at airports and financial support for hard-hit businesses to drastic work-style reform.

NEC is supplying a thermal screening solution for airports in Hawaii where a precipitous decline in the number of tourists is ravaging the economy. With NEC's solution, which combines thermal cameras with facial recognition and image analysis technologies, the body temperature of passengers at airports is screened to identify those who may be COVID-19 infected. NEC is also developing a system capable of facial recognition in the case of people who are wearing masks.

Sumitomo Mitsui Banking Corporation (SMBC) has launched a program supporting the introduction of tele-

working for corporate customers who have yet to embrace teleworking because their ICT environments are a bottleneck. With this program, SMBC bears upfront costs and service fees partly or wholly. SMBC is providing diverse financial support for businesses affected by COVID-19, including a fund specifically to support customers so that they can stay in business and make necessary capital investment and a fund dedicated to supporting medical institutions and manufacturers of medical equipment.

Mitsui Sumitomo Insurance's promotion of work-style reform predates the outbreak of COVID-19 and it has stepped up reform efforts since fiscal 2020. In April, when a state of emergency was declared in Japan, 70% of the employees worked from home. Since the lifting of the state of emergency, it has been standard practice to have 30-50% of employees working from home. The company has been endeavoring to inculcate throughout its workforce a predisposition toward engaging in work-style reform

and an appreciation of its importance, thus cultivating a corporate culture that encourages employees to take the initiative in reviewing their working styles. This posture has helped the company rise to the challenge posed by COVID-19.

Though COVID-19 has plunged the world into a crisis, it is also creating opportunities. Indeed, work-style reform is likely to lead to new business opportunities. The Sumitomo Group companies continue to advance, inspired by the conviction that their energy and expertise can contribute to an increasingly affluent society in which individuals flourish and achieve fulfillment.

新型コロナウイルス感染症によって、私たちの生活様式は劇的に変わった。治療薬やワクチンの開発も進められているが、目に見える成果が出るにはまだ時間がかかりそうだ。これから少なくとも数年は、「ウィズコロナ」といわれるウイルスと共生しながら生きていく時代となるだろう。その中で、自分にできることは何かをそれぞれが考え、行動に移していくことが重要ではないだろうか。

住友グループは、新型コロナ感染防止の水

際対策や金融面での支援、働き方の抜本改革など、様々な分野でウィズコロナ時代の対応を始めている。

NECは、観光客の減少で経済的に大きなダメージを被っているハワイで、空港における感染症対策のソリューションの提供を始めた。サーマルカメラで空港の乗降客の体表温度を測定し、顔認証と映像分析技術を活用して新型コロナ感染を疑われる人物を特定するという。マスクを着用した状態でも顔認証ができるシステムも開発中だ。

三井住友銀行は、ICTの環境面などがネックとなってテレワークが導入できない法人顧客を対象に、初期導入費用や利用料の一部またはすべてを同行が負担する「テレワーク導入支援

プログラム」を立ち上げた。他にも、新型コロナの影響で新たな運転・設備資金需要が発生した顧客を支援する「特別ファンド」や医療従事・関係者を支援する「医療支援ファンド」など、金融を通じた多様な支援を行っている。

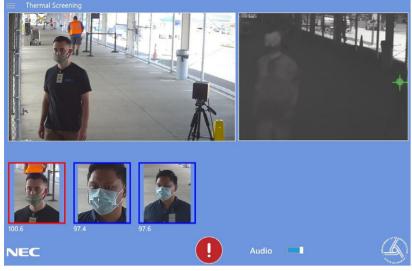
三井住友海上火災保険は、新型コロナ以前から進めていた働き方改革を、2020年度からはさらにギアを一段上げた。緊急事態宣言が出された4月は7割の社員を在宅勤務とし、宣言解除後も3割から5割の在宅勤務を標準として運用している。「なぜ働き方改革に取り組むのか」といった意義を社員に浸透させる活動を続け、社員が主体的に働き方を見直す風土を醸成してきた成果だろう。

ウィズコロナ時代は、危機である一方でチャンスでもある。これを機に働き方や仕事のあり方を見直すことで、新たなビジネスチャンスが生まれる可能性もあるだろう。個人や社会がより豊かに、より成長していけるように、住友グループ各社も進化を続けていく。



ウィズコロナ時代を生き抜く





Thermal sensing and facial recognition technologies to detect passengers with elevated body temperature support passenger screening at airports

体表温度の高い乗客を顔認証と映像分析で 特定し、水際での感染拡大防止をサポート

y causing a precipitous decline in the amount of travel, COVID-19 has hammered regional economies reliant on tourism. What can be done to keep these economies going while preventing the spread of infection as much as possible? An NEC solution introduced at five airports in Hawaii is a good start.

Implementation consists of two steps. Firstly, installation of thermal cameras for passengers' body temperature screening at the airports was completed by August 20. Secondly, a person identification system will be deployed by the end of 2020, leveraging facial recognition and image analysis technologies. Linking this system with the thermal cameras' screening results will make it possible to identify passengers who may be infected by coronavirus.

In the first phase, a thermal camera scans deplaning passengers to check body temperature as they pass the scanning point and alerts screeners at the airport to anyone whose temperature is 38 degrees Celsius (100.4 degrees Fahrenheit) or higher. In the second phase, facial recognition and

image analysis will be performed based on the facial images of passengers captured by a camera. A random ID will be assigned to each passenger to tag the person with the body temperature screening result.

Any passengers with elevated body temperature will be called aside. In addition, whenever passengers pass a checkpoint at the airport, their IDs are checked against the database in order to grasp their behavior before leaving the airport so that the information can be used to prevent clusters of infection. From the viewpoint of privacy protection, passengers' gender and ethnicity are not identified and the passenger ID is not tagged with personal information, such as nationality, name, and address. To meet the requirements of the State of Hawaii, data of facial images will be deleted within 30 minutes. The collected data will only be used for preventing the spread of COVID-19.

By screening passengers at its airports to prevent the spread of infection, the State of Hawaii wants to facilitate the recovery of tourism, which is the engine of Hawaii's economy. NEC and three other

the selection process, demonstration tests of technologies were performed in June. The site assigned to NEC was notable for heavy traffic of deplaning passengers wearing hats and sunglasses. Rising to the challenge, NEC's solution demonstrated the capability to perform the combination of body temperature screening with facial recognition and analysis, and moreover to do so with accuracy and speed superior to the other companies' solutions.

Moreover, whereas passengers need to halt in front of the cameras in the case of other companies' solutions, they do not need to do so with NEC's system. This advantage was also highly regarded and NEC's solution was adopted. NEC also proposed comprehensive solutions for preventive measures against contagious diseases combined with other technologies, and this expandability was also considered advantageous.

Before the outbreak of COVID-19, NEC's labs were already developing the key technologies employed in the solu-

NEC'S foresight. Besides these technologies, NEC's development of a system that enables facial recognition of people wearing masks is now at the demonstration test stage. As the wearing of masks is an aspect of the new normal, this technology has potential for widespread application. Capitalizing on its various technologies and solutions, NEC is eager to deploy its expertise in ways that are attuned to new lifestyle needs in the "With Corona" Era.

新型コロナウイルスの影響により各地で観 光客が大幅に落ち込み、地域経済が深刻なダ メージを受けている。では、この状況で感染拡 大を可能な限り抑止しながら、観光を柱とする 地域経済を動かしていくにはどうすればいいの か。その一つのヒントとなるのが、NECがホノ ルルなどハワイの5空港で提供を始めた感染症 対策ソリューションだ。

このソリューションは2段構えの計画で進んでい る。まず8月20日までに、体表温度を測定するサー マルカメラを各空港に導入。続いて2020年末を 目指し、顔認証と映像分析技術を活用して人物を

感染している可能性のある人物を特定するわけだ。

第1段階では、飛行機から降りた乗客が撮影ポ イントを通過した際に体表温度を測定し、38度 以上であれば空港の担当者に通知される。そし て第2段階では、乗客一人ひとりにランダムにID を付与し、サーマルカメラとは別のカメラで撮影し た顔写真をもとに顔認証と映像分析を行って、体 表温度の測定結果と結び付けられるようになる。

体表温度が高く感染している可能性がある 人物には担当者が声をかけるほか、空港内に 設定した複数のポイントを通過するたびにデー タベースと照合し、空港を出る前にどのような 動きをしたかを把握して、クラスターの発生予防 に役立てる仕組みとなっている。ちなみにプラ イバシー保護の観点から性別や人種は識別せ ず、IDと国籍、氏名、住所といった個人情報を 結び付けることもしない。またハワイ州の要請 により、顔写真のデータは30分以内に消去す ることとしている。あくまで感染拡大防止の目 的でのみ、使用するということだ。

経済の柱である観光業を復興するため、感 染拡大を空港で防止したいというハワイ州の 実証で、同社の持ち場は帽子やサングラスを付 けたままの乗客が降りてくる往来の激しい場所 であったにもかかわらず、体表温度測定と認証・ 分析システムとの連携を他社よりも高精度かつ 高速に行えることを実証した。

加えて、他社の場合は乗客がカメラの前で一 度ストップする必要があったが、同社のシステム は立ち止まる必要がない点も高く評価され、採用 に至った。同社では他の技術との組み合わせ による包括的な感染症防止対策ソリューション も提案しており、この拡張性も評価されたという。

今回のソリューションにつながる要素技術の 開発は、コロナ禍以前から同社の複数の研究 所で進められていたもので、その先見性が生き た好例といえるだろう。今回採用に至った技 術以外にも、マスクを着用した状態で顔認証を 可能とするシステムの開発が実証実験段階ま で進んでおり、これもマスクが欠かせない現在 の日常において可能性が広がるソリューション だ。同社はこうした様々な技術とソリューション で、ウィズコロナ時代の新しい生活スタイルに 沿った貢献を行っていく。

ace to another can play a significant role in eventing infection. (The photo is for illustrative 国内外の人々が行き交う空港での水際対策は感染 抑止の観点から大きな意味がある(写真はイメージ)。 companies participated in the bid, protion being supplied for Hawaii's airports, 特定するシステムも整備していく。このシステムと ニーズに対し、同社と海外企業3社の計4社 posing solutions to accomplish this. For and so this project is a good example of サーマルカメラの測定結果を紐付け、新型コロナに が応募。選定に際して6月に実施された技術

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With an eve to current and future needs, SMBC launches diverse programs to serve society

これからの銀行のあり方を見据え、 社会に貢献する多様なプログラムを展開

→ he COVID-19 pandemic is sweeping through the economy, impacting virtually every industry. The financial sector is no exception. Sumitomo Mitsui Banking Corporation (SMBC) is pursuing initiatives geared to an era in which COVID-19 will be a fact of life, aligning SMBC's services with needs that have recently emerged and will likely persist.

Among various notable initiatives of SMBC, is an innovative program supporting the introduction of teleworking. Businesses are urged to promote teleworking so as to prevent the spread of infection and this trend is expected to accelerate. However, many companies, particularly medium and small-sized enterprises, have yet to embrace teleworking because their ICT environments are not

adequate for the task. Mindful of the crucial social significance of supporting companies' transition to teleworking, SMBC launched the program in June. Corporate customers intending to introduce and continue using teleworking services of providers designated by SMBC are eligible for the program. Upfront costs and service fees are borne partly or wholly by SMBC. Eager to transition to teleworking, an increasing number of customers are taking advantage of this program.

SMBC has also set up a fund specifically to support customers in need of funds for maintaining and managing supply chains disrupted by COVID-19. The idea is to facilitate customers' cash flows so as to ensure liquidity in a scheme utilizing the Special Funds-Supplying Operations to Facilitate Corporate Financing

for COVID-19 introduced by the Bank of Japan in March. The amount of funds disbursed has already reached 1 trillion yen.

Companies whose business is related to the medical field have particular funding needs amid the COVID-19 pandemic. SMBC has also set up a fund dedicated to supporting production and procurement of facilities and goods related to treatment of COVID-19. Not only medical institutions such as hospitals but also manufacturers of medical equipment and related goods are eligible for funding so that they can operate effectively and secure the necessary capital investment. Approximately 100 billion yen has been set aside for the fund. As regards these two funds, SMBC had already made over 400 loans by the end of June.

Addressing the needs of communities and society, in addition to various types of support for research and other activities in the medical field, SMBC has launched initiatives to prevent the spread of infection at its branches and ensure the continuity of banking services.

Following the lifting of the declaration of a state of emergency, the number of customers visiting branches in residen-

tial areas has risen. The risk of infection will increase if branches are crowded with customers. In the event of infection at a branch, it would have to suspend operation. Banking services are vital financial and social infrastructure, and to secure them while also taking action to prevent the spread of infection, SMBC is encouraging customers to use online banking for procedures such as change of address. To help give this initiative a tailwind, SMBC at HOME has been launched. Under this scheme, for every individual customer and corporate customer that uses specified online banking services, SMBC is setting aside 25 yen and will donate a maximum of 100 million yen to medical institutions.

Furthermore, from July 6 onward in a scheme applying to all SMBC branches, customers wishing to visit a branch can book the date and time in advance. This initiative, which reduces the waiting time at branches, is good for customers and also good for communities and society. By implementing diverse measures, SMBC is resolved to fulfill its mission as a bank while offering timely effective support in an era in which COVID-19 is a fact of life.

新型コロナはあらゆる業界に影響を与えてい る。銀行も例外ではない。三井住友銀行は、 ウィズコロナ時代に金融機関としてできる取り 組みを「これからの銀行機能のあり方」という視 点から進めている。

多彩な施策が展開されているが、代表的なも

新型コロナの影響でサプライチェーンの維 持・管理において、運転・設備資金が新たに 発生した顧客に対する支援ファンドの取り組み も始めている。「特別ファンド」は当座の資金 Major initiatives in response to the COVID-10 pandamic 新刊コロナウイルフ酸洗完妆+大平けた主た取り织 3.一覧

	Details 内容	Amount 金額
Support for corporate customers 法人向け支援	Setting up of a fund specifically to meet needs amid the COVID-19 pandemic 「新型コロナウイルス感染症」の拡大に係る「特別ファンド」の制定	1 trillion yen 1兆円
	Handling fees waived for "Business Select Loan," a product for small and medium-sized enterprises 中小企業向け「ビジネスセレクトローン」取り扱い手数料免除	_
	Establishment of a fund specifically to support medical institutions and medical equipment manufacturers 病院や医療関連用品メーカーへの支援として「医療支援ファンド」設定	100 billion yen 1000億円
	Launch of a program to support the introduction of teleworking under which SMBC bears upfront costs and service fees partly or wholly テレワーク導入費用を三井住友銀行が負担する「テレワーク導入支援プログラム」開始	_
Support for individual customers 個人向け支援	Provision of special interest-free loans 「特別金利フリーローン」の提供	_
Contribution to ocal communities and society 地域・社会 への貢献	Donation to the Center for iPS Cell Research and Application, Kyoto University (CiRA), to support research of new viruses 新種ウイルスの医学研究に対する支援として「京都大学iPS細胞研究所」に寄付	500 million yen 5億円
	Donation to the Coalition for Epidemic Preparedness Innovation (CEPI) to support development of vaccines for new viruses 新種ウイルスに対するワクチン開発等への支援として「The Coalition for Epidemic Preparedness Innovation」(CEPI)に寄付	1 million euros 100万ユーロ
	Donation to the Japan Committee for UNICEF to support the upgrading of medical and educational systems in emerging-market countries 新興国における医療・教育体制の充実に対する貢献活動の一環として「日本ユニセフ協会」に寄付	100 million yen 1億円
	Donation to the Association of Japanese Symphony Orchestras to support culture and the arts 文化・芸術活動に対する支援として「公益社団法人日本オーケストラ連盟」に寄付	100 million yen 1億円
	Launch of the SMBC at Home Project under which SMBC makes donations to institutions related to COVID-19 countermeasures in an amount corresponding to customers' use of online banking services インターネットバンキングの取引に応じて、本感染症対策に関する寄付を実施する「SMBC at HOME」プロジェクトの開始	Max. 100 million yen 最大1億円

のとして「テレワーク導入支援プログラム」を挙げ たい。感染拡大防止策として企業ではテレワー クが推進され、今後も増えていくとみられる。しか し中小を中心にまだ多くの企業が、ICT(情報通 信技術)の環境面で対応できないことを理由に 移行できていない。同行は、企業のテレワーク移 行を後押しすることには社会的意義があると捉 え、テレワークの導入・継続利用を検討している 法人顧客を対象に、同行の指定事業者による サービスの初期導入費用や利用料の一部また はすべてを負担する本プログラムを6月から立ち 上げた。顧客からはこのプログラムがきっかけに なったという声が増えているという。

繰り支援として制定されたもので、日本銀行が3

月に制定した「新型コロナウイルス感染症にか かる企業金融支援特別オペレーション」を活用 した枠組みだ。ファンド総額は1兆円に上る。

また、今回のコロナ禍では医療活動に伴う経 済的負担も大きな問題となっている。同行は 新型コロナの治療などに関する設備・物資の 生産および調達に対するサポートとして「医療 支援ファンド」も設定した。対象には病院など の医療機関だけでなく、医療機器や関連物資 のメーカーも含まれ、運転・設備資金の需要に 幅広く応える。こちらのファンド総額は1000 億円ほどだが、この両ファンドで6月末までに 400件を超える取り組みが実施されている。

一方、地域・社会への貢献としては、医学研 究や医療活動への様々な支援に加えて、店舗 での感染拡大防止と銀行機能維持の観点から も新たな取り組みをスタートした。

緊急事態宣言解除後は住宅地の店舗など で来店客が増えた。来店客が集中すると感染 の危険性が高まり、実際に感染が発生すれば店 舗の機能を停止しなければならない。同行では 感染拡大防止に加え、金融・社会インフラとして の銀行機能維持を重視し、住所変更などの手続 きはオンラインへの誘導を図っている。この取り

組みに関し、同行ではインターネットバンキングの 対象手続きについて個人顧客1人・法人顧客 1社ごとに25円を積み立て、最大1億円を医療 機関に寄付する「SMBC at HOME」を始めた。

そのほか、7月6日からは全支店で来店日時の 予約サービスもスタートしている。予約してから来 店することで店舗での待ち時間がなくなるため、 これも地域・社会に貢献する取り組みといえる。 同行はこうした多様な施策で銀行としての使命 を果たし、ウィズコロナ時代を支えていく。

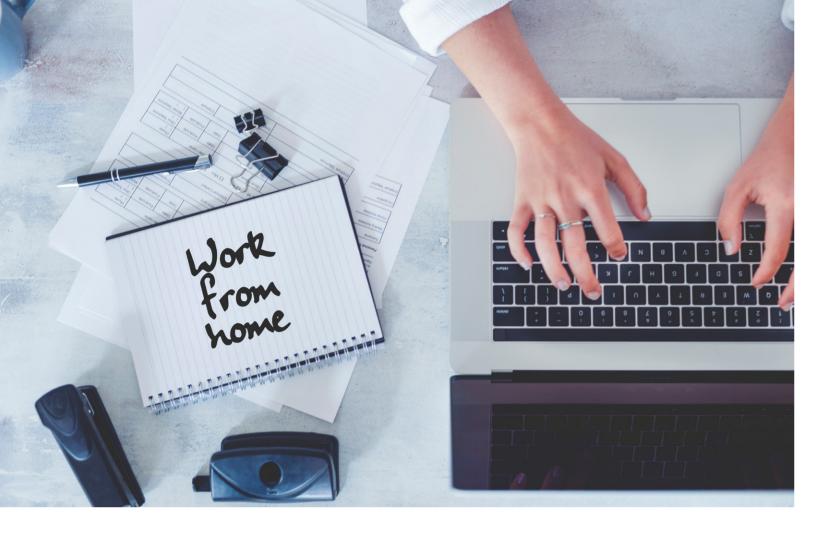
Top page of SMBC at Home 「SMBC at HOME」トップ画面



With SMBC at Home, SMBC aims to promote use of online banking while contributing to

「SMBC at HOME」は、感染症対策への貢献ととも に、ネットバンキングの利用推進を目的にしている。





Accelerating work-style innovation attuned to the needs of an era in which COVID-19 is a fact of life

先駆的な働き方改革の取り組みを加速し、 ウィズコロナ時代に備える

T n light of two factors—work-style reform advocated by the Japa-**L** nese government and the need to stop the spread of COVID-19—business process transformation is being pursued with added urgency across the economy. Mitsui Sumitomo Insurance began work-style reform initiatives in fiscal 2016 focused on reducing total working hours and, in fiscal 2019, added enhanced employee job satisfaction as a further objective. In 2020 Mitsui Sumitomo Insurance proceeded to Phase 2 of its drive to reform work-styles.

In Phase 1, the company introduced a guideline whereby all personnel were encouraged to leave the office by 7 in the evening. Furthermore, it equipped all 20,000 employees with PCs to enable

teleworking. As a result, over the past four years 12,000 employees have had experience of working from home.

Phase 2, launched in April 2020, is synchronized with the final two years of Vision 2021, the MS&AD Insurance Group's medium-term management plan covering the four years from fiscal 2018 to fiscal 2021. Although the main thrust of the initiatives remains virtually unchanged, Mitsui Sumitomo Insurance has shifted into high gear. All personnel have watched a 30-minute video created by the company to entrench throughout the workforce a commitment to tackling work-style reform at this critical juncture.

Then COVID-19 morphed into a global pandemic. Following the Japanese government's declaration of a state of

emergency, Mitsui Sumitomo Insurance took steps so that only 30% of employees came to the office, with the rest working from home. Mindful that many employees had little or no experience of working from home, the company prepared a guidebook for all employees containing an IT environment checklist and tips on how to efficiently work from home. Now that the concept of teleworking is becoming pervasive in the company, the transition to working from home is proceeding smoothly. Ever since the declaration of the state of emergency was lifted, it has been standard practice at Mitsui Sumitomo Insurance to have 30% of employees working from home, which rises to around 50% in Tokyo and the adjacent prefectures of Saitama, Chiba, and Kanagawa.

Mitsui Sumitomo Insurance considers diversity and inclusion (D&I) to be essential for innovation and inextricably linked with work-style reform. Endeavoring to inculcate D&I throughout the workforce, the company is convinced it empowers each individual to achieve personal development while actively con-

"Four tips for working from home" publicized throughout Mitsui Sumitomo Insurance in April following the government's declaration of a state of emergency 緊急事態宣言下の4月、全社に公開した「在宅勤務の心構え4か条」。

Discard the fixed idea that the type of work doable from home is limited

It is essential to change your mindset and transform your

「在宅でできる仕事は限られている」という固定観念を捨てましょう 仕事のやり方を変える(業務プロセスの見直し、ペーパーレス化など)とい う老え方に切り替えることが重要です。

Working from home does not have to result in lonelines

Using communication tools, such as LINE for Business and web conferencing, perform your daily tasks while communicating widely and deenly with co-workers

在宅勤務は「孤独」ではありません

ビジネスLINEやWeb会議などのコミュニケーションツールを活用し、「い つもの仕事」を「いつものコミュニケーションをしながら」遂行することが

国を挙げた働き方改革の要請に新型コロナ 感染拡大防止の視点も加わり、業務変革に向 けた動きが進んでいる。そんな中、2016年度か ら「総労働時間の削減」を業務変革の一丁目 一番地と定め、2019年度には「社員の働きが いの向上」も追加して働き方改革に取り組んで きたのが三井住友海上火災保険だ。2020年 度からはその歩みを「ステージ2」へと高めている。

ステージ1では「原則、遅くとも19時前退社」 というルールのもと柔軟なテレワークを可能とする PCを全社員約2万人に配布。その結果、4年 間で延べ1万2000人が在宅勤務を実施した。

tributing to corporate success. The company has pursued work-style reform for the past four years and, according to the results of annual employee awareness surveys, a growing number of respondents think D&I is becoming woven into the fabric of Mitsui Sumitomo Insurance.

These innovative initiatives of Mitsui Sumitomo Insurance are attracting the attention of agents and corporate customers who are eager to learn best practices. In response, Mitsui Sumitomo Insurance is proactively sharing its knowhow, including the guidebook for employees.

Regarding teleworking, there are various issues related to hardware, communication, and management. The company has created videos on best practices, featuring workplaces that have achieved good results, and is conducting training and workshops for managers across Japan. Performance evaluation is also being systematized. Viewing teleworking as an effective weapon in an era in which COVID-19 is a fact of life, Mitsui Sumitomo Insurance is accelerating initiatives to weather the storm.

Be as focused when working from home as in the office.

The same work rules apply when teleworking as when working in the office. Register your daily schedule on the scheduler to share with

自宅でもオフィスと同様の緊張感を持ちましょう

在宅勤務時もオフィス勤務と同様の勤務ルールが適用されます。スケジュ ーラーにその日の業務予定を登録し、メンバーと共有しましょう。

Practice effective

When teleworking, you can be become so absorbed in your work that you tend to work longer hours. Manage time wisely and work

時間を意識して業務を遂行しましょう

在宅勤務は集中できる環境で業務を行うため、長時間労働に陥りやすい 側面があります。タイムマネジメントを意識し、効率的・自律的な働き方を実 践することが必要です。

2020年4月からのステージ2は、4年間の中期 経営計画「Vision2021」が同年度から後半2年 に入ることと同期したもの。取り組みの基本は大き くは変わらないがギアを一段と上げるため、今なぜ 働き方改革に取り組むのか、その意義を伝える30 分の動画を制作し、全社員に閲覧してもらった。

ちょうどその折、新型コロナの感染状況が深 刻化。政府から緊急事態宣言が出される中 で、3割の社員のみが出社するという制限を実 施し、残りの7割は在宅勤務に切り替えた。 在 宅勤務に初めて取り組む社員も多かったことか ら、環境面のチェック項目や在宅で効率を上げ るためのヒントを網羅した社員向けガイドを作成 し、全社に公開。テレワーク自体は既に浸透し ていたことから、在宅勤務への移行も円滑に進 んだという。緊急事態宣言解除後も全社的に 3割の在宅勤務を標準とし、首都圏の一都三 県については5割程度で運用している。

同社では、イノベーション創出のためにダイバー シティとインクルージョン(D&I)が必要であり、働き 方改革はその土台になるものと捉えている。社 員への浸透を図るためD&Iを「多様な社員全員 の成長と活躍」と意訳。4年にわたり働き方改 革を推進してきたことで、社員意識調査でD&Iの 風土を感じるという答えが年々増えているという。

こうした先駆的な取り組みには、代理店や顧客 企業などからも評価の声や事例を学びたいという声 が多くなっている。同社としても前出の社員向けガイ ドの提供をはじめ、ノウハウを積極的に公開している。

テレワークについてはハードウェアの環境面や コミュニケーション、あるいは制度面で課題は残る。 そこで、テレワーク下で成果を上げている職場を紹 介する動画の作成や全国の課長職を対象に研 修・ワークショップを実施している。人事評価に ついても制度化が進行中だ。同社ではテレワー クをウィズコロナ時代の最大の武器と捉え、会社 をより良く変えていく取り組みを加速させる。

Model created reflecting the results of an employee questionnaire survey. Teleworking is practiced based on this model and reflecting the characteristics and the reality of business processes. For *1 to *3 in the table below, the HR Department prepared templates and samples. 社員アンケートをもとに作成したモデル。このモデルを標準とし、業務の特性や実態に即して運営した。※1~3は人事部がひな型や見本イメージを用意

Standard model for teleworking (teleworker's typical day) *Excerpt

在宅勤務の標準モデル(一日の過ごし方)※抜粋

Previous day

前日(始業前)

cation method for teleworking in advance by email.*1

Set a message notifying others that you are teleworking and implement call forwarding on the extension

Make a to-do list and register your schedule on the scheduler for sharing.*2

在宅勤務時の連絡手段をメールで事前案内**

・内線電話への在宅勤務メッセージや転送先の設定 ・Todoを整理し、誰でもわかるようにスケジューラーに登録[※]

starting work

Share the progress of tasks and physical conditions of team members by web conferencing or by LINE for Business at a predetermined time

【コミュニケーション】

・定刻に、Web会議またはビジネスLINEにより、職場内で業務の進捗や各自の体調を確認

 Check the purpose of reporting and eliminate unnecessary reporting (reporting without feedback) · Create a group talk (by objective) within a department/branch/team to share information and seek/offer advice.

· Use the "task" functions to eliminate excessive progress manage

During work

終業時

始業時

報告目的を再確認し、報告者にフィードバックできない(しない)報告は廃止

・部支店内や職場のグループトーク(目的別)を作成し、常時、情報共有や相談を実施 ・過剰な進捗管理や経過報告を減らすため、「タスク」機能を活用

Select an online conference tool (Webex etc.) suitable for the conference/meeting.

・主催主体に応じて、Webexや新たなWeb会議ツールを使い分け、社内外の会議・打合せを開催

End of the day's Use email templates to efficiently report at the end of the day's work.*3

Register working hours as necessary and end the day's work by 19:00 at the latest to prevent long working hours.

・業務終了時は【メールひな型】を活用し、効率よく終了報告を実施**3

・長時間労働にならないよう、都度、勤務時間入力を行い、遅くとも19時前に業務を終了

SUMITAMA AUARTERI Y NO 162

"Check the News!"

by Junichiro Hori

明るい未来が見えてくる 堀 純一郎のチェック・ザ・ニュース!

In each issue of Sumitomo Quarterly, journalist Junichiro Hori takes a closer look at two eve-catching news releases from Sumitomo Group companies. He comments on their context and the implications for the future.

住友グループ各社が発表したニュースリリースの中から毎号、 特に注目の2つをピックアップ。ジャーナリストの堀純一郎が解説します。



Junichiro Hori 堀 純一郎

Junichiro Hori is a market researche a consultant and a widely published journalist. He is the representative of the eponymous HORI PARTNERS.

HORI PARTNERS代表。 様々な媒体で取材・執筆活動を行う他、 市場調査・コンサルティングなどを手掛ける。

New company established to develop and supply autonomous multifunctional robots for farmers

Japan Research Institute Issued on May 27, 2020

The Japan Research Institute, jointly with Altech, Yuasa Trading, Watanabe Pipe, and T.D.I., has established DONKEY, a new company that seeks to assist farmers by developing and supplying autonomous multifunctional robots as well as services utilizing data obtained from the robots. In Japan, where small and medium-sized farms account for 70% of agricultural output, automation has made little headway and most work is still done manually. Agriculture in Japan suffers from labor shortages and low profitability. It is envisaged that the new company will reduce workloads and boost the operational efficiency of farmworkers by offering compact multifunctional agricultural robots and related services, thus contributing to higher productivity.

Hori's perspective!

Enhance food self-sufficiency rate

COVID-19 threatens the world, causing

支える新会社な 開発・提供で農

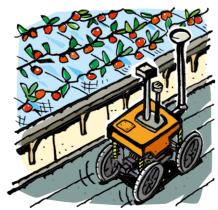
and poses major problems. Japan's high reliance on imported food makes it particularly vulnerable to disruption. According to the Ministry of Agri-

delays in the import and export of food.

culture, Forestry and Fisheries, Japan's food self-sufficiency rate was 37% (calorie-based) in fiscal 2018, the lowest ever rate for the country. Having peaked in fiscal 1965, the rate has been in long-term

Contributing factors include a decrease in the number of farmers in line with aging and a resulting increase in the area of abandoned agricultural land, as well as the changing diet of Japanese people who are eating less rice and more bread. In particular, small and mediumsized farms, which account for 70% of Japan's agricultural output, are suffering from labor shortages and a lack of automation.

Digital transformation (DX) is increasingly viewed as a promising solution for these issues besetting the agricultural sector. The revolutionary potential of DX is a focus of rising expectations, opening up the possibility of farms where cultivation is optimized utilizing data gathered by robots. Widespread application of agricultural DX will likely boost Japan's food selfsufficiency rate.



Demonstration test of blockchain-based automatic claiming of benefits

Sumitomo Life Insurance Issued on January 31, 2020

Sumitomo Life Insurance has conducted a demonstration test of automatic claiming of benefits utilizing blockchain technology in cooperation with comprehensive IT services provider TIS and Kitahara Neurosurgical Institute and Kitahara Medical Strategies International, members of the Kitahara Hospital Group that aims to advance medicine by applying IT. Conventionally, claiming benefits requires cumbersome communication among patients, hospitals, and life insurance companies. Once this blockchain-based system is up and running, it will no longer be necessary to obtain and submit bills and medical certificates, thus leading to greater convenience.

Hori's perspective!

Greater conveniencey

Blockchain became a buzzword because of its use for Bitcoin, a virtual currency. Although people tend to associate blockchain technology with virtual currencies,

dustries as insurance, manufacturing, and A characteristic of blockchain technology is that records of transactions are retained and linked like information in a

its potential application field goes way be-

yond finance to include such diverse in-

genetic sequence. Moreover, depending on the application, blockchain technology has the potential to greatly reduce the cost of constructing a computer system compared with the conventional approach

Thus, the possible application of blockchain technology has become a hot topic in many industries. Nevertheless, depending on the nature of the industry, thorny issues remain concerning how best to implement the technology so as to ensure confidentiality

In the healthcare sector, where personal information of patients is handled, confidentiality is vital. For the demonstration test for automation of the claiming of insurance benefits, technology to ensure the confidentiality of the personal information of patients claiming benefits is imple-

Going forward, the development of blockchain-based systems for applications in diverse industries is expected to lead to



生活をより便利に

吳証実験を実施 した給付金自動き

greater convenience for everyone.

The content of the press releases was summarized by the Sumitomo Quarterly editorial committee. 両社の発表内容はプレスリリースを基に編集部が要約しました。

の業界での採用が広が

食料自給率向

Hiroki Tsuboi Sumitomo Group

[漫画ルポライター つぼいひろきの住友グループ探訪

Theme [今回のテーマ]

Northwester 2 Offshore Wind Farm, Sumitomo Corporation

住友商事 ベルギー ノースウェスター2洋上風力発電所

Sumitomo Corporation traces its history back to The Osaka North Harbour Co., Ltd. established by Sumitomo Head Office in 1919. With six business units and regional organizations, Sumitomo Corporation operates globally and has been in the offshore wind farm business since 2014. 住友商事は1919年、住友本社が中心となって設立した大阪北港株式会社がルーツ。6つの事業部門と地域組織が連携し、グローバルに事業を展開。2014年、洋上風力発電事業に参入。







Sumitomo Corporation is involved in the development and operation of three offshore wind farms in Belgium, two in the UK and two in France. Northwester 2 Offshore Wind Farm is the company's fourth joint project with Parkwind N.V.

住友商事はベルギーで3つ、イギリスで2つ、フランスで2つの洋上風力発電所 の開発・運営に携わっている。ノースウェスター2洋上風力発電所はパークウィ ンド社との4つ目の共同事業になる。 here is an upswing of interest in having offshore wind farms play a growing role in Japan's energy sector. They efficiently transform wind power into electricity without spoiling the land-scape or seascape and with less noise pollution. Since wind power generation is such an excellent fit with the needs of our planet, the technology has a bright future. Eager to know more about wind power generation, I went on my first "online visit." The more I heard about this offshore wind farm, the more fascinated I became. Once I had connected Belgium and Japan over the Internet, I was able to take a virtual trip to Belgium to see the wind farm. It was great fun!

Northwester 2 Offshore Wind Farm developed and constructed by Sumitomo Corporation came on stream in May 2020. Located in the North Sea, 52 kilometers off the Belgian coast where the sea is about 40 meters deep, the wind farm comprises 23 units of V164-9.5MW, the world's largest mass-produced wind turbine*, manufactured by MHI Vestas in Denmark. With 9.5MW power generation capacity, this wind turbine is a giant towering 180 meters above the ocean. And with total power generation capacity of 219MW, the wind farm can fulfill the electric power needs of 210,000 households. What a magnificent view of white wind turbines soaring above the blue ocean.

Sumitomo's partner, Parkwind, develops and operates off-shore wind farms and is a member of the Colruyt Group, Belgium's largest operator of supermarkets. Parkwind originally entered the offshore wind farm business to meet the electricity needs of Colruyt Group's stores, numbering roughly 1,000, with renewable energy. What a great idea! I was moved. Mr. Motoo Shimada of Sumitomo Benelux, who works in Belgium, explains, "Since the EU aims to achieve zero emissions of greenhouse gases by 2050, the take-up of renewable energy has considerable momentum among EU member countries." And among the various types of renewable energy, interest in offshore wind power generation is particularly strong, leading to more and more wind farms.

Great stretches of the seas off Europe are shallow. Even 90 to 100 kilometers offshore, the depth may be only 30 to 40 meters. Since the turbines are on piles driven into the seabed, shallow seas are ideal for offshore wind farms. So the seas lapping the coast of much of Europe are blessed with geographical conditions suitable for offshore wind power generation. Moreover, thanks to technological innovation, larger wind turbines are becoming available, making it possible to harness the wind so as to produce amounts of electricity comparable to those derived from thermal or nuclear power generation.

But the task of erecting huge wind turbines in the hazardous offshore environment must be dangerous and difficult. How is it done? "Although we have excellent equipment that makes full use of state-of-the-art technology, we always respect and are attentive to the forces of nature. Before using a crane, the crew gathers to reconfirm the procedure. We check the strength of the wind before starting work. If, in the course of work, the wind velocity exceeds a certain threshold, work is immediately halted. Our operational procedures, including safety, are verified by a third-party certification body. Before we start construction, our operational procedures and safety criteria have to be certified," says Mr. Shimada.

The crew lives on the vessel. All crewmembers have their own rooms with an en-suite shower and toilet. Communal facilities include a gym and a sauna. It looks comfortable. Crewmembers spend two weeks aboard, followed by a spell ashore for rest and recuperation.



The four pillars are used to jack up the vessel during pile driving to form the foundation for a wind turbine in the seabed (above). And these four support legs resting on the seabed are jacked down to elevate the vessel above the sea surface. The yellow unit is the foundation of the wind turbine. Even though the tower is 100 meters tall, adjustment is carried out in centimeters when tightening bolts. During installation, the vessel is jacked up to prevent the impact of waves, thus ensuring the stability necessary for the work (right).



船の上にそびえ立つ4本の柱は、風車の基礎部分を海底に打ち込むとき支えになる柱(上)。 4本の柱を海底に立て、船を海面から上昇させる。そして左側の黄色い柱を海底へ打ち 込んでいく。この黄色い柱が風車の基礎部分になる。長さ100mの柱でもボルトを締める とさはセンチ単位で調整する。安定した状態での作業が必要となるため、波の影響を受けないよう、4本の柱で船を支えたうえで据え付け作業を行う(右)。

日本でも導入に向けた動きが広がる洋上風力発電。風の力を効率よく発電に結び付けられるだけでなく、景観や騒音問題への影響が少ない。まさにこれからの地球になくてはならない発電技術だ。ボクなりに学びたいなぁという思いから、今回初めて"オンライン探訪"にトライ。ベルギーと日本をネットでつなげて話を聞けば聞くほど、ベルギーに風車を見に行きたくなった!住友商事が開発・運営するノースウェスター2洋上風力発電所は、2020年5月に運転を開始したばかり。ベルギー沖約52km(水深約40m)の北海海域に建てられていて、世界最大の量産型風車(※)、デンマークMHIVestas社製「V164-9.5MW」を23基使用している。この風車、高さが約180mで発電容量は9.5MWというスケールの大きさ。発電所全体の総発電容量は219MWで約21万世帯相当の電力を供給している。青い海の上に真っ白な風車が立つ姿は壮観だ。

パートナー企業のパークウィンド社は、ベルギー最大手のスーパーマーケット、コルホイトグループの洋上風力発電事業開発・運営会社。全店舗分(約1000店)の電力を再生可能エネルギーでまかないたいという夢をもって、洋上風力発電に参画したそうだ。かっこいいぞ。ボクが感動していると、「EUは2050年までに同域内の温暖化ガスの排出を実質ゼロにする目標を掲げています。そのため、EUにおける再生可能エネルギーの普及は拡大しています」とベルギー駐在員の島田茂東さん。なかでも急速に導入が進んでいるのが洋上風力発電だ。

ヨーロッパの海は遠浅。陸地から90~100kmまで海底30~40m程度の 海が広がっている。洋上風力発電は基礎となる柱を海底に打ち込む構造であ



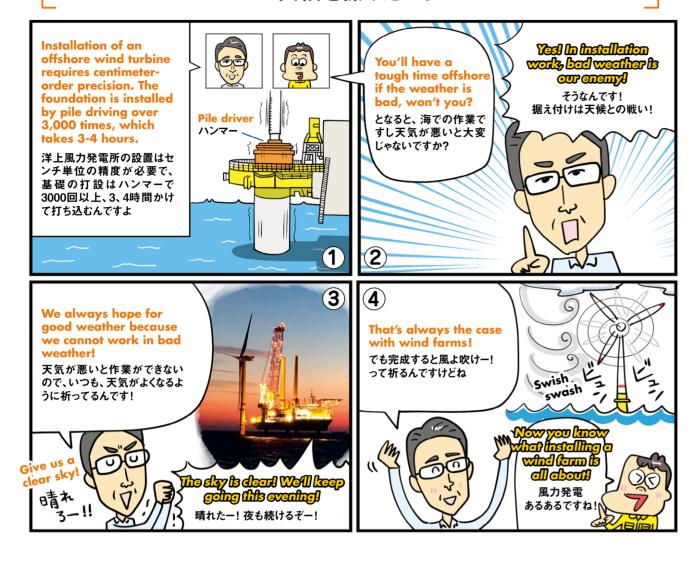
We are delighted to be contributing to environmental protection both directly and indirectly! 環境に間接的にも直接的にも 貢献できているのがうれしいです!

Referredly to the environment! 地球に優しいんだね! /



Wish we could control the weather!

天候を操りたい!



There is a chef on board who prepares delicious, nutritious meals. Mr. Soichiro Nakano of the Power Infrastructure Dept. No. 2, a department responsible for Sumitomo Corporation's overseas renewable energy business, has worked on this vessel. "You may imagine that offshore construction is largely done by rough and ready men with a seafaring background. In reality, crews are a diversified group of people. Each crewmember has a role and everyone cooperates to ensure the work proceeds safely and smoothly. Nevertheless, the weights in the gym are heavy. They must be designed for big strong person, they were not for me," says Mr. Nakano with a smile.

There are always about 80 crewmembers on board. Work is done in two shifts around the clock. The environment is challenging and the work demanding. Mr. Nakano says, "To work on an offshore wind farm project, you need to have a license certified by the Global Wind Organisation (GWO). You have to be trained and know what to do if an accident occurs offshore, including survival and rescue techniques at sea and actions to be taken in the event of fire. Although everything about an offshore wind farm is on a gargantuan scale, attention is paid to the smallest details. This meticulous approach is also evident in all matters relating to the environment.

るため、浅い海は好都合。洋上風力発電に適した地理的条件を持っているとい うわけだ。また近年、技術革新による風車の大型化が進んでいて、風の力だけ で火力発電や原子力発電に匹敵する量の電気が作れるようになっているのだ。

しかし巨大な風車を立てるだけでも大変なのに、それが海の上となると危 険度も高い。海での作業はどのように行っているのだろう?

「ハイテクの塊のような機械ですが、一番大切にしているのは自然との調 和です。クレーンを使うときは必ず担当者で集まって再度手順を確認、風 の強さを確認したうえで作業を進めます。作業中に基準となる風速を上回 ると、すぐに作業をストップ。また、安全を含めた段取りは第三者の認定機 関が確認します。作業手順や安全基準がチェック項目に合致しているとい う認証をもらって、はじめて作業を行うことができるのです」(島田さん)

作業員が寝泊まりする据付船には、シャワー・トイレ付きの1人部屋のほ か、トレーニングルームやサウナも完備していて快適そう。2週間ごとにロー テーションで海上に滞在するためコックが船に同乗。おいしくてボリューム 満点な食事を提供しているとのこと。この船に乗り込んだことがある海外 の再生可能エネルギーを担当する同社電力インフラ第二部の中野壮一郎 さんは、「洋上建設は"屈強な海の男たち"によって行われるというイメージ があるかもしれませんが、実際の現場は男女問わず様々なメンバーが、各々 の役割を担い、安全かつスムーズな工事が実施できるよう協力し合っていま す。ただし、トレーニングルームの重りは大きめでした。屈強な方々向けだ



メンテナンスは夏がメインシーズンになる。 と思います。僕は使っていません」と笑う。 クルーは常時80人、2シフト24時間体制で作業を行う。 なかなかハード

Construction work continues around the clock as long as the

wind is low and the sea calm. Since such offshore conditions

are typical in European coastal waters during the summer, that

is when most of the installation and maintenance work is done

風が少なく波が落ち着いていれば、工事は昼夜問わず24時間行われる。

ヨーロッパの海は夏の季節、風が比較的少なく波が穏やか。据え付けや

な現場だ。「洋上風力発電所で働くには、国際機関『GWO』が認定する ライセンスの取得が必要です。海に投げ出されたときのサバイバル方法や 救助方法、火災時の対処など、洋上で事故が起きたときに必要な知識を学 びます | と中野さん。巨大な洋上風力発電所だが、非常に細やかな作業 で運営されている。その細やかさは、環境への配慮でも伝わってくる。

「海洋生物への影響を最小限にするために、海底に基礎柱を打ち込む際 には、騒音対策として基礎柱のまわりに泡のカーテンを作ります(通称バブル カーテン)。海底にリングを沈めるのですが、このリングから泡を出して基礎 柱の打ち込み音が極力響かないようにします。渡り鳥の通り道を観察して、 鳥が通らない場所に風車を立てるなど、海鳥への配慮も大切です」と島田さ ん。未来のために地球環境と共生した仕組みづくりは着々と進んでいるの だ。魚や鳥と風車が共存している姿を想像して、ボクは胸が熱くなった。

EUでは洋上風力発電の導入が加速するといわれている。環境への意 識が強まったことや、経済効果も高められるためだ。導入が進み技術が発 展すれば、国土が海に囲まれている日本にも洋上風力発電が増えるはず。 欧州での洋上風力発電事業の経験を、日本で生かす機会が近い将来にや ってきてほしい!と思ったオンライン探訪だった。

"In order to minimize the impact on marine life, a bubble curtain is created around the foundation when pile driving into the sea bed as a noise mitigation measure. A large ring is laid around the construction site underwater on the seabed to generate air bubbles, which form a curtain that reduces noise. We also take steps to protect seabirds. Based on observation of migratory birds, when selecting sites for wind turbines. we avoid their customary routes," explains Mr. Shimada. With sustainability as their watchword, offshore wind farms like this are clean energy systems with impeccable environmental credentials. Marine life, birds, and wind turbines can all flourish. It is a vision that I find deeply appealing.

Offshore wind power generation is expected to grow and flourish in the EU, where it is not only attuned to rising environmental awareness but also promises to deliver substantial economic benefits. As the technology advances, I am sure that the Japanese archipelago will be dotted with a growing number of offshore wind farms. I cherish the hope that in the coming years Sumitomo Corporation will find many opportunities to utilize in Japan the experience in the offshore wind power generation business that it has gained in Europe. That is my key takeaway from this first online visit.

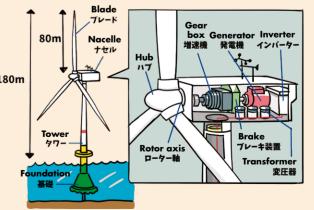
Technological innovation of offshore wind power generation never stops!

洋上風力発電の技術革新が止まらない!

The number 164 in the wind turbine model name "V164-9.5MW" is a reference to the 164-meter rotor diameter, which is about half the height of Tokyo Tower (333 meters). The scale is on a par with that of a high-rise building. This propeller-type wind power generation system is the most suitable for such a big wind turbine. The wind rotates the blades, the gearbox increases the number of rotations to the number necessary for power generation, and the generator converts rotational energy into electric energy. The development of larger wind turbines and new technologies has been accelerating in recent years. Whereas the current mainstream offshore wind turbines are those with a foundation fixed to the seabed, wind turbines mounted on floating platforms have also emerged. Technological innovation continues at a brisk pace.

「V164-9.5MW」の164とは羽の直径のこと。約164mとは、どのくらい大きいかとい うと、東京タワー (333m)の約半分。高層の建物と同じスケールなのだ。内部はプ ロペラ式風力発電と呼ばれる構造。最も大型化が可能なシステムだ。ブレードが風 を受けて、増速機が発電を行うのに必要な回転数まで増速。発電機で回転エネル ギーを電気エネルギーに変換する。昨今、大型の風車や新しい技術が著しく開発さ れている。今は海底に風車を打ち込む「善床式」が主流だが「浮休式」と呼ばれる 海に風車を浮かせるという技術も出てきた。技術革新は止まらないのだ。

Structure of an offshore wind turbine 「洋上風力発電所の構図]



SUMITAMA AUARTERI Y NO 162 17

SUMITOMO'S MODERN DEVELOPMENT

— Besshi Copper Mine Memorial Museum —

近代住友の歩み | Part 25

~ 別子銅山記念館編~

To delve deeper into Sumitomo's history, let's take a look at some of the exhibits at the Besshi Copper Mine Memorial Museum in Niihama City,

愛媛県新居浜市にある別子銅山記念館。その所蔵品から、住友の歴史をひもときます。

穴を穿つ 盛

Seizanbo, a bit for drilling holes in rock



Among the tools used at the Besshi Copper Mines and displayed at the Besshi Copper Mine Memorial Museum is the seizanbo. About 30 centimeters in length, this is a bit made of forged steel for drilling holes in rock in which gunpowder is charged. Although it looks just like a nondescript rod, the seizanbo is a tool symbolizing the modernization of the Besshi Copper Mines that not only revived the mines but also the fortunes of the House of Sumitomo. Indeed, the literal mean-

ing of "seizanbo," a word coined by Saihei Hirose, is "rod for prosperity of the mines," clearly expressing the role he had in mind for this new tool.

Following his adoption by an uncle who worked at the Besshi Copper Mines, Saihei Hirose moved there in 1836 at the age of nine. He was apprenticed to the House of Sumitomo when he was 11 and became general manager of the Besshi Copper Mines at 38. By the closing years of the Tokugawa shogunate, some 170

years since the opening of the mines, annual copper production at the Besshi Copper Mines had declined to 350 tons, one-fourth of its peak. Almost everything was still done manually and this way of doing things had reached its limit.

別子銅山で使われた工具の一つとして、別子

銅山記念館に展示されているのが「盛山棒」で

ある。採掘現場で岩盤に火薬を装填するため

の穴をあける穿孔棒で、長さ30cmほどの鍛鋼

製だ。一見、何の変哲もない棒のようだが、名

付け親である広瀬宰平が「山が盛大に繁栄す

るように | という願いを込めた通り、別子銅山の

再生、さらには住友家の再興に向けた別子銅

広瀬宰平は、別子銅山に勤める叔父の養子

となって、1836年に9歳で別子銅山へ。11

歳から奉公を始め、38歳で別子銅山の支配人

となっている。幕末の別子銅山は、開坑から約

170年を経て、産銅量が最盛期の4分の1、お

山近代化を象徴する工具だ。

Beset by mounting losses at the Besshi Copper Mines and the threat to business continuity posed by the risk that daimyo would default on debts because of their difficulties following the Meiji Restoration, the House of Sumitomo conよそ年間350tにまで落ち込んでいた。手掘り による採掘が限界に達していたのである。

別子銅山の赤字経営が続く中、住友家では 銅山の売却案が出た。明治維新により諸大 名に用立てていた御用金の回収が難しくなり、 事業の存続が危ぶまれていたのだ。さらには、 新政府による別子銅山接収の危機もあった。 しかし、別子銅山を熟知する広瀬は、同山には まだまだ眠る鉱脈があり、鉱山業を住友家の 事業の柱とすべきことを力説。また新政府にも 「豊富な実績と経験を持つ住友家が継続して 経営することこそが国益に沿う」と主張し、売却 案も接収も阻止している。

この時、新政府に才腕を見込まれた広瀬は、 鉱山司の役人に任命された。出仕した官営の 生野鉱山で、広瀬が目の当たりにしたのが先進 の西洋技術だった。新政府の御雇い外国人技 術者から黒色火薬を使用した採鉱法を学ぶと、さ っそく別子銅山に導入。採掘する岩盤に火薬を 入れるための穴をあける穿孔棒として、広瀬が考 案したのが「盛山棒」だった。火薬を使うことで 一気に鉱石の採掘量を増やし、5年後の1875 年には年間715tにまで産銅量を回復させた。

別子銅山の再生に西洋技術による近代化

sidered selling the mines. Moreover, the new government was keen to requisition the Besshi Copper Mines. Drawing on his in-depth knowledge of the Besshi Copper Mines, Hirose explained to the executives of the House of Sumitomo that the Besshi Copper Mines still had untapped veins and insisted that Sumitomo should position mining at the heart of its business. Hirose told the new government, "In view of the House of Sumitomo's extensive track record and abundant experience in managing copper mines, Sumitomo's continued management of the Besshi Copper Mines is in the national interest." Using all his powers of persuasion, Hirose prevented the sale or requisition of the Besshi Copper Mines.

Having recognized Hirose's capabilities during the negotiation, the new government appointed him to serve as an official of the Mine Agency. On a visit to the government-managed Ikuno Silver Mine, Hirose encountered the latest Western technologies. From a foreign engineer hired by the government, Hirose learned about modern mining techniques using gunpowder and introduced them to the Besshi Copper Mines. The seizanbo is a tool conceived by Hirose for making holes in rock in which gunpowder is charged.

が不可欠であることを確信した広瀬は、フランス の鉱山技師ルイ・ラロックを、広瀬の給料の約 6倍という高額な報酬で招聘した。民間企業 としては初めてのことだ。 ラロックは約1年半 をかけて、別子銅山の地質や鉱脈などを調査。 それに基づいて、輸送道路の敷設、採鉱方法 およびその関連設備の近代化、洋式製錬所の 設置などの改善策をまとめた「別子銅山目論 見書 | を提出している。

同書を参考に別子銅山の近代化を進めた結 果、1890年前後には幕末期の約10倍の銅を 産出し、見事に別子銅山は蘇った。特筆すべきは、 それを外国人技師に頼らず、自分たちの手で実現 したことだろう。技術は学ぶが、国づくりは外国任 せにしないという広瀬の気概が伝わってくる。



used by Louis Larroque in his work. He came to Japan, bringing the latest equipment with

ルイ・ラロックが調査のために 使用した測量器・トランシット。 当時の最新機器を携えて、ラ ロックは来日した。

Use of gunpowder boosted output to such an extent that by 1875, five years after its introduction, annual output of the Besshi Copper Mines had recovered to 715 tons.

Convinced that only by introducing Western technology could the Besshi Copper Mines be revived, Hirose hired French mining engineer Louis Larroque at a monthly salary six times greater than his own. This was the first instance in Japan of a private enterprise hiring a foreigner. First, Larroque spent 18 months investigating the geology of the Besshi Copper Mines. He then formulated the Besshi Copper Mines Masterplan consisting of improvement measures, including construction of a road for transportation, modernization of the mining methods and related facilities, and construction of a Western-style smelter.

As a result of modernization based on Lorroque's masterplan, the Besshi Copper Mines achieved such a decisive revival that by 1890 annual copper production was 10 times what it had been at the end of the Tokugawa Shogunate. Although the technology was learned from foreign engineers, it is noteworthy that Japanese engineers carried out the actual modernization. This demonstrates Hirose's determination to achieve self-reliance.

SUMITOMO QUARTERLY NO.162 *Cooperation by: Besshi Copper Mine Memorial Museum ※取材協力:別子銅山記念館

Mitsui Sumitomo Insurance 三井住友海上火災保険

Launch of the industry's first car insurance product for car sharing platform providers

Mitsui Sumitomo Insurance has developed and launched a car insurance product specifically for peer-to-peer car sharing platform operators. It is the first such product in Japan's insurance industry.

The peer-to-peer car sharing platform provider will be the policyholder and comprehensive coverage is assured under an annual contract with the provider for any accidents that occur during use of the car sharing service. As the insurance contract is not for each individual usage of the car sharing service, all car owners and car sharing service users will have comprehensive coverage. Another advantage is flexibility, such as whether to include compen-

sation for legal expenses and for in-vehicle baggage. The new product also covers theft of vehicles by car sharing service users, which is not covered by conventional insurance products, thus offering peace of mind to car owners who are considering car sharing.



カーシェアプラットフォーム 事業者を対象とする業界初の 自動車保険を販売

三井住友海上火災保険は、個人間の カーシェアリングに対応する「カーシェア プラットフォーマー専用自動車保険」を 開発し、このほど販売を開始した。 同種 の保険は業界初となる。

同保険は個人間カーシェアなどのプラットフォーム運営事業者が契約者となり、カーシェア利用中の事故を利用1回ごとの契約ではなく事業者との年間契約で包括的に補償する。このため車両保有者やカーシェア利用者は補償の抜け漏れがなくなるほか、弁護士費用や車内手荷物補償の有無なども柔軟に設計することが可能。また、従来の保険では対象外だったカーシェア利用者による車両の持ち逃げも支払対象となり、車両所有者が安心してカーシェアを始められるようになる。

Sumitomo Mitsui Construction 三#住友建設

SMCC won 6 awards at the 2019 JSCE Awards

SMCC (Sumitomo Mitsui Construction Co. Ltd.) has won a total of 6 awards including the Tanaka Award at the 2019 JSCE (Japan Society of Civil Engineering) Awards.

JSCE Awards is an award program founded in 1920. Among the awards, Tanaka Awards are granted to the companies with outstanding performances achieved in the Bridge and Steel Structural Engineering projects in the 3 categories: Outstanding Research Achievement, Excellence in Research Paper, and Excellence in Bridge Design and Construction. The Excellence in Bridge Design and Construction Award in the Renovation section was given to the "Widening Works of KIRIGATAKI BRIDGE" project on the ShinMeishin Expressway in Mie Prefecture, and the "KOMONODAINI VIADUCT" project on the same Expressway received the Excellence in Bridge Design and Construction Award in the



New Construction section. Other awards SMCC received this year are the Continuing International Contribution Award and the Outstanding Civil Engineering Achievement Award in Group 1 and Group 2. Up to date, SMCC has won a total of 56 JSCE Awards and, in particular, more than 40% of our bridge projects have won JSCE awards.

令和元年度 土木学会賞で 田中賞・作品部門2件など 計6件を受賞

三井住友建設は「令和元年度 土木 学会賞」で田中賞など計6件を受賞した。

土木学会賞は1920年に創設された表彰制度。田中賞は橋梁・鋼構造工学に関する優秀な業績に対して授与される学会賞で、研究業績部門、論文部門、作品部門の3つがある。今回は同社が施工した三重県の新名神高速道路「錐ヶ瀧橋の拡幅」が作品部門/改築で受賞。同じく新名神高速道路の「菰野第二高架橋」が作品部門/新設を受賞した。このほか国際活動奨励賞1件、技術賞(Iグループ)1件、技術賞(Iグループ)2件で受賞している。同社の土木学会賞受賞は今回で計56件となり、特にコンクリート橋梁では全体の4割以上の受賞実績を誇っている。

Sumitomo Seika Chemicals 住友精化

Certification as an excellent operator in the 2019 Eco-ship Modal Shift Project



Sumitomo Seika Chemicals was certified as an excellent operator in the 2019 Eco-ship Modal Shift Project and commended by the Director-General of the Maritime Bureau of the Ministry of Land, Infrastructure, Transport and Tourism (MLITT).

Certification in the Eco-ship Modal Shift Project is determined by the executive committee, consisting of ferry operators and

domestic vessel operators, in cooperation with the Maritime Bureau of the MLITT. 2019 was the 11th year of this certification program. From among cargo owners and physical distribution service providers that selected and used marine transportation, which is a transportation mode notable for high energy efficiency and low carbon dioxide emissions, companies that made an outstanding contribution to reduction of environmental impacts are certified as excellent operators. Sumitomo Seika Chemicals was recognized for implementing modal shift in cooperation with consignees and physical distribution service providers. The company will continue promoting modal shift to reduce environmental impacts.

環境負荷を低減する エコシップ・モーダルシフト事業 の優良事業者に認定

住友精化は令和元年度「エコシップ・モーダルシフト事業」の優良事業者に認定され、このほど国土交通省海事局長から表彰を受けた。

エコシップ・モーダルシフト事業の認定は、フェリー事業者と物流などの内航事業者で構成する実行委員会が国土交通省海事局の協力を得て決定するもので、今回が11回目。エネルギー消費効率がよく環境負荷の少ない輸送モードを選定した荷主や物流事業者の中で、特に貢献度が高い企業を優良事業者として認定する。同社は輸送分野で着荷主・物流事業者との三者連携によるモーダルシフトが輸送において一定の功績が認められた。今後もモーダルシフトを図り、環境負荷低減に取り組んでいく。

SMBC Nikko Securities SMBC日興証券

Launch of Japan's first stock investment service using d point in cooperation with NTT DOCOMO

SMBC Nikko Securities, in partnership with NTT DOCOMO, launched Nikko Froggy + docomo on March 24, 2020. Using this service, which is the first of its kind in Japan, anyone can invest in stocks by using points gained through NTT DOCOMO's d Point Club program. Some 3,700 equities listed on the Tokyo Stock Exchange can be purchased, with a minimum investment of 100

yen (100 points), free of commission provided that the transaction does not exceed 100 million yen .

This service lowers the psychological barrier to investment by combining Nikko Froggy—an online medium whose users can purchase stocks mentioned in the content, with the 75-million-member d Point Club. SMBC Nikko Securities is advocating this innovative investment style in which d points accumulated in the course of daily life can be used to buy stocks.

NTTドコモとの提携で 「dポイント」を使った日本初の 株式投資サービスを開始

SMBC日興証券は、NTTドコモとの 提携により、同社が運営する「dポイント」 を使って株を購入できる日本初のサービス「日興フロッギー+ docomo」を2020 年3月24日に開始した。東証上場の 約3700銘柄を、100万円以下であれば手数料無料で100円 (ポイント) から 購入できる。

本サービスは、記事で学びながら株を購入できる投資情報メディア「日興フロッギー」と、7500万人以上のユーザーを持つdポイントを合わせることで、投資に対するハードルを下げることを目指している。日常生活でポイントを貯める「ポイ活」になぞらえ、dポイントで株を購入する新しい投資スタイルを「ポイ株」として推進していく。

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SCSK Corporation scsk

Joint demonstration experiments to prevent financial fraud using behavioral biometrics

SCSK conducted demonstration experiments for prevention of financial fraud using behavioral biometric authentication technology in cooperation with Mizuho Bank and BioCatch, an IT startup based in Israel.

Using an Al-based platform for behavioral biometric authentication developed by BioCatch, the experiments were conducted at the Silicon Valley Office of SCSK USA and the Americas Office of Mizuho Bank's Digital Innovation Department. By executing scenarios for sending money using pseudo-applications based on Mizuho Bank's banking application, the effectiveness of behavioral biometric authentication technology in combating spoofing and other financial fraud was tested. SCSK developed the pseudo-applications using BioCatch's cutting-edge technology, verified the various functions, and executed testing scenarios. SCSK and Mizuho Bank aim to introduce Al-based behavioral biometric authentication solutions reflecting analysis of the results of the experiments.

行動的生体認証技術を活用した 金融詐欺防止の共同実証実験を開始

SCSKは、みずほ銀行およびイスラエルのITスタートアップ企業・BioCatch社と、行動的生体認証技術を用いた金融詐欺防止に関する共同実証実験を開始した。

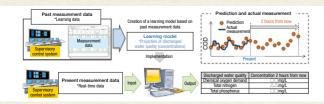
今回の共同実証実験は、BioCatch社が開発した行動的生体認証のAI活用プラットフォームを利用し、SCSK USA シリコンバレーオフィスとみずほ銀行 デジタルイノベーション部 米州室にて実施。みずほ銀行のバンキングアプリケーションを模した疑似アプリケーションで送金シナリオを実行することで、なりすまし対策やその他金融詐欺対策ソリューションとしての有効性を分析する。SCSKはBioCatch社の最新技術を実装した疑似アプリケーションの開発と、各種機能の確認、テストシナリオの実施を担う。この実験の分析結果をもとに、SCSKとみずほ銀行はAIを活用した行動的生体認証ソリューションの早期導入を目指す。

Nissin Electric 日新電機

Al-based prediction of quality of water discharged from sewage treatment facilities

Nissin Electric has developed technology for Al-based prediction of the quality of water discharged from sewage treatment facilities.

This technology uses AI to predict concentrations of chemical oxygen demand (COD), total nitrogen (TN), and total phosphorus (TP), whose management and control are mandated by the Water Pollution Prevention Act, with a two-hour time horizon based on past measurement data. If the quality of discharged water deteriorates owing to the characteristics of influent and other factors, restoring water quality to normal takes time and requires the involvement of experienced supervisors. Prediction two hours in advance provides sufficient time for an effective response while reducing the burden on supervisors and preventing deterioration of water quality. The company intends to commercialize this technology as an add-on to its energy management system for sewage treatment facilities, thus enhancing the efficiency of their maintenance and management.



下水処理場の放流水質を AIで予測する技術を開発

日新電機は、AIを活用して下水処理場の放流水質を予測する技術を開発した。

同技術は過去の計測データをもと に、水質汚濁防止法で管理・規制 対象となっている化学的酸素要求量 (COD)、全窒素含有量 (TN)、全り ん含有量 (TP) の2時間後の濃度を AIで予測するもの。流入水などの状 況により放流水質が悪化した場合、 正常に戻すには一定の時間と管理者 の経験・労力を必要とするが、2時間 前の予測によって十分な対応時間を 確保するとともに、管理者の労力軽減 にも寄与し、水質悪化の未然防止が 可能となる。今後は下水処理場の維 持管理の効率化に向け、同社の下水 処理場向けエネルギー管理システム の機能拡張として製品化していく。 🗊

Meidensha 明電舎

Incentive Prize received in the 2019 Environmental Human Resource Development Corporate Awards



Meidensha received the Incentive Prize in the 2019 Environmental Human Resource Development Corporate Awards, which is sponsored by the Ministry of the Environment and the Environmental Consortium for Leadership Development (EcoLeaD). The objective of the

Awards is to increase the number of companies contributing to integrated improvement of the environment, society, and the economy by commending those that are fostering employees capable of taking the initiative in environmentally conscious management. This was the first time for Meidensha to be recognized in the Awards.

Items assessed for the Awards include companies' employee-initiated environmental protection activities, corporate support for these activities, and systematic employee training, as well as other initiatives to foster human resources with acute environmental awareness. Of the Meiden Group, 17 companies in Japan and 11 companies overseas are ISO 14001 certified. Moreover, the Group has implemented environmental management systems throughout its value chain and focused on developing an environmentally conscious workforce. The Group's initiatives were highly regarded.

環境人材の育成を評価する 「環境 人づくり企業大賞2019」 の奨励賞を受賞

明電舎は「環境 人づくり企業大賞 2019」(主催:環境省、環境人材育成 コンソーシアム)の奨励賞を受賞した。 同賞は環境・社会・経済の統合的向 上に寄与する企業を増やすため、環境に 配慮した企業経営に向け社員を育成す る企業を表彰するもので、同社の受賞は 今回が初。

評価の対象となるのは、環境に配慮した社員の自発的な活動とその活動を支援する企業としての取り組み、また環境人材育成に向けた日頃からの社員教育などの取り組みだ。同社グループはISO14001認証を国内17社・海外11社で取得しているほか、バリューチェーン全体での環境マネジメントシステム普及と環境人材育成に注力してきたことが総合的に評価された。

Sumitomo Mitsui Auto Service 住友三井オートサービス

Absorption-type merger with SMAS Fleet to strengthen comprehensive mobility services

Sumitomo Mitsui Auto Service (SMAS) merged with SMAS Fleet, a subsidiary engaged in vehicle leasing, on April 1, 2020, in accordance with an absorption-type merger agreement concluded on December 25, 2019. The merger seeks to create new value meeting customer needs by integrating the two companies' resources and

strengthening development of the comprehensive mobility service business.

SMAS Fleet's card business was folded into SMA Support, a 100% subsidiary of SMAS, through an absorption-type split. In addition, SMA Support merged with Nicopit, a 100% subsidiary of SMAS Fleet, through an absorption-type merger.

SMASフリートを吸収合併し 総合モビリティサービス事業を強化

住友三井オートサービスは2020年4月1日付で、グループ企業のSMASフリートを吸収合併により統合した。

SMASフリートは自動車リースを事業とする企業で、今回の 吸収合併は2019年12月25日に締結していた吸収合併契約 を実行したもの。この合併により両社が持つ各種リソースを統 合し、総合モビリティサービス事業の展開を強化して新たな価

値を創造することで、顧客のニーズに応えていくことを目指す。また、SMASフリートのカード事業は住友三井オートサービスの完全子会社・SMAサポートに吸収分割するとともに、SMAサポートがSMASフリートの完全子会社・ニコピットを吸収合併で統合した。



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