



TCFD 2022

Status Report

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A message from the CEO



“ *On behalf of Institutional Shareholder Services' (ISS) more than 2,700 professionals across the globe, I am pleased to welcome you to our inaugural TCFD report.* ”

Since its inception in 1985, ISS has focused on providing investors with the tools and independent research needed to monitor and address corporate governance and, a decade later, ESG and other latent risks at portfolio companies. Today, climate change is for many corporations and, importantly, their stakeholders, a serious risk as well as a key theme for financial market participants from Seoul to Sao Paulo.

ISS has a role to play in addressing the hazards posed by global warming, which includes reducing our own carbon footprint and availing ourselves of carbon offsets where appropriate.

At the same time and given the nature of our work, we are in the unique position to provide tools to help our diverse universe of clients monitor and mitigate climate risks within their portfolios, their supply chains, and/or within their own operations. As laid out in this report, ISS is responding to their needs by offering a wide array of industry-leading solutions, including climate advisory, climate analytics, data for climate-focused indices, water risk ratings, net zero collaborative engagement services, and a custom climate voting service. In sum, investor and corporate clients alike can choose from a suite of leading resources to help assess and address as they determine the myriad risks stemming from a warming planet.

ISS supports the central goal of the Paris Agreement to limit global warming to 1.5°C and, in furtherance of this position, is focused on moving to ensure its

business operations are carbon neutral. In 2020, ISS adopted for the first time a Climate Strategy focused on how to reduce our carbon footprint. In 2021 and 2022 we significantly enlarged the Scope 3 dimension of our strategy and are basing our reduction goals on Science Based Target Initiative requirements. For ISS, this means targeting a 50 percent reduction of absolute Scope 1 & 2 emissions by 2030; a 20 percent reduction in absolute travel emissions by 2030; and an ambitious engagement goal aimed at encouraging 50 percent of our suppliers, by spend, to have a Science Based Target by 2027.

I hope this report informs your understanding as to how ISS will thoughtfully and transparently communicate to stakeholders steps taken to become carbon neutral. Within you will find metrics, targets, and methodologies ISS will use to assess and manage its progress toward climate neutrality.

We recognize the criticality of organizations large and small addressing the risks posed by a warming planet and all of us at ISS are committed to doing our part to ensure a healthy environment for future generations.

GARY RETELNY
President & CEO
Institutional Shareholder Services Inc.

INTRODUCTION & BACKGROUND

Disclose the organization's governance around climate-related risks and opportunities.

Institutional Shareholder Services

Institutional Shareholder Services Inc. has more than 35 years of experience working with institutional investors, companies, and other stakeholders, globally, providing corporate governance and responsible investment solutions that help investors manage ESG risks and seize investment opportunities. As a global company active in the financial markets, we are focused on building for long term growth and increasing the value of the services provided to our clients by placing quality and independence at the core of our organization, products, and business solutions.

Through our dedicated responsible investment arm, ISS ESG, ISS provides globally recognized expertise, data, and analytics across a range of sustainable and responsible investment issues, including climate change, sustainable impact, human rights, labor standards, corruption, controversial weapons, and

many more. ISS solutions enable clients to develop and integrate responsible investing policies into their strategy and execute upon these policies with actionable data, services, engagement, voting and reporting.

ISS has built a culture that seeks to uphold the well-being of our people, clients, and other stakeholders and is rooted in the pillars of integrity, collaboration, empowerment, flexibility, and diversity. ISS takes its responsibility to its stakeholders seriously. As a company, we advance Corporate Responsibility both with our products and services, and with our organizational programs and policies. We are committed to positively impacting the environment and society both through our market-leading solutions and leading by example. ISS is a PRI signatory and a member of the UNGC.

What is the TCFD?

The Task Force on Climate-related Financial Disclosures (TCFD) was launched after the 2015 Paris Agreement by the Financial Stability Board with the goal to improve climate disclosure by providing guidance on identifying and steering climate-related risks and opportunities. Considering climate transparency as a crucial factor for financial market stability, the TCFD, headed by Michael Bloomberg, released its first set of recommendations in 2017¹. The resulting framework has a dual purpose: First, to support informed investment, credit, and insurance underwriting decisions, and second, to enable investors and regulators to better understand climate-related risks associated with financial institutions. In a context where more than 400 disclosure frameworks for corporates and 20 for investors exist globally, the objective of the TCFD is to create a harmonized standard for both corporate

and investment climate disclosure, considering that domestic and local regulatory frameworks may require different levels of compliance.

In October 2021, the TCFD published updates on its initial recommendations. With nations and corporates starting to set net zero targets, the TCFD framework is intended to support the disclosure of, and assessment of progress made under, transition plans by providing more specific guidance on metrics and targets.²

The recommendations are split into the four categories: Governance, Strategy, Risk Management, and Metrics & Targets. Each of the categories present approaches for assessment and disclosure of associated climate risks and opportunities. This ISS report presented is structured in accordance with the recommendations.

GOVERNANCE

Disclose the company's governance around climate-related risks and opportunities.

RISK MANAGEMENT

Disclose how the company identifies, assesses, and manages climate-related risks.

STRATEGY

Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.

METRICS & TARGETS

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

1. Task Force on Climate-related Financial Disclosures, Overview of Recommendations, June 2017 (<https://www.fsb-tcfd.org/wp-content/uploads/2017/06/TCFD-Recommendations-Overview-062717.pdf>)
2. See https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf

GOVERNANCE

Disclose the organization's governance around climate-related risks and opportunities.

ISS' commitment to have good governance and management structures around climate-related issues is demonstrated in two ways: firstly, as a business striving to reduce our own carbon footprint and actively contributing to achieving the 1.5 degree target. Secondly, ISS' business lines offer products and services that enable its customers to implement sustainable and climate-neutral strategies.

The Chief Executive Officer

The overall responsibility for climate strategy at ISS lies with the CEO, Gary Retelny, who ensures and encourages the promotion of key ESG and climate-related initiatives by ISS' management teams. In shaping the internal strategy, the CEO is supported by the Corporate Responsibility (CORE) Council which was founded in May 2020.

ISS Leadership Team

While there is no central climate-governing body, climate-related matters are discussed in regular governing bodies, such as the ISS Leadership Team (ISS LT), the ISS Business Unit Head meetings, and in a range of unit-level leadership teams. Some members of the ISS LT are part of the CORE Council and engage in climate-related governance responsibilities on a regular basis.

Corporate Responsibility (CORE) Council

The CORE Council includes senior members from different business areas and is led by the Head of Corporate Responsibility, Robert Hassler, and currently comprises Allen Heery, CFO; Alexis Daur, Head of Global Human Resources; Marija Kramer, Head of ISS Corporate Solutions Business; Subodh Mishra, Head of Communications; and Steven Friedman, General Counsel.

The CORE Council works in close collaboration with the ISS LT and is supported by a global Corporate Responsibility (CR) Team. It provides input to inform and develop key ISS ESG and Climate-related policies and initiatives and meets at least monthly.

In 2021, the CORE Council led the assessment of our climate-related risks mitigation in accordance with the TCFD recommendations. A full carbon footprint assessment was undertaken based on the Science Based Target Initiative (SBTI) requirements, leading to ISS' commitment to CO₂ reduction targets aligned with SBTI criteria and commitment to perform ongoing assessments of climate-related risks and reporting on an annual basis of ISS progress in accordance with the TCFD recommendation.

Global Corporate Responsibility (CR) Team

The Global Corporate Responsibility Team is led by the Global CR Manager and includes regional CR leads. The global CR Team collaborates with HR and Corporate Services throughout the company to implement the CR strategy at the local level. For climate-related issues specifically, the CR team is supported by in-house climate experts.

TCFD Working Group

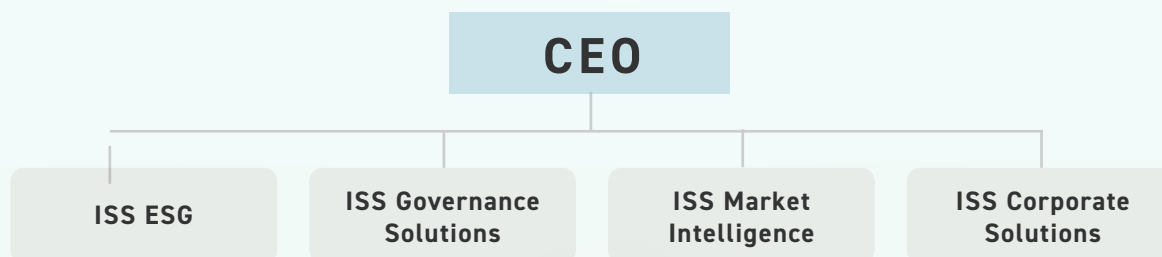
In 2021, the CORE Council launched a TCFD working group, whose primary goal is to support, report, and disclose in accordance with the TCFD Recommendations ISS' climate-related governance, strategy, risk management and climate-related metrics. The TCFD working group is led by the Head of Corporate Responsibility, Robert Hassler, and included various members of the Climate Specialists team to provide expertise.

Fig. 1: ISS Climate Governance Structure



BUSINESS OFFERINGS

ISS consists of four business units that all integrate climate change in their individual business conduct.



Climate on the agenda of regular exchanges between Heads of Business Units with CEO affecting several business units

Fig. 2: ISS Business Units with Climate Agenda

ISS ESG BUSINESS UNIT

ISS ESG delivers sustainability-related data, solutions, and services to more than 1,000 institutional investor clients across the globe.

Within the ISS ESG business unit, a dedicated climate team not only develops climate solutions and services for investors and corporates, but also serves as a cross-business center of expertise for climate-related matters. Through its product/services offerings, this team effectively supports the preparation of TCFD reports of hundreds of investors globally.

The wider ISS ESG research group focuses on the topic of climate change through research and services such as the ISS ESG corporate rating and

the Sustainable Development Goals (SDG) rating that includes a focus on climate relevant goals such as Climate Change (SDG 13), renewable energy etc. A dedicated Energy & Extractives team focuses on climate relevant topics such as fossil reserves and energy generation of utilities.

The Stewardship & Engagement team assists with engagements on behalf of investors with corporates on the topic of climate change.

ISS Governance Solutions (GS) BUSINESS UNIT

The GS business unit, inclusive of market-leading shareholder research and voting services, was the first to offer the global investor community with a climate-focused proxy voting policy in 2019. With dedicated environmental specialists, the GRV team also monitors climate-linked shareholder resolutions, globally, and annually informs its clients about outcomes and trends. In 2021, GRV included climate change related questions in its annual policy survey that enables clients and other stakeholders to make their views heard as part of ISS' annual benchmark proxy voting policy update process. Based on stakeholder feedback and market developments, in 2022 GRV implemented

in the benchmark proxy voting guidelines a new policy on climate change for the U.S., UK & Ireland, Continental Europe, and Russia, with a focus on the world's highest emitting companies as deemed by Climate 100+. This new policy provides a framework to assess climate transition plans, and a voting policy for the assessment of and focus on the world's highest greenhouse gas (GHG) emitting companies.

A standing committee between GRV and the ISS ESG climate team ensures information sharing, joint product development, and interaction with different climate focused market participants, such as the Institutional Investors Group on Climate Change.

ISS Market Intelligence (MI) BUSINESS UNIT

MI offers a wide variety of market intelligence solutions to financial market participants worldwide. This includes information on climate change. One example is the fund platform www.fondsweb.de that provides users with the "CLIMETRICS" climate rating (developed by ISS ESG and the climate NGO, CDP) for thousands of funds. Another example is the featuring of the ISS ESG funds rating on MI's www.simfund.com platform and the different climate publications that MI's Australia-based unit, Rainmaker, releases regularly.

This ISS Media business operates a range of investor-focused titles, publications, and events, including the CIO magazine³. Many of those titles publish regularly on the topic of climate change and ISS Media-hosted annual conferences have featured panels and keynotes on the topic of climate change.

ISS ESG's climate unit serves as a resource for further integration of climate information and data into MI's offerings.

ISS Corporate Solutions (ICS) BUSINESS UNIT

The ICS business unit, which operates separately from ISS' business units serving institutional investors, helps companies design and manage their ESG programs to align with company goals, reduce risk, and manage the needs of a diverse stakeholder base by delivering expert advisory, data, and SaaS-

based solutions across a wide spectrum of ESG and climate topics. ICS is also an integral part of the sustainable finance ecosystem through the provisioning of Second Party Opinions for issuances of green bonds and sustainability-linked loans.

3. Chief Investment Officer magazine



Dedicated Thought Leadership teams across all business units ensure ongoing production of climate-relevant content for ISS clients, with several publications per month. The ISS Marketing team, meanwhile, hosts in-person and online events featuring ISS ESG climate experts.

STRATEGY

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

For its TCFD assessment, the ISS CR team identified ESG-related risks at ISS, building upon its longstanding in-house expertise on sustainability in general and climate change specifically. In 2018, the CR task force, a predecessor of the current CR team, conducted a multi-stage sustainability materiality assessment, including for climate-related risks to identify those areas of corporate sustainability deemed most material by our internal and external stakeholders and with the largest impact on our business success.

Due to the nature of the ISS business as a data, services, and information provider, many of the TCFD risks were assessed as not material or to have a low potential financial impact in the short-, medium-, and long-term. Notwithstanding, climate remains a key consideration for ISS and is considered to be very relevant for our stakeholders.

ISS supports the central goal of the Paris Agreement to limit global warming to 1.5°C versus pre-industrial levels and is committed to ensuring its contribution to the decarbonization of the global economy through its own business operations. In 2021, the ISS CORE Council developed scenarios and science-based emissions reductions targets and plans to submit these targets for approval by the Science Based Target Initiative in 2022.

Additionally, ISS has conducted physical scenario assessments using ISS' proprietary physical risk tools.



ISS SCIENCE-BASED TARGETS

50%

Scope 1 & 2 GHG emissions reduction by 2030

20%

Scope 3 Business travel emissions reduction by 2030

50%

Suppliers by spend to have a Science-Based Target by 2027

From 2019 baseline.

The above represents ISS goals based on the requirements of the SBTi and grounded in climate science.

These are not SBTi approved goals.

Seizing Climate-related Opportunities

Major climate-related opportunities undoubtedly flow from the ISS product offerings by facilitating the ability of clients to improve climate disclosure and performance. ISS supports its clients across a variety of dimensions and in different phases: collecting relevant carbon footprint data, assisting some in developing their own climate strategies,

and helping them to meet regulatory requirements. Products and services are continuously adapted to be at the forefront of regulatory requirements and to incorporate recent developments in a timely manner in order to assist clients in meeting their obligations.

ISS CLIMATE SOLUTIONS

ISS provides a wide range of industry-leading climate solutions that enable investors to understand, measure, and act on climate change risks and opportunities.

\$3 trillion

in AuM screened for exposure to climate risks since 2010

29,000+

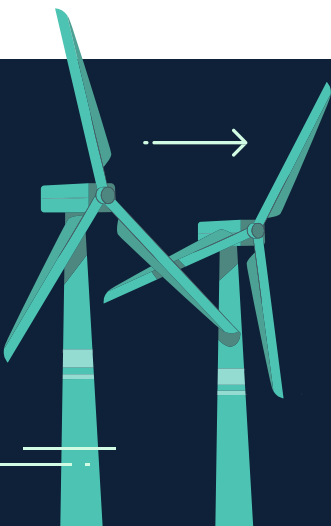
issuers assessed annually on exposure to climate risks

Dedicated climate experts

located in the Americas, APAC, and EMEA

To keep up with demand for climate-related data and advisory services, ISS has been significantly increasing the number of personnel with ESG and climate expertise. While overall client demand for ESG offerings has increased, demand for climate-related services has experienced particularly strong

growth in the past several years. With additional regulatory requirements likely to be implemented for corporates, both on disclosure and performance related to ESG, and to climate specifically, the demand for ISS' products and services as outlined in the Business offerings is likely to increase further.



Spotlight on Net Zero

With many countries seeking to mitigate the effects of climate change and limit global temperature rise to 1.5° C, a growing number of financial market participants contend Net Zero must be reached by 2050 and investors can play a key role in the transition to low-carbon economy. ISS ESG's Net Zero Solutions enables investors to identify the most suitable KPIs, analysis, and data to transition portfolios and set relevant net zero targets in accordance with net zero financial sector initiatives.

END-TO-END SOLUTIONS



UNDERSTAND

Climate Advisory

ISS' team of climate experts support investors with positioning themselves with respect to climate change and has worked with many clients in providing internal and external training and workshops. Advisory services include, climate change strategy development and implementation, investment product and benchmark development, and climate-related reporting support for all asset classes.



MEASURE

Climate Analytics

For equity and fixed income investors

With the broadest and deepest coverage in the market, ISS' enables equity and fixed income investors to assess Scope 1 & 2 and Scope 3 emissions, Net Zero alignment, transition and physical risks and climate scenario analysis based on the International Energy Agency's Sustainable Development Scenario. Energy & Extractives Screening provides additional analysis on companies' involvement in the extraction of fossil fuels, and the generation of power from fossil fuel, nuclear, and renewable sources for a comprehensive climate-risk assessment.

For private equity investors

ISS's Private Company Climate Solution allows private equity investors to assess their portfolios' carbon emissions, and to identify key impact sectors by leveraging more than 800 specialized GHG emission estimation models. Climate scenario analyses and physical risks assessments are offered on a bespoke basis.

For corporate issuers

ISS Corporate Solutions' Climate Analytics tool offers unparalleled data and analytics on the climate-related disclosures and performance of thousands of corporate issuers around the globe, including TCFD alignment benchmarking.



ACT

Custom Climate Voting Service

ISS is the only corporate governance and responsible investment solutions provider assisting investors with an actionable, transparent framework to exercise their voting rights with reference to their portfolio companies' climate disclosures and performance. ISS' Climate Voting Policy is based on principles developed from widely recognized international frameworks, such as the TCFD's disclosure requirements.

Climate Indices

ISS develops ESG indices and collaborates with global index providers to create innovative solutions based on high-quality, reliable, and relevant ESG data, including indices that meet the minimum requirements for climate benchmarks provided by the European Commission's Technical Expert Group (TEG) on Sustainable Finance.

Minimizing Climate-related Risk

In addition to its climate-related product and service offerings, ISS also monitors its own operations with respect to climate-related matters, regularly reviewing and enhancing its internal policies, measures, and targets, where ISS has direct influence on climate outcomes. We endeavor to lead by example.

As discussed above, ISS maintains a Corporate Responsibility program, [ISS CORE](#), including a company-wide policy and clearly defined goals to minimize its own carbon footprint as well as fostering diversity and inclusion, promoting a safe, healthy, and respectful workplace, and generally adhering to sustainable business practices. ISS' Corporate Responsibility foundation is based on 4 pillars: People, Environment, responsible Business Operations, and Policy Governance.

The Environment pillar's main goal is to minimize the environmental impact of ISS' operations by reducing

CO₂ emissions. ISS is committed to reducing its Scope 1 and 2 emissions by 50 percent and Scope 3 business travel emissions by 20 percent by 2030 from a 2019 carbon footprint baseline using SBTi methodology. ISS is also committed to aligning and influencing its supply chain to commit to Science Based Targets and will strive to have 50 percent of the largest suppliers per amount spent to have set Science Based Targets by 2027.

To achieve those ambitions, ISS' Climate strategy relies on three core principles to reduce carbon emissions: Avoid, Reduce, Compensate. Suitable measures were identified to achieve ISS' reduction targets involving an increase in the share of energy from renewable sources for its office operations, and a reduction in emissions from its data centers, as well as from business travel.




	 AVOID change to renewables	 REDUCE energy consumption / emissions	 COMPENSATE remaining emissions
SCOPE 1 & 2 Emissions	OFFICES Target: 100% renewable electricity in 2021 Move to green electricity in 10 offices Purchase of EAC where green electricity change not possible	OFFICES Target: 50% reduction by 2030 Focus on heating energy consumption reduction	High quality Carbon Offsetting projects provided by established partners
SCOPE 3 Emissions	DATA CENTERS Target: continuous effort to move to green electricity	SUPPLY CHAIN Target: 50% of suppliers by spend to have Science-based Targets by 2027 Engagement with suppliers BUSINESS TRAVEL Target: 20% reduction by 2030 Business travel policy	

Fig. 3: ISS Climate Strategy

Scope 1 & 2 Emissions

Electricity Consumption - Avoid

The company's electricity consumption comes almost exclusively from office operations (Scope 1 & 2). Where possible, green electricity has been purchased; where access to green electricity is not available, Energy Attribution Certificates (EAC) were purchased to compensate for electricity used from conventional energy sources.



Goal Scope 1 & 2 emissions:
50% reduction of absolute emissions by 2030

Scope 3 Emissions

In 2021, the CORE team conducted a comprehensive Scope 3 analysis on the basis of the Scope 3 terminology of the GHG protocol and identified the following Scope 3 categories as relevant for ISS:

- > Purchased goods and services/ capital goods
- > Fuel and energy-related activities
- > Waste generated in operations
- > Business travel
- > Employee commuting + teleworking
- > Use of sold products

Data collection for all categories with the exception of use of sold products is underway. It is planned that data on the use of sold products category will start to be collected in the course of 2022.

Since business travel and supply chain emissions represent the largest parts of our Scope 3 emissions, ISS has decided to develop targets to reduce impacts on these two Scope 3 categories as a priority.

Business Travel - Reduce

ISS tightened its travel policy in December 2020, further taking into account ways in which to make

it more sustainable by setting out guidelines to facilitate the reduction of the overall environmental impact – given that business travel accounted for approximately 30 percent of ISS' 2019 annual carbon footprint⁴.

The travel policy's objective is to support and encourage employees to proactively reconsider the necessity of each business trip by leveraging virtual communication technology as well as the means of transport where physical travel is considered essential. If a business trip is considered relevant, sustainable and public transportation modes such as trains are preferred over car transportation, and flights for destinations under 300 miles should be avoided. Furthermore, transcontinental flights should be kept to a minimum.



Goal Scope 3 emissions from business travel:

20% reduction of absolute emissions by 2030

Supply Chain - Engage

ISS' most significant carbon footprint stems from its supply chain. The carbon footprint of purchased goods and services⁵ – that were collected in 2020 – exceed by far all other activities and represented approximately 85 percent of ISS' overall carbon footprint in 2021. To tackle emissions in the supply chain, ISS has already conducted a Science Based Target analysis and will engage with those vendors which don't yet have a SBT based on our [Vendor Sustainability Policy](#).



Goal Scope 3 emissions of supply chain:

50% (by spend) should have a SBT by 2030

4. Relative to the activities as included in the 2019 carbon footprint, i.e., scope 1, 2, and 3 (business travel only)

5. The GHG emissions for the supply chain were computed by means of the [GHG Protocol's Scope 3 Evaluator tool](#), which generates high-level estimates based on an economic input-output model database. A relatively high degree of uncertainty is assumed.

Wind in Maharashtra, India



With a total installed capacity of 80 MW, the project comprises 40 Wind Turbine Generators (WTGs) with a capacity of 2 MW each and displaces an equivalent amount of power from the grid, which is fed mainly by fossil fuel fired power plants.

Gola rainforest project, Sierra Leone



Protecting some of the world's most threatened forest with a mission to manage the park's forests sustainably through a focus on land use planning, agroforestry, education, health, and sustainable agriculture.

Protecting Biodiversity in the Congo Basin, DR Congo



The project protects 185,000 hectares of forest in the middle of the Congo Basin from illegal logging and thus an important carbon sink. Local communities and the enormous diversity of animal and plant species benefit from the protection of their habitat in the world's second largest rainforest. Without the project's protection status, illegal deforestation would take place here.

Solar power for Karnataka, Uttar Pradesh and Maharashtra, India



The installed solar PV moduls in the three Indian states Karnataka, Uttar Pradesh and Maharashtra have a capacity of 225 MWh. The project saves about 329,700 tonnes of CO₂ per year by displacing electricity that would have otherwise been produced by thermal/fossil fuel based power plants.

Offsetting and Supporting a "Just Transition"

Based on the Avoid-Reduce-Compensate approach that guides our climate strategy, the CORE Council has identified, in close collaboration with external partners, the following high-quality projects to offset ISS' remaining carbon footprint (3,500 tons for 2019 and 3,800 tons for 2020 and 2021).

By both reducing energy consumption throughout the value chain, and increasing the share of renewable energy sources, ISS seeks to contribute to achieving goals laid out under the Paris Agreement. At the same time, ISS minimizes its exposure to GHG emissions and, thus, is more resilient to expected changes to the cost of carbon.

Scenario Analysis

Climate Physical Risk

In 2021, ISS conducted a physical risk analysis to assess the exposure of its offices and data centers worldwide. In particular, the assessment was performed for six climate hazards for a baseline period and over two future scenarios. The two future scenarios over which the analysis was conducted are a likely emissions scenario associated with a 1.7-3.2 °C warming by 2100 (RCP 4.5 emission pathway) and a worst-case scenario, associated with a 3.2-5.4°C warming by 2100 (RCP 8.5) and one acute hazard

(Heat Stress) in 2050 following the Likely Scenario. The size and color of the bubbles at each ISS location indicate the exposure of each office or data center to the respective hazards⁶.

Physical risk stemming from climate hazards can be categorized into acute and chronic. For example, tropical cyclones, wildfires, and flooding cause acute damage while the impact of heat stress, droughts, and sea-level rise are chronic, i.e., the increase in impact is permanent and felt every year.



Fig. 4: Exposure of all ISS offices and data centers to Tropical Cyclones, an acute Physical Risk.

The map above shows ISS' offices and data centers and their respective exposure to one acute hazard, tropical cyclones. The size and color of the bubbles at each ISS location indicate the exposure of each office or data center to the hazard alongside an estimated dollar-damage-per-million assessment of economic impact. The U.S. east coast and some APAC locations are expected to be more at risk for tropical cyclones in 2050 in the likely emissions scenario with 1.7-3.2 °C warming by 2100 (RCP 4.5)



Fig. 5: Exposure of all ISS offices and data centers to Heat Stress, a chronic Physical Risk.

The map above shows ISS' offices and data centers and their respective exposure to one chronic hazard, heat stress, while the size and color of the bubbles at each ISS location indicate the exposure of each office or data center to the average number of heat-intensive days per year. As expected, APAC locations are expected to be more affected by heat stress in 2050 in the likely emissions scenario with a 1.7-3.2 °C warming by 2100 (RCP 4.5 emission pathway).

6. Representative Concentration Pathways (RCP) used as climate model outputs in line with the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), i.e. RCP 4.5 = Likely, RCP 8.5 Worst-Case

Table 1 & 2: Average values from physical risks impacts across ISS locations per hazards

Climate-related Risks		Units	Historical Risk	Long-term Risk	
				Likely Scenario	Worst Case Scenario
Chronic	Droughts	Average number of drought months per decade	6.8	2.7	2.2
	Heat Stress	Average extreme heat days per year	4.7	11.0	17.0
Acute	Tropical Cyclones	Expected annual damage in USD for 1 million USD value	1700	2100	2300
	Wildfires	Expected annual damage in USD for 1 million USD value	2100	3500	3000
	River floods	Expected annual damage in USD for 1 million USD value	100	100	100
	Coastal Floods	Expected annual damage in USD for 1 million USD value	0	0	0

The tables represent the results of ISS' physical risks assessment for the types of hazards per affected locations. Based on this assessment, ISS is potentially the most exposed to hazards such as tropical cyclones, wildfires, and heat stress.

However, ISS' business model is knowledge-centered and therefore minimally dependent on physical assets. ISS leases its physical office properties so that the occurrence of an extreme weather event affecting an ISS office location would not be directly associated with an increase in costs for the company. During the Covid pandemic, ISS swiftly adapted to new circumstances without any business disruptions to a primarily "work from home" model, which demonstrated the resilience of the business against unexpected adverse events impacting physical office locations. As most employees were able to work from their homes during the pandemic, adverse impacts of acute weather events on ISS' offices are deemed minimal. Indirect impacts in terms of increase in insurance costs would be conceivable, as well as

Climate-related Risks		# Affected locations for Likely Scenario	
		Offices	Data Centers
Chronic	Droughts	5	0
	Heat Stress	7	0
Acute	Tropical Cyclones	18	6
	Wildfires	16	5
	River floods	6	0
	Coastal Floods	0	0

business interruptions on a small scale if physical equipment, especially data centers, are damaged. However, due to sophisticated back-up systems, critical infrastructure for business continuity should be maintained even if one of the data centers were to be affected. Still, expected damages caused by acute physical risk hazards, i.e., tropical cyclones, wildfires, and river floods, are predicted to increase significantly until 2050 under both scenarios.

As a research-centered company, hazards that impact employee productivity are most relevant as they are likely to lead to increased production costs. Thus, exposure to heat stress is of particular interest. It is likely that ISS locations will experience more heat intense days per year in the future. In the Likely Scenario and the Worst-Case Scenario, the most affected locations will face between 100 and 200 intense heat days by 2050. Heat intense days are defined as days with a Wet Bulb Globe Temperature greater than 29 degrees Celsius – a metric that includes the effects of both temperature and humidity. From that perspective, costs for maintaining a healthy workplace and countering a potential decrease in labor productivity due to unfavorable working conditions are expected to increase.

Scenario Analysis

In 2021, the ISS CORE team produced scenario analyses to facilitate the development of science-based emissions reductions targets to support the central goal of the Paris Agreement to limit global warming to 1.5°C versus pre-industrial levels and to ensure ISS' contribution to the decarbonization of the global economy.

Scope 1 & 2 Emissions

The company's electricity consumption comes almost exclusively from office operations (Scope 1 & 2). Where possible, green electricity has been purchased; where access to green electricity was unavailable, Energy Attribution Certificates (EAC) were purchased to compensate for electricity used from conventional energy sources.

Starting in 2021, 100 percent of electricity consumption from offices are green with remaining emissions stemming from office heating.

To project estimated emissions in 2030 in order to develop achievable yet ambitious targets, ISS developed a scenario based on estimated employee growth.

The impact of Covid on emissions reductions in 2021, and the subsequent progressive return to office in 2022, were computed in the scenarios' assumptions. As a result of this scenario analysis, ISS is confident in reaching a 50 percent Scope 1 & 2 emissions reduction. Future data collection in the upcoming years will provide additional insight and inform the potential revision of future targets to enhance the goal of further reductions.

Scope 3 Business Travel Emissions

The comprehensive Scope 3 analysis conducted in 2021 highlighted business travel and supply chain emissions mitigation as the most material for ISS.

To project emissions in 2030 in order to develop achievable yet ambitious targets, ISS developed a scenario based on estimated company growth as well as assumptions modelling post-Covid travel behavior of ISS staff.

The results of the projected Scope 3 emissions from business travel based on this scenario is below:

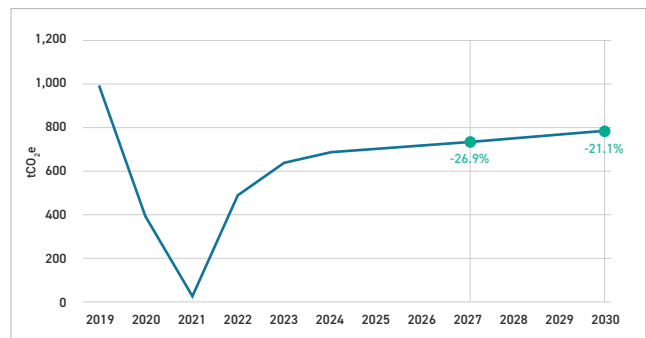


Fig. 7: Project Scope 3 Emissions from Business Travel

Business travel emissions for 2021 have largely decreased from a 2019 baseline due to Covid-related cutbacks. Though ISS does not expect business travel to return to the same level as 2019, it is still important to consider in projecting emissions an increase in business travel from 2020/2021 levels starting in 2022 and increasing in 2023. However, with the sustainability travel policy in place, ISS is setting the ambitious target to reduce by 2030 business travel emissions by 20 percent from the 2019 baseline.

Scope 3 Supply Chain-related Emissions

In 2022, The CORE team conducted an analysis of the top 150 suppliers representing 82.5 percent of total supplier spend in order to assess the number of suppliers with an existing Science Based Target. The results showed that 65 of those top 150 suppliers, representing 27 percent of total spend, have Science Based Targets or have committed to the SBTi.






The team identified a number of suppliers without Science Based Targets and decided to target those suppliers as part of ISS' general engagement based on the ISS Vendor Sustainability Policy, with the goal to increase the number of suppliers with Science Based Targets up to 50 percent of total spend by 2027.

RISK MANAGEMENT

Disclose how the organization identifies, assesses, and manages climate-related risks.

The CR team is tasked with identifying and assessing ESG-related risks at ISS, building upon the longstanding in-house expertise on sustainability broadly and climate change specifically. For that purpose, ISS' corporate sustainability performance was assessed against a comprehensive set of ESG criteria – criteria that ISS' ESG research team has established and has been refining continuously over many years to reflect dynamic developments in the ESG field. In addition, a determination of material ESG factors in relation to ISS' operations was undertaken by members of the ISS Leadership Team via a self-review, coupled with an assessment and consideration of third-party requests for ESG information from ISS.

As a result of this materiality assessment, the development of a climate strategy was deemed material when addressing the ff:

-  CO₂ emissions reduction & compensation
-  Compilation of relevant data
-  Implementation of energy efficiency measures
-  Sustainable buildings certifications as criteria for new offices
-  Target setting

Using the ISS ESG Corporate Rating as a risk assessment tool, areas for action were identified and prioritized – including the preparation and release of a variety of policies and goals, such as the Diversity Policy, the Sustainable Travel Policy, and the CR policy. The CR policy includes an explicit commitment to reducing the carbon footprint of the company. For the identification and assessment of climate risks, necessary to put this commitment into practice, the CR team is supported by in-house staff with climate expertise.

Members of the CR team sit on the CORE Council that oversees the overall CR strategy, and, hence, are directly involved in the decision-making. The CR team implements the agreed upon CR strategy and provides suggestions on next steps and milestones to drive progress toward agreed targets. As a first step, relevant emissions data for capturing the carbon footprint of ISS were defined in 2020. The decision was made to first focus on emissions caused by energy consumption and business travel and in 2021 to further expand Scope 3 emissions calculations to additionally cover purchased goods and services, as well as employee commuting and remote work. To collect relevant data, the CR team developed a questionnaire with input from in-house climate experts, sent it to all local office managers requesting energy consumption information for their location, to the IT team to capture information on data centers, and to ISS' Corporate Services unit to obtain information on business travel.

METRICS & TARGETS

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Scope 1 & 2 and Scope 3 Business Travel Emissions – Targets

ISS is committed to positively impacting the environment and society through our market-leading solutions and leading by example. ISS' corporate-wide initiatives to decrease operational emissions is promoted through accountability and the transparent public disclosure of our reduction efforts.



Science Based Targets approval

ISS developed science-based targets in accordance with Science Based Target Initiative requirements and will submit the targets for approval in 2022.



ISS SCIENCE-BASED TARGETS

50%

Scope 1 & 2 GHG emissions reduction by 2030

20%

Scope 3 Business travel emissions reduction by 2030

50%

Suppliers by spend to have a Science-Based Target by 2027

From 2019 baseline.

The above represents ISS goals based on the requirements of the SBTi and grounded in climate science.

These are not SBTi approved goals.

Scope 1 & 2 and Scope 3 Business Travel Emissions – Metrics

ISS conducted a full assessment of Scope 3 emissions in line with Science Based Target Initiative requirements. The following Scope 3 categories are relevant to ISS and reported in the emissions scope table.

In 2019, the carbon footprint of ISS amounted to 3,502 tons of CO₂ emissions, and 12.87 tons of CO₂ emissions/per \$million in revenue. While ISS has no relevant Scope 1 emissions⁷; Scope 2 and Scope 3 emissions are covered by this assessment.

Category	Collection Data
1. & 2. Purchased goods and services/Capital goods	From 2020
3. Fuel and Energy-related activities	From 2019
5. Waste generated in operations	From 2019
6. Business travel	From 2019
7. Employee commuting + Teleworking	From 2020
11. Use of sold products	Not yet started – planned for 2022

Table 3: ISS Scope 3 Material Categories

Category	2019	2020	2021
Scope 1 & 2 GHG Emissions Offices (tCO ₂ e)	2,323	1,698	193
Electricity	2,105	1,489	0
Heating	218	209	193
Scope 3 GHG Emissions (tCO ₂ e)			
1., 2. Datacenters	138	174	60
5. Waste	35	12	2
6. Business travel	1,006	386	32
Air	1,000	377	32
Land	6	9	0
7. Commuting	na	379	38
7. Remote Working	na	389	449
Total (tCO₂e)	3,502	3,038	775
1., 2. Supply Chain	na	5,978	6,099
3. Fuel & Energy related activities	448	312	266
Total (tCO₂e)	3,950	9,328	7,140

Table 4: ISS GHG Emissions

7. ISS does not burn fuel for heating and has no company owned cars.

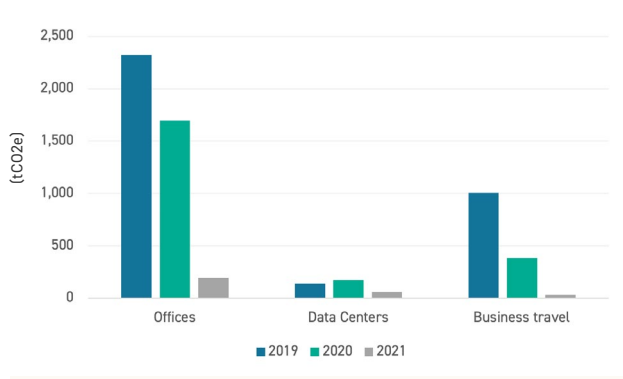


Fig. 8: ISS GHG Emissions 2019-2021

Energy consumption across ISS' offices and staff business travel have both gone down significantly between 2019 and 2021 due to the changes brought about by the pandemic. Therefore, the reduction goals for energy consumption related to offices and business travel have already been exceeded. Energy consumption at ISS offices and emission related to business travel have both decreased by approximately 90 percent while, concurrently, the share of green electricity obtained at ISS offices has increased. In 2021, three EMEA offices (Berlin, London, Paris) switched fully to renewable electricity.

In 2021, additional activities were covered to provide a more comprehensive view on the overall ISS carbon footprint. Our Scope 3 emissions calculations now include purchased goods and services, commuting and remote work, waste and fuel, and energy related activities in addition to business travel.

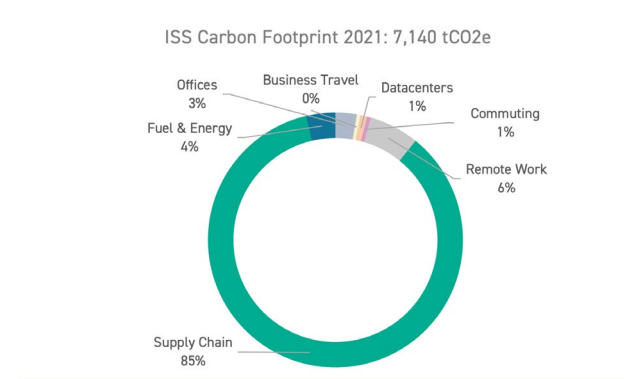


Fig. 9: ISS 2021 Carbon Footprint Breakdown

Commuting and remote work were added to complement the calculation of the carbon footprint of the office operations. While commuting was especially relevant for the period before the pandemic, some element of remote working has become the routine for many ISS employees. Details on the methodology for calculating emissions from commuting and remote work can be found in the appendix.

The most material part of ISS' carbon footprint arises from our supply chain. The carbon footprint of purchased goods and services⁸ – that were collected in 2020 for the first time – exceed by far all other activities and represent 85 percent of ISS' overall carbon footprint 2022. To tackle emission in the supply chain, ISS has already conducted a SBT analysis and will engage with those vendors which don't yet have a SBT based on [ISS Vendor Sustainability Policy](#).

8. The GHG emissions for the supply chain were computed by means of the [GHG Protocol's Scope 3 Evaluator tool](#), which generates high-level estimates based on an economic input-output model database. A relatively high degree of uncertainty is assumed.



LOOKING FORWARD

ISS will continue to refine and enhance its climate governance structure and continue developing and refining a strong climate strategy, as well as the processes, tools, and methodologies to assess material climate-related risks and opportunities and their financial impact on ISS' business operations. ISS has applied to become an official Science Based Target Initiative partner and submit its

climate goals for SBTi approval and continue to explore ways to improve the operating model and work to mitigate its environmental impact.

ISS will continue to promote transparency, providing complete and clear disclosures via subsequent TCFD reports and will continue to develop tools and services to help our clients advance their own climate strategies.

APPENDIX

Carbon Footprint Methodology



ELECTRICITY

(light, power, heating, cooling)

kWh * grid electricity emission factor (EF) per country



SUPPLY CHAIN

Spend based calculation using the [GHG Protocol's Scope 3 Evaluator tool](#)



REMOTE WORKING (own methodology)

headcount per office * country specific annual emission factor for residential buildings per m² * 20m² * 220/365 * 8/24



HEATING

kWh * EF for natural gas/district heating



COMMUTING

2020 - GHG Protocol Distance-based method - [GHG Protocol Distance-based method](#)

Sum of total daily commuting distance per office

Estimation per office of share of transportation mode car, commute, bike/walk

Multiplied by emission factor per transportation mode

2021 - Due to the pandemic and remote working situation remaining the whole year, the emissions resulting from commuting in 2021 were estimated to be 10% of 2020.



TRAVEL

ReQlogic data export: travel mode, origin, destination

Calculation of distances (Data Team): km (per travel mode) * EF (per travel mode)



DATACENTERS

kWh * grid electricity EF of location

Renewable energy for our biggest datacenters

Carbon footprint reported by Amazon Web Services (AWS)

Physical Risk Assessment Methodology

Scenarios

Climate scenarios simulate how the climate responds to different greenhouse gas (GHG) concentration pathways in the atmosphere over time, e.g., how the concentrations of CO₂ change over a specific period. This analysis extends to the year 2050 and includes two of the most relevant scenarios used as part of the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report (AR5)⁹: a "likely" scenario built around Representative Concentration Pathway (RCP) 4.5 (1.7-3.2 temperature rise by 2100), and a "worst-case" scenario, based on RCP 8.5 (above 3.2-5.4 temperature rise by 2100). As a comparison point, future risk levels are assessed in terms of a historical scenario, which nominally represents the year 1980.

When simulating hazards, this analysis uses the same climate model outputs as the IPCC used in the 5th Assessment Report (AR5). Several scientific institutions manage these models, and all participated in the Coupled Model Intercomparison Project 5 (CMIP5). The purpose of CMIP5 was to provide a standardized approach for simulating the effects of increased emissions on the world's climate. For example, all institutions following the CMIP5 protocol will be using the same CO₂-RCP concentration pathways, thus generating comparable results across models.

Geolocation of assets

This analysis applies a geolocation tool to convert the addresses of ISS assets into longitude and latitude coordinates. These coordinates are then used to extract hazard impact values from the climate hazard maps.

Climate hazards

Physical climate hazards are climate processes, extreme events, or disasters that can harm human health, livelihoods, assets, business activities and/or natural resources. This analysis includes six hazards that are the costliest in terms of damage incurred and are expected to continue to incur substantial financial impacts on both business and civil society. Hazard intensities are derived from a variety of sources and are all represented on a spatial grid of the world.

Tropical cyclones

The tropical cyclone model applies the natural catastrophe damage model CLIMADA¹⁰. Cyclone trajectories and intensities are simulated based on historical observations and using scenario-dependent relationships derived from the scientific literature for future values.

Coastal floods

Extreme Sea Level events such as tides, surges and waves can result in coastal flooding. This analysis uses the World Resource Institute (WRI) Coastal Hazard projections¹¹. The WRI future extreme sea level projections are estimated using two datasets as inputs:

- › the Global Tide and Surge Reanalysis (GTSR), a dataset of extreme water levels,
- › the responses to Coastal Climate Change: Innovative Strategies for High-End Scenarios—Adaptation and Mitigation project, a dataset of extreme water levels and gridded sea level changes.

9. <https://www.ipcc.ch/report/ar5/syr/>

10. <https://climate-adapt.eea.europa.eu/metadata/tools/climada/>

11. <https://files.wri.org/s3fs-public/aqueduct-floods-methodology.pdf>

River floods

A river flood is an overflowing of water from a river on to land that is usually dry. Areas near rivers are at risk due to the possibility of increased water levels in the riverbeds due to excessive run-off. Run-off refers to the amount of water that flows through a river. If the amount of water surpasses manageable levels, for example, via intense precipitation, a flood can occur. This analysis uses flood hazard maps from the World Resource Institute (WRI) River Flood projections¹².

Wildfire

“A wildfire is an unplanned fire that burns a natural area such as a forest, grassland, or prairie.”¹³ This analysis uses the global burnt areas simulated by climate models and land surface impact models. Simulated global burnt areas are then bias corrected using satellite observations of burned areas from 2001-2019. The wildfire hazard uses ISI-MIP¹⁴ land surface impact models for burned area fraction.

Heat stress

Heat stress is a series of human conditions resulting from challenges for the human body to maintain a temperature of 37°C. A variety of conditions determines how the human body perceives heat. Heat stress is assessed by looking at a combination of factors: rising temperatures, humidity, wind speed, cloud cover, and amount of direct sunlight.

The combination of these factors is expressed in terms of the wet bulb globe temperature (WBGT). This analysis considers impacts in terms of the number of days per year with an average WBGT above 27.8°C, based on output from CMIP5 climate models .

Drought

A drought is defined as a long period of below-average net water supply to a specific area. This analysis uses a standard precipitation index to assess droughts, based on output from CMIP5 climate models. The index indicates whether a month is dryer or wetter than usual conditions over the past six-month period as compared to a historical record.

Impact Functions

Impact functions are used to estimate the impact of a hazard on an asset by relating a simulated climate quantity (e.g., temperature, wind-speed) to an impact (e.g., degree of destruction). Impact functions and impact types differ between hazards. For example, an impact function for tropical cyclones relates the simulated wind-speed to the degree of destruction of physical property. If the value of the damaged asset is known, then the associated repair costs can be computed. The table below details the impact functions for each hazard.

Table 6: The climate inputs used by the various impact functions and the type of impacts generated.

HAZARD	CLIMATE VARIABLE	IMPACT
Tropical Cyclones	Maximum daily sustained wind-speed (m/s)	Expected annual damage (\$)
River Floods	Maximum flood depth (m)	Expected annual damage (\$)
Coastal Floods	Maximum flood depth (m)	Expected annual damage (\$)
Wildfires	Burnt area fraction	Expected annual damage (\$)
Heat stress	Daily wet-bulb-globe temperature	Average days per year of heat stress
Drought	Standard precipitation index (SPI)	Average number of drought months per decade

12. <https://files.wri.org/s3fs-public/aqueduct-floods-methodology.pdf>

13. https://www.who.int/health-topics/wildfires#tab=tab_1

14. <https://www.isimip.org/>

ISS participates in and provides expertise to various Climate Initiatives, such as:



Climate Action 100+



Science Based Targets for Investors



Glasgow Financial Alliance for Net Zero



Institutional Investors Group on Climate Change



TCFD



Net Zero Asset Owner Alliance



Net Zero Investment Framework



Partnership for Carbon Accounting Financials



CLIMATE IMPACT REPORT

Understand, measure and act on climate-related risks and their impact on your investments.



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