2023

Carbon Neutrality Action Report

Contents

Overview

Widely acknowledged as one of the most pressing challenges of the 21st century, climate change has garnered broad recognition as a global imperative. In September 2020, China outlined its commitment to peak carbon emissions before 2030 and achieve carbon neutrality by 2060, underscoring the nation's proactive stance in addressing climate concerns.

In response to the urgent global call for sustainability, the nationwide emphasis on dual-carbon goals, and driven by our deep commitment to social responsibility, the Shanghai Advanced Institute of Finance (SAIF) at Shanghai Jiao Tong University has launched a comprehensive initiative to foster sustainable development. As an academic institution, we recognize our obligation to spearhead research and education in sustainable practices. This report, serving as a pivotal component of our broader undertaking, details how we have meticulously assembled a complete greenhouse gas inventory for 2023. This report aligns our operational decisions with sustainable growth strategies and emission reduction targets. Furthermore, it outlines our long-term strategy to incorporate low-carbon development models across our entire operational framework and supply chain, facilitating a methodical decline in greenhouse gas emissions.

In terms of research, we are actively exploring various sustainability topics. Our research faculty is engaged in studies that aim to understand the impact of financial markets and institutions on sustainability, as well as the role of finance in promoting environmentally friendly practices. By conducting rigorous analysis and publishing our findings, we hope to inform policy makers, businesses, and the general public about the importance of sustainability in the financial sector.

Moreover, we recognize the critical role of education in fostering a culture of sustainability. Therefore, we have integrated sustainability concepts and practices into our curriculum, providing students with the knowledge and skills necessary to make informed decisions that prioritize environmental sustainability. Through courses, workshops, and seminars, we aim to equip our students with the tools to become agents of change in their future professions.

By combining research, education, and our own daily practices, we are committed to fostering a culture of environmental stewardship within SAIF and beyond. We believe that these efforts will not only enhance our institution's sustainability but also contribute to the broader global effort to address climate change and promote a more sustainable future.

Carbon Neutrality Goals of SAIF

SAIF is committed to reaching scope 1 and scope 2 carbon neutrality by the year **2035** and achieving comprehensive carbon neutrality across all scopes by the year **2045.**

The greenhouse gas emissions of SAIF in 2023

Direct emissions

325.76 tCO_2e

Scope1

Indirect emissions from electricity

670.08 tCO_2e

Scope2

Scope3

Indirect emissions in the supply chain

1137.67 tCO_2e

Proposed Carbon Neutrality Actions of SAIF

Exploring Low-Carbon Operation Models:

- Implementation of electrification and automation
- Enhancement of equipment efficiency for emission reduction
- Integration of renewable energy sources
- Utilization of carbon offsetting measures

Promoting a Low-Carbon Campus Culture:

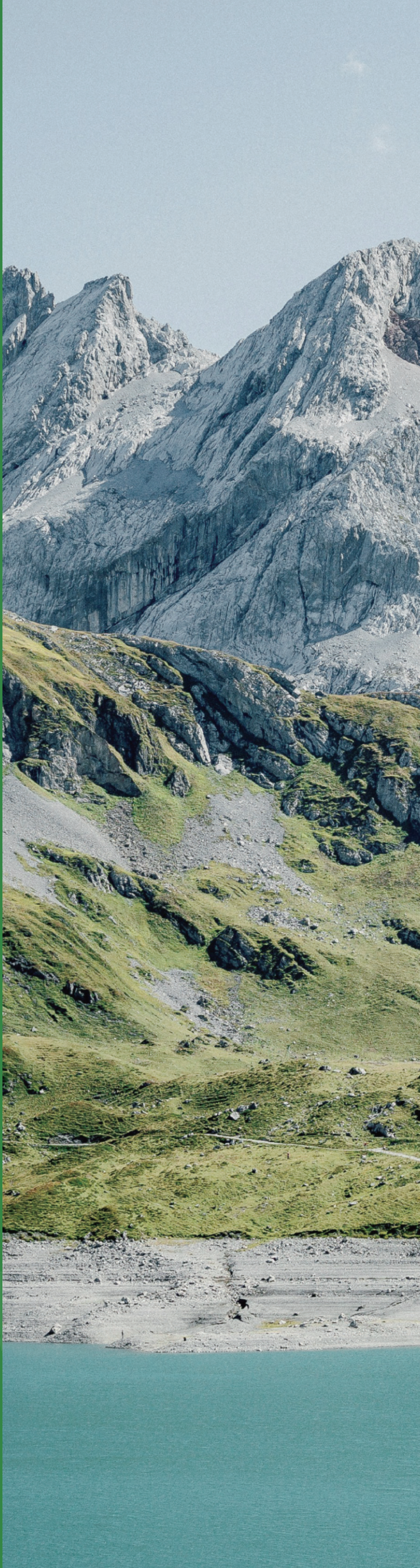
- Promotion of green business travel practices
- Adoption of low-carbon transportation solutions
- Embrace of sustainable procurement strategies
- Implementation of zero-waste measures
- Integration of green operations and carbon neutrality initiatives

Expanding the Influence of Sustainability:

- Publication of sustainability-focused research
- Operation of the Center for Sustainable Investment
- Offering courses on sustainability
- Facilitation of student clubs related to sustainability
- Organization of the sustainable development summits

01

Understanding Carbon Neutrality

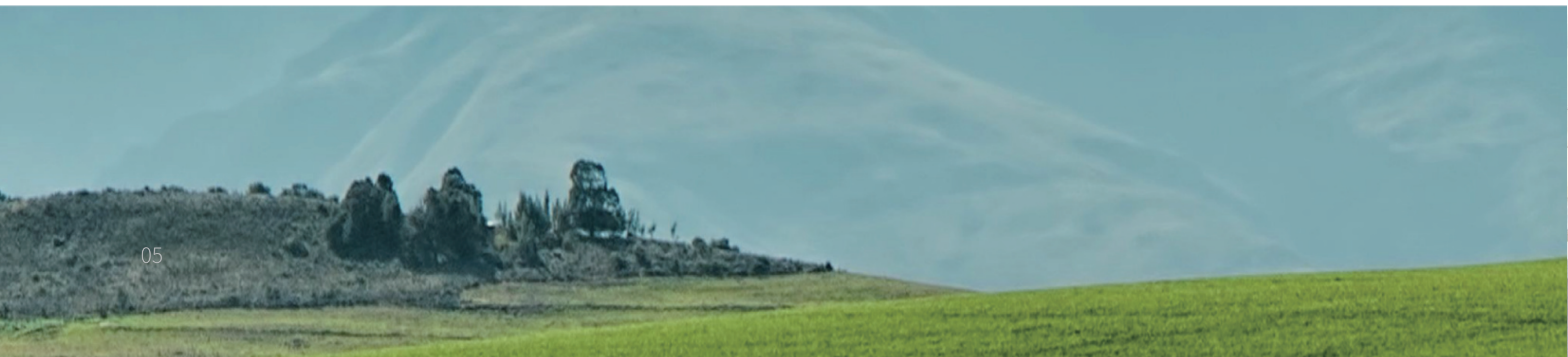


Background

In September 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, encompassing 17 Sustainable Development Goals (SDGs). This agenda provides a holistic framework to address social, economic, and environmental development challenges from 2015 to 2030, guiding societies towards sustainable progress. A key aspect of this agenda is the urgent need to address climate change, a crucial step in both mitigating its effects and adapting to its consequences.

Sustainable Development Goals (SDGs) by the United Nations

Figure: Sustainable Development Goals (SDGs) by the United Nations



In December 2015, 178 countries ratified the Paris Agreement, creating a unified global framework for action on climate change. The primary goal of the agreement is to limit the global average temperature increase to well below 2°C above pre-industrial levels, while striving to restrict the temperature rise to 1.5°C. The 6th assessment report from the Intergovernmental Panel on Climate Change (IPCC) presents a sobering view of the urgent and severe climate crisis we face. The report emphasizes the critical need to rapidly reverse the trajectory of greenhouse gas emissions. Failure to do so will inevitably lead to catastrophic outcomes that pose a significant threat to human development, severely limiting our ability to progress sustainably.

In recent years, Chairman Xi has given several speeches on climate change, highlighting the global nature of the challenge with the statement, "Climate change is a global challenge that no country can tackle alone." On September 22, 2020, during the general debate of the 75th session of the United Nations General Assembly, China made a significant commitment by announcing a carbon neutrality target. This commitment involves allocating more national resources, implementing stronger policies and measures, aiming to peak carbon dioxide emissions before 2030, and striving to achieve carbon neutrality by 2060. Currently, "green" has become a defining feature of China, with all sectors of society embracing the ethos of "lucid waters and lush mountains are invaluable assets." China is steadfastly progressing towards carbon peaking and neutrality, initiating a comprehensive green transformation across its economy and society.

In alignment with the vision to develop Shanghai into an International Financial Centre, the Shanghai Advanced Institute of Finance (SAIF) was jointly founded by the Shanghai Municipal Government and Shanghai Jiao Tong University. The mission of SAIF is to develop high-quality educational programs, establish an open research platform, and become a leading think tank.

SAIF recognizes that sustainability is at the core of China's new development philosophy and that carbon neutrality is critical to solving environmental problems and promoting sustainable development. By exploring decarbonization strategies and action plans within the framework of the UN SDGs, SAIF aims to spearhead its own green transformation. Moreover, SAIF will uphold its social responsibility as an educational institution to guide students to positively influence societal progress through the lens of sustainable development. SAIF aims to utilize its expertise and resources to contribute to global efforts to address climate change and promote sustainable development.

Climate Governance Structure

Within SAIF's climate governance structure, the Institute' s leadership holds the highest decision-making authority. They regularly formulate strategic directives and provide oversight on matters related to sustainable development. The Sustainable Development Working Group, established in January 2024, plays a crucial role in developing short-, medium-, and long-term developmental trajectories and action plans. Additionally, the Group provides insights and recommendations on SAIF' s sustainable development, delegates specific tasks to relevant departments, and supervises the implementation of mitigation strategies. This comprehensive approach underscores SAIF's commitment to integrating sustainability principles into its core governance framework and operational practices.

Sustainability Strategy

SAIF actively incorporates sustainability into strategic planning and views sustainable development as a crucial long-term objective. By benchmarking against other leading international business schools and taking into account the Chinese context, SAIF is committed to promoting green development and creating collective value with all faculty, staff, and students to serve the country' s major development strategies.

- Investigating low-carbon operations and establishing an efficient carbon emissions management mechanism to consistently reduce carbon emissions and achieve carbon neutrality objectives.
- Developing a comprehensive Sustainable Finance curriculum that blends theory with practice, aimed at cultivating financial professionals who are cognizant of their global citizenship responsibilities.
- Providing academic and think-tank support for national sustainable development strategies and amplifying SAIF's societal impact in the realm of sustainability.

Carbon Neutrality Goal

In alignment with the UN Sustainable Development Goals and the Paris Agreement, SAIF has set forth its decarbonization targets and has charted a comprehensive green development roadmap.

SAIF is committed to reaching scope 1 and scope 2 carbon neutrality by the year 2035, and achieving comprehensive carbon neutrality across all scopes by the year 2045.

2035

Medium-term Goals

By 2035, SAIF will amplify our efforts in energy conservation, efficiency enhancement, renewable energy adoption, and low-carbon operations. Our goal is to ensure a continuous reduction in carbon emissions, thereby achieving carbon neutrality in Scope 1 and Scope 2.

2045

Long-term Goals

By 2045, SAIF plans to implement initiatives such as green procurement, waste recycling, and low-carbon transportation. These initiatives aim to enhance the effectiveness and proportion of emission reduction measures. By integrating technical solutions like carbon sinks and carbon trading, SAIF aims to achieve carbon neutrality across all scopes (Scope 1, 2, and 3). This showcases our holistic commitment to sustainability and environmental responsibility.

02

Current Greenhouse Gas Emissions Status

Referencing Standard

SAIF adhered to the *Greenhouse Gas (GHG) Protocol and ISO 14064-1:2018* Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals. For calculating indirect emissions in Scope 3, the Corporate Value Chain Accounting and Reporting Standard by the GHG Protocol was employed.

Carbon Accounting Boundary

Aligning with international standards and conventions, SAIF adopted the operational control approach to define emission activities. The greenhouse gas inventory was meticulously compiled based on emission sources and business activities within the organizational boundaries, encompassing the Shanghai Xuhui SAIF Building, the Beijing Center, and the Greater Bay Area Center. Any changes in organizational boundaries due to expansion or relocation will necessitate revisions to the inventory report.

In accordance with ISO 14064-1:2018, SAIF accounted for seven types of greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), nitrogen trifluoride (NF_3), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

Greenhouse gas emissions were quantified across Scopes 1, 2, and 3 based on the GHG Protocol guidelines. Scope 1 encompasses emissions from organizational activities owned or controlled by the reporting entity, while Scope 2 includes emissions from the consumption of purchased electricity, steam, heat, or cooling. Scope 3 accounts for other indirect emissions occurring in the value chain, covering upstream and downstream emissions not included in Scope 2.

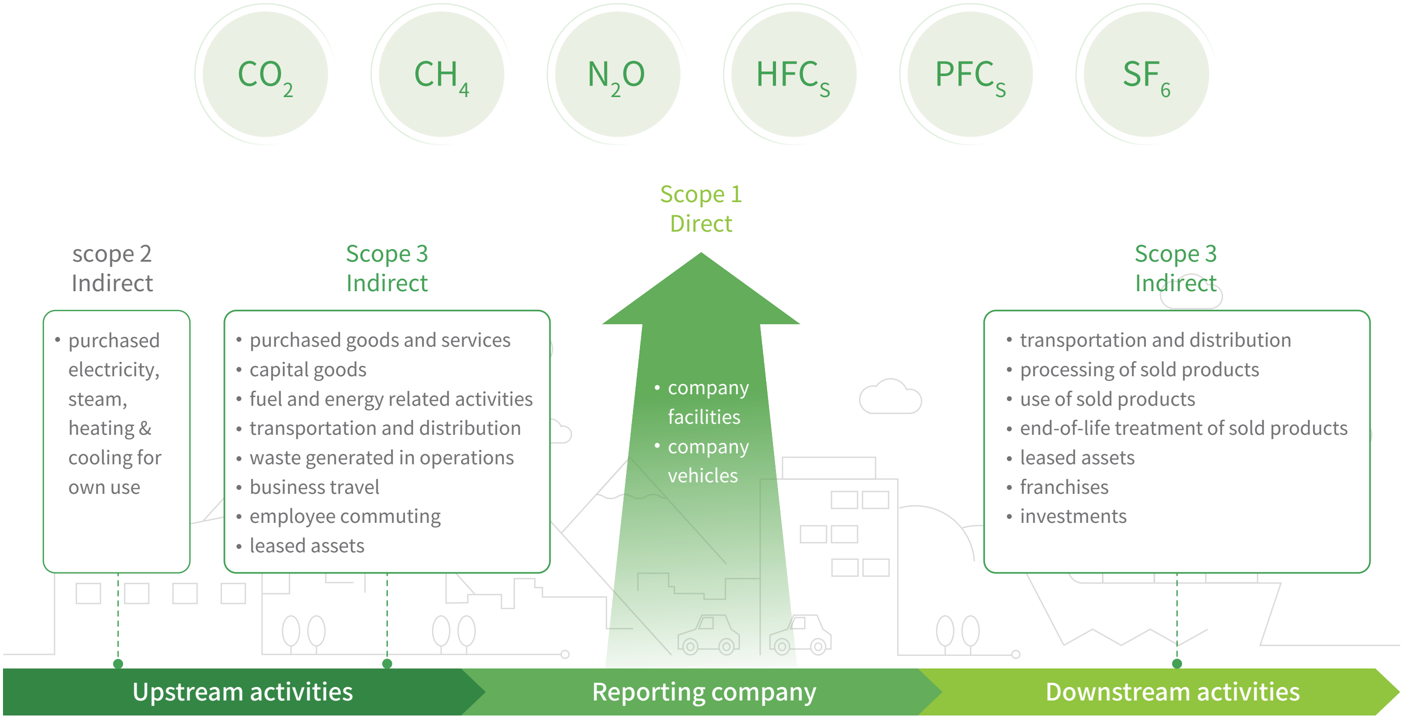


Figure: Overview of GHG Protocol scopes and emissions across the value chain

Emission Categories

SAIF's carbon inventory encompasses Scope 1 (direct emissions), Scope 2 (indirect emissions), and Scope 3 (other indirect emissions). Relevant categories within the organizational boundaries are included. Scope 3 categories are selected based on materiality, business relevance, and data availability. From 2019 to 2022, the Scope 3 carbon inventory solely encompassed the categories of Purchased Goods and Services, Business Travel, and Employee Commuting. In 2023, all relevant Scope 3 categories have been incorporated. Details are as follows:

Table: 2019-2023 Greenhouse Gas Inventory Comparison for SAIF

Scope	Category	2019	2020	2021	2022	2023
Scope 1	Stationary Combustion Emissions	×	×	×	×	×
	Mobile Combustion Emissions	√	√	√	√	√
	Process Emissions	×	×	×	×	×
	Fugitive Emissions	√	√	√	√	√
Scope 2	Purchased Electricity	√	√	√	√	√
	Purchased Heating	×	×	×	×	×
Scope 3	1. Purchased goods and services	√	√	√	√	√
	2. Capital goods	○	○	○	○	√
	3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	○	○	○	○	√
	4. Upstream transportation and distribution	○	○	○	○	√
	5. Waste generated in operations	○	○	○	○	√
	6. Business travel	√	√	√	√	√
	7. Employee commuting	√	√	√	√	√
	8. Upstream leased assets	×	×	×	×	×
	9. Downstream transportation and distribution	×	×	×	×	×
	10. Processing of sold products	×	×	×	×	×
	11. Use of sold products	×	×	×	×	×
	12. End-of-life treatment of sold products	×	×	×	×	×
	13. Downstream leased assets	×	×	×	×	×
	14. Franchises	×	×	×	×	×
	15. Investments	×	×	×	×	×

Note: √ included; ○ not included; × not relevant

Emission Quantification

The primary sources of greenhouse gas (GHG) emissions at SAIF are the operation of office buildings and the daily activities of faculty and staff. After the principal emission sources are identified and data from credible sources are gathered, various calculation methods are employed based on the data quality of different emission categories. Emission data are then converted to carbon dioxide equivalents utilizing appropriate physical or economic emission factors. The methodology employed and the results for GHG accounting in 2023 are detailed below:

Table: Carbon Accounting Methodology and Results for Scope 1, 2, and 3 Emission Categories for SAIF in 2023

Scope	Category	Emissions (tCO_2e)	Proportion to Total Emissions	Description
1	Mobile Combustion	6.1074	0.29%	This category consists of a long-term leased vehicle under the operational control of SAIF. Emissions are calculated based on gasoline consumption data from fuel invoices and statistical records, using emission factors from the China Statistical Yearbook and the IPCC 2006 Guidelines for National Greenhouse Gas Inventories.
	Fugitive Emission	319.6498	14.98%	This category includes emissions from refrigerant leakage in air conditioning units. Emissions are calculated based on the amount of R410a refrigerant filled, as documented in air conditioning maintenance records, using the corresponding global warming potential (GWP-100) from the IPCC Sixth Assessment Report (AR6).
2	Purchased Electricity	670.0773	31.41%	This category contains the purchased electricity for the SAIF Building in Shanghai, the Beijing Center, and the Greater Bay Area Center. Emissions are calculated based on the electricity consumption data from monthly electricity bills and the electricity emission factors published by the National Ministry of Ecology and Environment of China.

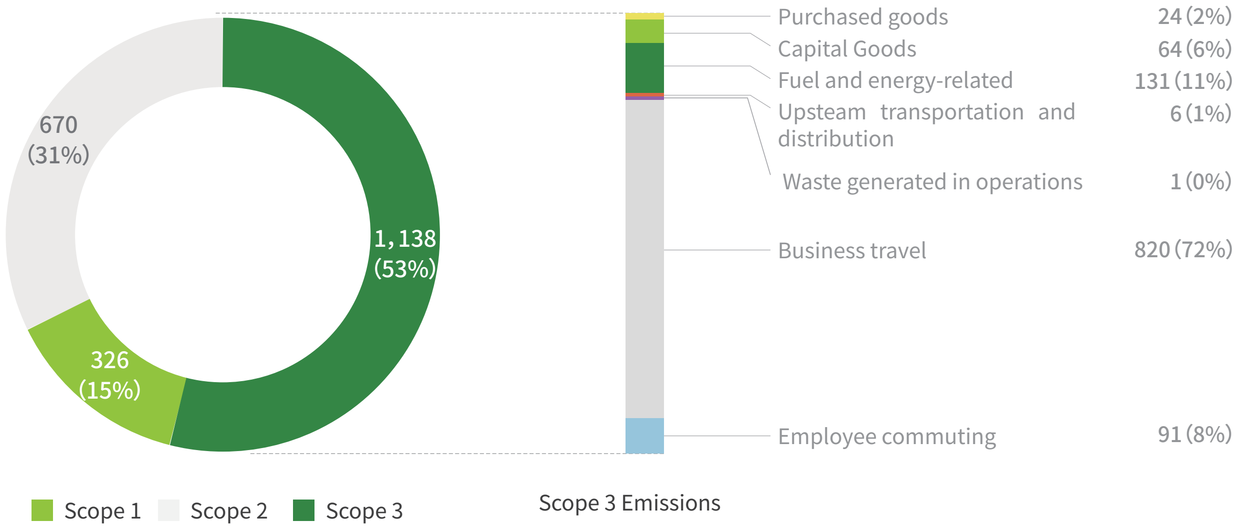
Scope	Category	Emissions (tCO_2e)	Proportion to Total Emissions	Description
3	1.Purchased goods and services	24.1421	1.13%	This category involves all purchased goods during the reporting period, mainly categorized as office supplies, household items, and low-value consumables. Emissions in this category are calculated using the average data method, estimating the weight of all purchased goods through research. The lifecycle emission factors from the ecoinvent v3.10 database, the UK Department for Environment, Food and Rural Affairs (DEFRA) 2023 emission factors, and the China Purchasing and Consumption Database (CPCD) are used to convert the emissions into carbon dioxide equivalents.
	2. Capital goods	63.8850	2.99%	This category consists of all newly acquired fixed assets during the reporting period. Emissions in this category are calculated using the expenditure-based approach, directly converting the purchase amount of asset equipment into carbon emissions using the EEIO emission factors from MioTech.
	3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	130.7757	6.13%	This category includes upstream emissions from fuel production, electricity generation, and electricity transmission and distribution losses. The emissions are calculated using the average data method, converting the consumption quantities from statistical records and supplier invoices using the emission factors from the ecoinvent v3.10 database.
	4. Upstream transportation and distribution	5.8157	0.27%	This category includes the emissions generated from transporting and distributing all goods and assets during the reporting period. Emissions in this category are calculated using the expenditure-based approach, converting the estimated transportation costs into carbon emissions using the EEIO emission factors from MioTech.
	5.Waste generated in operations	1.4325	0.07%	This category includes all solid waste generated by the Shanghai SAIF Building during the reporting period. Emissions in this category are calculated using the average data method, converting the estimated annual waste weight into carbon emissions using the related waste treatment emission factors from the ecoinvent v3.10 database.

Scope	Category	Emissions (tCO_2e)	Proportion to Total Emissions	Description
3	6.Business travel	820.1374	38.44%	This category includes all transportation and accommodation associated with business travel purposes by SAIF's employees during the reporting period. The emissions in this category are calculated using a combination of the distance-based approach and the expenditure-based method. For air travel, rail travel, and some of the car journeys, emissions are accounted for based on the mileage data provided by suppliers. For the remaining portion, emissions are accounted for based on expenditure amounts.
	7.Employee commuting	91.4817	4.29%	This category includes the daily commuting of SAIF's employees during the reporting period. The emissions for this category are calculated using the distance-based method. A survey is conducted to gather information on the daily travel modes and average distances of the employees. The emissions are then converted using the emission factors from the UK Department for Environment, Food and Rural Affairs (DEFRA) 2023 and the "Methodology for Carbon Emission Reduction in Low-carbon Travel in Beijing (Trial Version 2023)".
	Total	2133.5046	100.00%	

Results Overview

SAIF's total carbon emissions in 2023 were 2,133.50 tCO_2e. Specifically, Scope 1 direct emissions amounted to 325.76 tCO_2e, while Scope 2 indirect emissions from purchased electricity totaled 670.08 tCO_2e, and Scope 3 other indirect emissions equaled 1,137.67 tCO_2e. Overall, operational carbon emissions (Scopes 1 and 2) accounted for 46.68% of the total, while supply chain emissions (Scope 3) constituted the remaining 53.32%.

Figure: SAIF' s Carbon Emission Distribution in 2023(tCO_2e)



SAIF maintains a continuous tracking and reporting system for its total greenhouse gas emissions. The graph below illustrates the emissions trend from 2019 to 2023, demonstrating a fluctuating and rebounding pattern primarily attributed to the influence of Covid-19 pandemic control measures. The specific factors contributing to these changes are analyzed as follows:

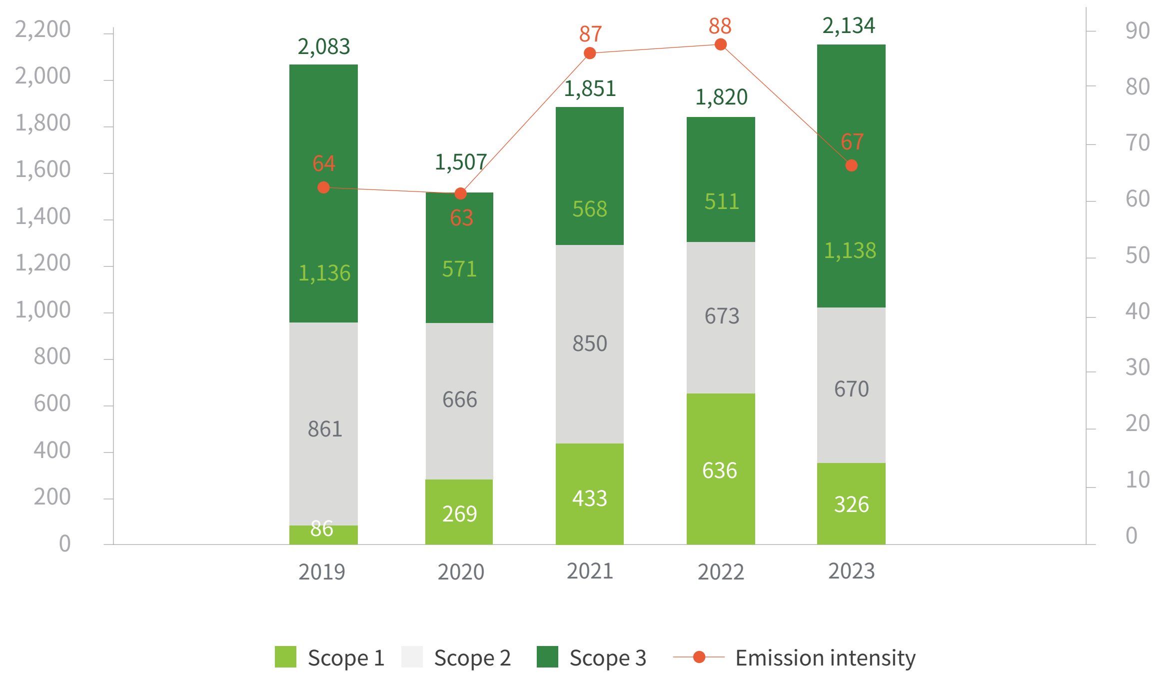
- **2020:** The pandemic and associated control measures led to reduced offline activities, resulting in decreased electricity consumption and restricted business travel. This led to a significant 27.68% decrease in carbon emissions compared to the previous year.

- **2021:** With the resumption of work and offline activities, there was an increase in electricity consumption for lighting, air conditioning, and equipment, leading to a 22.89% increase in carbon emissions compared to 2020.

- **2022:** Maintenance of air conditioning units caused significant refrigerant emissions, offsetting the pandemic-related reduction in energy consumption. As a result, carbon emissions remained relatively stable compared to 2021.

- **2023:** Operational carbon emissions decreased due to reduced refrigerant filling and adjustments to emission factors for Shanghai's electricity. However, the expansion of Scope 3 emissions accounting led to an overall increase in total carbon emissions, reaching a recent high.

Figure : Carbon Emissions Trends of SAIF from 2019 to 2023 (tCO_2e, $kgCO_2e/m$^2)



03

Implementing Green Operations at the Business School

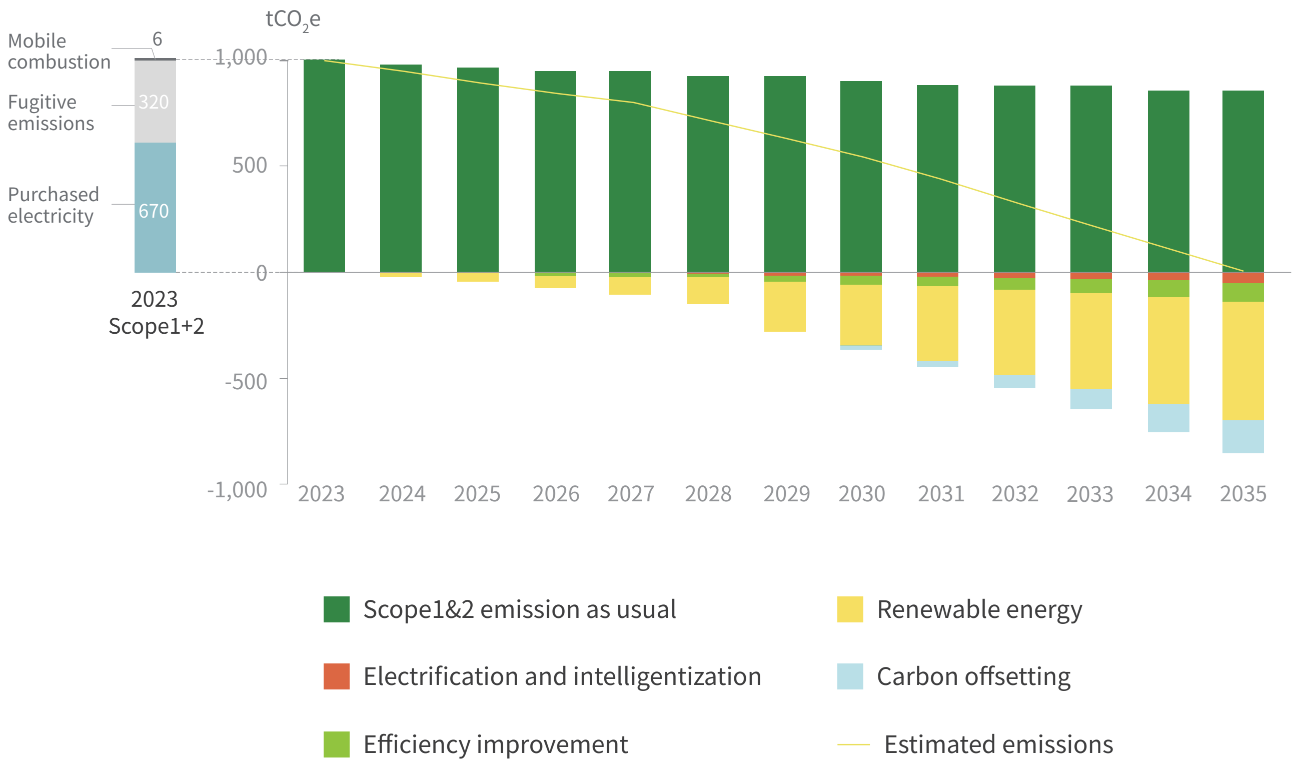
Scope 1 and Scope 2 Emission Reduction Strategies


SAIF

In 2023, SAIF's operational emissions comprised 32.7% direct emissions (Scope 1) originating from controlled assets. These included mobile combustion emissions from fuel usage in long-term leased vehicles for business travel and guest transportation services, and fugitive emissions from refrigerants in air conditioning units and fire extinguishers. Additionally, 67.29% of carbon emissions were attributed to purchased electricity (Scope 2), which constituted the primary source of SAIF’ s operational emissions. This electricity was primarily used for lighting, air conditioning systems, power systems, and backup equipment within the institution.

To address these operational emissions, SAIF has prioritized an emission reduction strategy that follows this order: direct emissions reduction, clean energy adoption, and finally, the implementation of offsetting measures. These strategies are in alignment with international standards for significantly reducing greenhouse gas concentrations in the atmosphere and are consistent with the fundamental principles of domestic and international emission reduction efforts. Specifically, SAIF aims to achieve emission reductions through four main pathways: electrification and intelligence, equipment efficiency improvements, renewable energy utilization, and carbon offsetting.

Figure: Projections of Scope 1 & Scope 2 Emissions of SAIF from 2023 to 2035



Electrification and Intelligence

Fuel emissions from long-term leased vehicles at SAIF pose a significant challenge. The adoption of electrification emerges as a key strategy to address this issue. By transitioning from fuel vehicles to electric vehicles gradually, we can effectively mitigate the emissions resulting from fuel combustion. SAIF plans to replace all leased fuel vehicles with pure electric or hybrid vehicles in the coming years. Furthermore, SAIF will only opt for new energy vehicles when procuring new vehicles in the future.

Simultaneously, SAIF is actively engaged in integrating smart technologies within our office environments. In May 2023, SAIF developed a self-control system that enables seamless switching and remote regulation of air conditioning. By implementing measures such as timed control, fault monitoring, and intelligent analysis, we aim to minimize energy wastage resulting from human factors. Looking ahead, SAIF's decarbonization roadmap includes enhancing our digital management systems to enable intelligent automatic control and adjustment in offline settings such as meeting rooms and classrooms. These initiatives aim not only to improve the Institute's carbon emission management capabilities for its facilities but also to reduce individual energy consumption by over 10%.

Figure: Control System Display Panel of SAIF

Equipment Efficiency Improvement

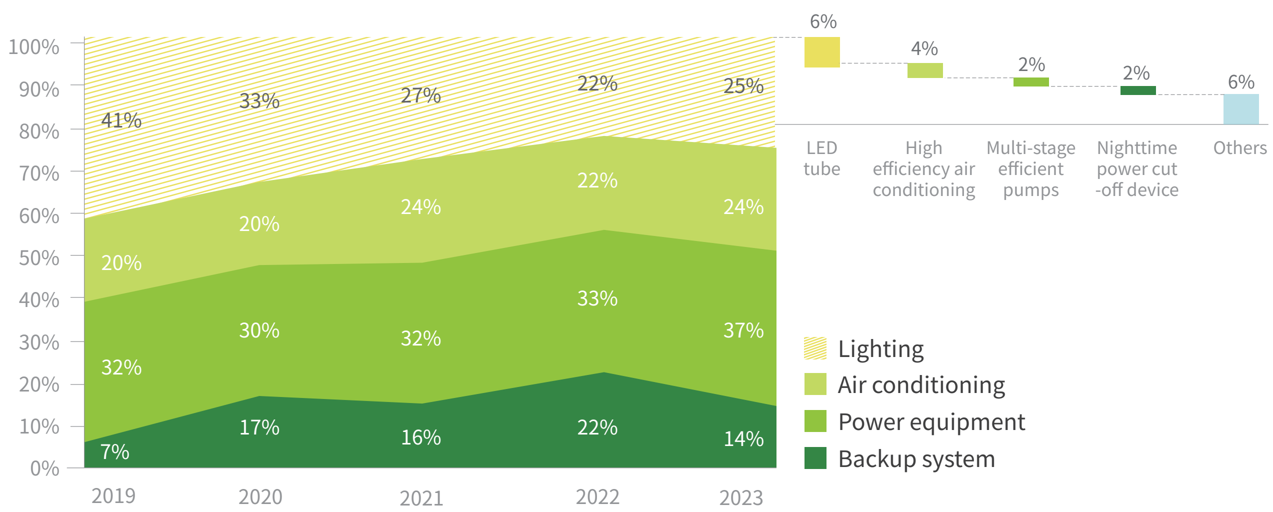
Scope 2 emissions at the Institute primarily originate from the electricity consumption of office buildings. Major energy consumers include lighting, air conditioning units, and power equipment. The adoption of more efficient technologies and equipment is a key driver for promoting low-carbon operations.

Since 2023, the Institute has been transitioning the lighting in its buildings to LED fixtures gradually. This initiative leverages the benefits of LED fixtures, such as longevity, low heat emission, and enhanced controllability, to boost energy utilization efficiency. This transformation has led to a reduction of approximately 30% in lighting electricity consumption, resulting in an annual emission reduction of around 50 tons.

Additionally, the Institute's refrigeration equipment, which has been in use for a prolonged period, faces challenges related to low energy efficiency, high power consumption, and frequent maintenance requirements. To address these challenges, effective technical measures have been implemented. These include adding external spray systems to air conditioning units to reduce their failure rate and the frequency of refrigerant refills and replacing outdated air conditioning units with new high-efficiency units. Upon completion, this endeavor is anticipated to save approximately 20,000 kWh of electricity annually.

To address other electricity consumption usages, the Institute is undertaking multifaceted efforts. These include replacing fixed-speed, high-energy consumption water pumps with multi-stage, variable-frequency drive water pumps.

Figure: Energy Consumption Breakdown of Different Equipment and Emission Reduction Enhancement Strategies from 2019 to 2023



Renewable Energy

As the level of electrification increases, carbon emissions from the power sector are also rising. The use of renewable energy is a critical strategy to achieve carbon neutrality in Scope 1 and Scope 2 emissions. With the support of national policies and advancements in renewable energy technologies, the clean energy market has seen rapid expansion. Over the next decade, SAIF will actively respond to the promotion of green electricity consumption by the National Development and Reform Commission and the National Energy Administration. We aim to accelerate the pace of renewable energy substitution and transform the Institute's electrical energy consumption patterns.

Carbon Offsetting

An effective carbon neutrality strategy requires both science-based carbon emissions reduction and viable offsetting measures. Given the potential for residual emissions during the pursuit of Scope 1 and Scope 2 carbon neutrality, the Institute plans to collaborate with domestic and international carbon credit suppliers. Our goal is to purchase high-quality carbon credits as a supplementary measure to our carbon neutrality strategy, thereby achieving SAIF's goal of operational carbon neutrality.

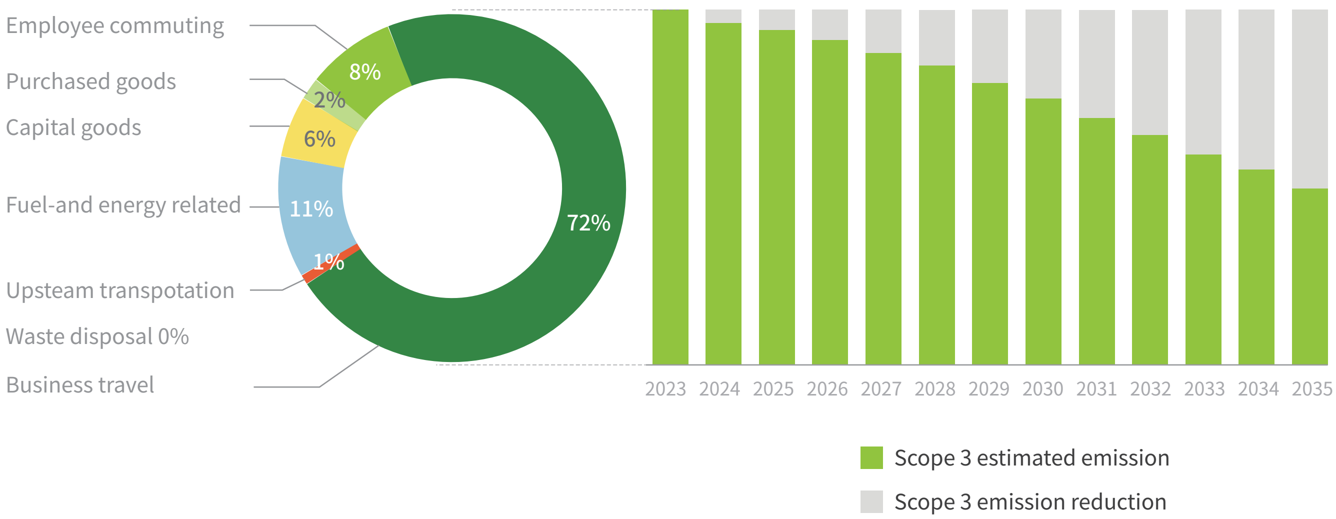
04

Building a Green and Low-Carbon Value Chain

Scope 3 Emission Reduction Strategies

In 2023, the accurately measured greenhouse gas emissions within SAIF's value chain (Scope 3) amounted to approximately 1,137.67 metric tons. These emissions primarily originated from purchased goods, fixed asset equipment, transportation and distribution, waste disposal, energy-related activities, business travel (including accommodation), and staff commuting. Notably, emissions from transportation and accommodation during business trips constituted 72.09% of the total emissions, while staff commuting accounted for approximately 8.04%. These two categories are the primary sources of emissions within the value chain, underscoring the need to prioritize emission reduction measures in these areas.

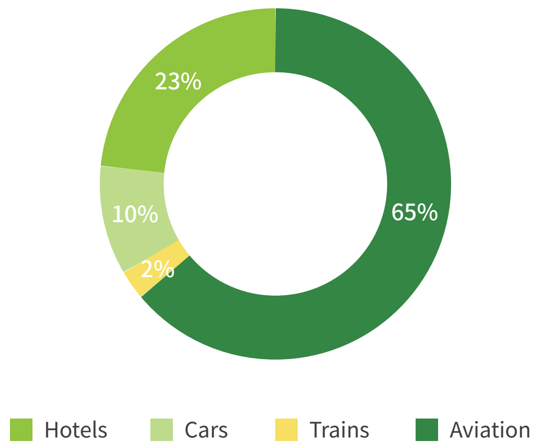
Figure: Forecast Trend Chart of Scope 3 Carbon Emissions from 2023 to 2035 for SAIF



Green Business Travel

In 2023, over 60% of the emissions in SAIF’ s Scope 3 Business Travel Category came from international and domestic air travel, while more than 20% were attributed to hotel stays. To effectively reduce Scope 3 emissions, the Institute consistently promotes low-carbon choices for employee business travel. This includes favoring High-speed Rail over flights or car trips for the same route, utilizing rideshare services, and sharing accommodation with colleagues of the same gender during joint trips. Looking ahead, the Institute plans to revise its business travel policy, prioritize green and low-carbon suppliers such as green hotels and low-carbon transportation operators, and intensify the promotion of green travel to expedite the decarbonization of business travel.

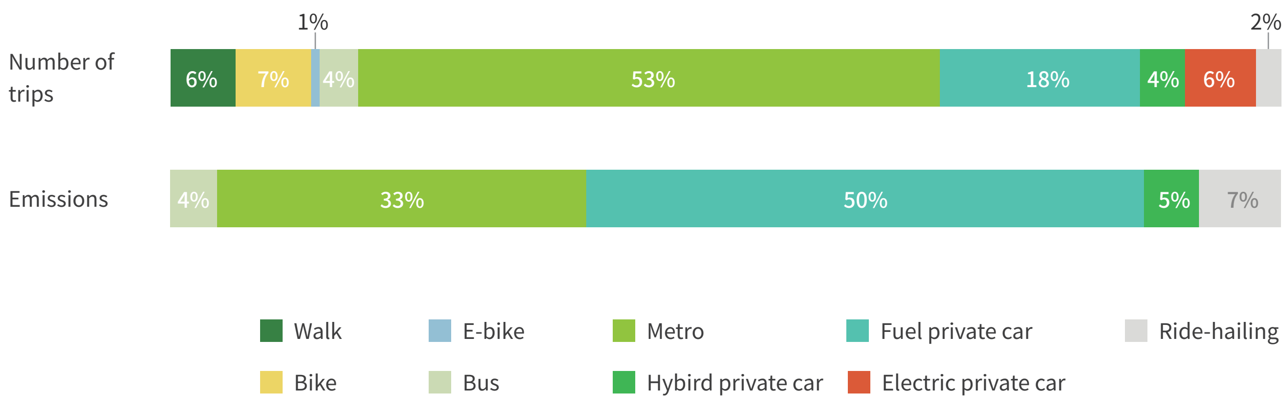
Figure : Composition of Business Travel Emissions in 2023 for SAIF



Low-Carbon Commuting

Survey results indicate that 69.43% of SAIF employees utilize low-carbon commuting methods such as bicycles, buses, and subways, while over 30% commute by hybird or electric private cars. In the future, the Institute will continue to promote low-carbon travel methods. This includes encouraging the use of public transportation for daily commutes, collaborating with car-sharing service providers to reduce emissions through shared rides, installing charging stations for new energy vehicles, and encouraging staff to transition to electric vehicles.

Figure: Breakdown of Employee Commuting Emissions for SAIF in 2023



Sustainable Procurement

In the procurement of goods and services, which significantly contribute to Scope 3 emissions, the Institute prioritizes the selection of certified green and eco-friendly office supplies. This includes choosing sustainable materials for products such as paper cups and tissues. Moreover, the Institute is continually improving its sustainable procurement procedures. When acquiring new fixtures and equipment, careful consideration is given to the energy usage and life cycle impact of the products.

In terms of space adjustments and expansions, the Institute incorporates sustainable practices by reusing furniture and equipment whenever possible. Internal reallocations of office equipment are explored, and the range of leased instruments and equipment is expanded. The goal is to reduce product carbon footprints through circular usage, thereby promoting a more sustainable approach. Furthermore, efforts are being made to enhance the integrated management of gifts and inventory procurement to prevent redundant purchases and unnecessary accumulation of inventory.

Zero Waste Measures

SAIF is committed to the "3R principle" (Reduce, Reuse, Recycle) to minimize waste generation. To reduce waste at its source, the Institute has taken measures such as decreasing the use of disposable items, upgrading all classroom microphones to rechargeable lithium batteries, and providing durable, reusable document bags. Furthermore, the Institute emphasizes the recycling and reuse of waste by providing clearly labeled bins for waste separation and encouraging employees to recycle old clothing.

Green Operations

SAIF encourages employee participation in emission reduction actions through various mechanisms. Energy-saving and carbon reduction behaviors in the office, such as turning off lights and air conditioning in unused spaces, double-sided printing, and using personal coffee cups, are internally rewarded. SAIF also strives to minimize water and plastic footprints in its operations. This is achieved by extensively using water-saving hardware and fixtures in our buildings, providing water dispensers for drinking water, and reducing the consumption of disposable plastics by providing renewable items.

Carbon Neutrality Initiatives

To minimize the environmental impact of meetings and events, SAIF actively promotes and strives to implement "green events." This includes reducing energy consumption, minimizing waste, and promoting low-carbon transportation. SAIF also endeavors to purchase sufficient voluntary carbon offsets to neutralize any remaining emissions. These initiatives aim to enhance social responsibility and awareness of sustainable development among event participants, fostering a new social trend that takes pride in adopting a low-carbon lifestyle. Moreover, the Institute will consistently monitor the enforcement of national policies and initiatives on low-carbon practices and environmental conservation. Tailoring strategies to the Institute’ s unique context, the exploration of cutting-edge technologies and management methodologies will be pursued.

05

Expanding Green Development Influence

As an educational institute dedicated to cultivating high-end financial talents, SAIF is committed to contributing to society's low-carbon economy and sustainable development. By implementing carbon neutrality actions, SAIF adheres to the concept of sustainable development, supporting faculty and students in conducting research and exchanges in the field of sustainability, thereby contributing to the progress of social and environmental sustainability.

Research and Publications

SAIF recognizes its critical role in providing intellectual leadership in decarbonization and sustainable development. SAIF scholars have actively engaged in research and policy advice related to carbon emission reduction and broader issues related to the link between environmental change, social responsibility, corporate governance, financial behavior, and financial markets. Their research outcomes have been published in international journals. Additionally, as policy advice, SAIF has extensively collaborated with governmental agencies and participated in the formulation of a number of green finance laws and regulations, becoming a think tank driving societal sustainable development.

Academic Publications and ThinkTank Research Outcomes (*Partial List*)

- *Does Concealing Gender Identity Help Women Win the Competition? An Empirical Investigation into Online Video Games.*
  Marketing Science, 2023, Chen Xinlei
- *Air Pollution, Affect, and Forecasting Bias: Evidence from Chinese Financial Analysts.*
  Journal of Financial Economics, 2021, Wang Yongxiang
- *Air Pollution, Behavioral Bias, and the Disposition Effect in China.*
  Journal of Financial Economics, 2021, Li Jie
- *The Brain Gain of Corporate Boards: Evidence from China.*
  Journal of Finance, 2015，Yu Xiaoyun
- *Determinants of Social Disclosure Quality in Taiwan: An Application of Stakeholder Theory.*
  Journal of Business Ethics, 2015, Chiu, Tzu-Kuan
- *Shanghai Green Finance Index*, Chiu, Tzu-Kuan and Wang, Tan
- *IFRS Sustainability Disclosure Standards Released and It is Time for SMEs to Start Preparing for ESG Disclosure* (SAIF ThinkTank)
- *Carbon Market Development History, Problems and Suggestions in China* (SAIF ThinkTank)
- *Current Situation, Analysis and Suggestions of Green Credit in China* (SAIF ThinkTank)

ESG Publications

- “ESG Finance in the New Century”
  Author: Chiu, Tzu-Kuan
  Publish Date: November 2021

- “ESG Finance in the New Century”
  Author: Chiu, Tzu-Kuan
  Publish Date: November 2021

Research Center

On November 26, 2022, SAIF announced the establishment of the Sustainable Investment Research Center during the Shanghai International Financial Center Development Forum. The Center is dedicated to advancing academic research, policy think tank initiatives, applied consulting, and talent development in the field of sustainable investment. Its primary objective is to position itself as a leading research hub for innovative ideas in sustainable investment within China. Furthermore, the Center aims to serve as a distinguished policy think tank and an elite training institution for nurturing the next generation of proficient investors and asset managers.

Curriculum

SAIF has consistently been a pioneer in sustainable finance education and persistently embeds concepts of social responsibility and sustainable development into its financial education. We are committed to nurturing students' insight and critical thinking skills, which are essential for contributing to societal sustainable development. SAIF has introduced several sustainability-themed courses across various educational programs, weaving the principles of low-carbon and sustainable development throughout the entire talent development process. This approach is designed to meet the pressing needs of future business leaders in tackling sustainable development challenges. Moreover, SAIF is in the process of developing the Sustainable Finance curriculum, which aims to cultivate high-level talents to serve the country's green development.

Current courses include

- "Impact Investing"
- "ESG and Corporate Social Responsibility"
- "Corporate ESG: Cases and Practices"
- "Sustainable Finance"
- "Ethics in Finance"
- "Clean Energy and Dual Carbon Targets – Technology, Market and Investment"

Furthermore, the SAIF Live Learning Center has launched several practical project topics related to sustainable development. Under the combined leadership of corporate executives and academic professors, students engage in real business interactions to learn about sustainable development. They apply theoretical knowledge to address practical problems and challenges with real-world significance.

Project topics include

- "Research on the ESG Current Status and Future Plans of Technology Enterprises Planning to Go Public in the Zhizhu National High-Tech Industrial Development Park"
- "Analysis of the Impact of Climate Change on Investment in Financial Institutions and the Necessary Solutions from a Carbon Neutrality Perspective"
- "Exploration of the Methods and Challenges of Constructing a Localized Climate Index in China"
- "Impact Investing in China: Opportunities and Investment Strategies"
- "Exploration of Climate Risk Stress Testing Model"
- "Climate Transition Pathway in China"
- "Carbon Asset Management Boosts ESG Enhancement Research – A Case Study of Inner Mongolia Energy Limited of State Power Investment Corporation"

Student Activities

Responsible Financier Club

Guided by the United Nations Sustainable Development Goals (UN SDGs), the Responsible Financier Club congregates socially responsible alumni and finance professionals from various sectors, all of whom demonstrate leadership and innovation. The club advocates the concept of "Finance for Good, Empowering Responsibility," thereby creating a platform for dialogue that focuses on social value innovation and development.

ESG Investment Club

The ESG Investment Club, centered around research and practice in ESG investment, leverages SAIF's robust financial research capabilities and the practical experiences of SAIF alumni in the finance and investment fields. Since 2021, the club has organized a series of events such as seminars on the development of China's carbon emissions trading market, lectures on climate investment and carbon accounting, hosting of the 2nd Sustainable Finance Forum, and the launch event of the book "ESG Finance in the New Century." The club also conducts offline salons on ESG data ratings and ESG investment practices.

Forums and Conferences

China Sustainable Investment Development Forum

This forum was designed to facilitate discussions on the rational trajectory and viable solutions for the green economy and sustainable development. The overarching goal was to contribute valuable insights and expertise to China's "dual carbon" strategic objectives and global efforts towards green and sustainable development.

China Social Responsibility Investment Summit

This Summit was centered on the theme "Innovation-Driven, Collaborative Integration." The aim was to explore the future development path of social responsibility investment in China.

ESG Global Leaders Conference

As a prominent institution, SAIF provided research assistance and academic support for the largest national ESG event with substantial international influence.

Conclusion

Achieving carbon neutrality is a complex and long-term endeavor that requires unwavering dedication to effect transformative change. The establishment of carbon neutrality goals and the publication of the Carbon Neutrality Action Report by SAIF represent a significant milestone in this journey. SAIF is committed to demonstrating its steadfast commitment to climate action and aims to make significant contributions to assist the nation and society in their transition towards carbon neutrality through tangible and practical measures.

Appendix

- The sources of emission factors for this carbon inventory include:

1. "IPCC 2006 Guidelines for National Greenhouse Gas Inventories" published by the Intergovernmental Panel on Climate Change (IPCC).
2. "Methods and Reporting Guidelines for Calculating Greenhouse Gas Emissions of Enterprises" and average carbon emission factors for the power grid, published by the Ministry of Ecology and Environment of China.
3. "Beijing Low Carbon Travel Carbon Emission Reduction Methodology (Trial) 2023 Edition" published by the Beijing Municipal Ecology and Environment Bureau.
4. "UK Government GHG Conversion Factors for Company Reporting 2023."
5. Ecoinvent Database version 3.10
6. China Product Carbon Footprint Database (CDCP) for greenhouse gas emission coefficients throughout the lifecycle of products.
7. MioTech Environmentally-Extended Input-Output (EEIO) Database.