2021

SAI Sustainability Report

2021

SAI Sustainability Report

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Message from the CEO

Our Approach

Our Future First strategy aligns our Environmental, Social and Governance (ESG) initiatives to the material issues that impact our stakeholders, business and the world around us.

As a leader in supercomputing and crypto mining industry, we have the opportunity to harness the power of technology in order to create a more sustainable future. At SAI, we are committed to protecting the planet, connecting everyone to the benefits of the digital world.

Our corporate sustainability program is comprised of our environment, social and governance (ESG) initiatives that focus on material issues to positively impact our key stakeholders. The ESG report will be published at an annually basis.

SAI followed GRI standards to prepare this report.

Awards and Recognition

- Participant of UNFCCC Climate Neutral Now Initiative, UNFCCC Race to Zero initiative
- Founder of OCEC
- Vice-chairman unit of the Clean Heating Industry Committee (CHIC)

Environment

- Protecting our planet and climate through the our SAICAB solutions.
- Protecting worldwide energy and natural resources by reducing our consumption and make our portfolio cleaner.
- Protecting our infrastructure through design and innovation.

Social

- Connecting our employees to the best opportunities the digital world has to offer.
- Striving to provide international communities the best energy solution to make a better world

Governance

- Empowering stakeholders and connecting them with the environmental ecosystem in a sustainable and responsible way

Environment

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- Energy efficiency
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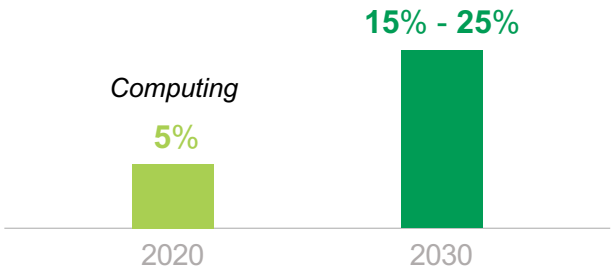
Message from the CEO

SAI was established in 2019 and has been committed to solving the problem of energy costs of computing. Bearing the mission of becoming the world's first horizontally integrated clean energy technology company, SAI serves its customers around the world with business solutions from computing power to electricity to heating.

Looking back at the development history of several industrial revolutions: the first industrial revolution, the heating from steam made it possible to replace hand production with machines in transportation and manufacturing industrials; The second industry revolution began with electricity and electrification in the electrical industries. The introduction of hydroelectric power generation in the Alps enabled the rapid industrialization of coal-deprived northern Italy, beginning in the 1890s.; in the third scientific and technological revolution, the computing industry has greatly shortened the time and space barriers of the physical world through computing power. The value created by each kilowatt-hour of electricity is getting higher. In this process, we discovered that the energy efficiency improvement process in the carbon-based world (that is, the physical world of human real life) can be understood as the improvement of atomic energy efficiency. Similarly, the transfer of value in the silicon-based world can also become more efficient through the global network of digital finance and encrypted assets. In the silicon-based world, the efficiency of value and information transmission is mainly improved by continuously improving electronic energy efficiency. And with the development of human society and the advancement of science and technology, this trend will further accelerate.

We believe that all developments in the silicon-based world must be based on computing. The computing core costs can be summarized as energy cost(including heating and electricity), and computing cost(including chip and algorithm). If we stretch the timeline, we will find that energy costs will account for the largest proportion.

According to the recent studies, about 5% of the total global power generation in 2020 is used for computing. However, according to official forecasts, 15% to 25% of global power generation by 2030 will be used for computing industry.



Bitcoin is at the forefront of the computing industry. Bitcoin mining, as an important part of the Bitcoin ecology, undertakes the task of maintaining the security and stability of the system. At present, the total global mining load is about 8 million kilowatts, which has grown to 40% of the Chinese traditional IDC volume in only ten years, and it still maintains a rapid growth trend far exceeding the growth rate of traditional IDC.

Message from the CEO

Because of the common mission of carbon neutrality, traditional industries are now paying attention to the replacement of fossil energy and the promotion and use of clean energy. In the computing industry, more and more people also pay attention to whether the computing power uses clean energy, and whether the process of generating computing power meets the requirements of environmental friendliness and sustainability.

However, most of the bitcoin mining centers are still powered by coal power plant. As more renewables come online, they create a tricky problem for grid operators. Since people cannot control how much sun shines or how much wind blows, there's a constant risk of either too much or too little energy flow. When there's too little, operators can compensate by firing up hydro or fossil fuel generators which are more reliable. But dealing with too much energy presents a complex challenge.

From the perspective of the clean computing business, SAI has four main technology segments: SAIHEAT (chip waste heat utilization), SAIWATT (clean power consumption), SAIBYTE (computing cloud network system), and SAICHIP (new computing chip).

SAIHEAT, by providing an integrated solution of "liquid cooling + waste heat utilization", collects the waste heat generated in the computing process and reuses it, helping to reduce the electricity cost dramatically while replacing the traditional heat source with clean energy. SAIWATT (clean power consumption) uses idle energy such as hydro-power, wind power, and waste gas power to generate electricity for computing, and realizes idle energy consumption and peak shaving, as well as costs reduction for both energy owners and SAI as the operator. SAI also offers computing power cloud services and new chip materials to jointly reduce the cost of the computing industry.

cutting-edge clean energy-based computing and energy center

waste heat utilization technology

power consumption technology

Reduce up to **30%** cost

With cutting-edge clean energy-based computing and energy center, as well as waste heat utilization technology and power consumption technology, SAI can reduce up to 30% of energy consumption cost in the computing process, while cutting down infrastructure investment, thus leads to a high-profit margin for the company and its partners. In the future, SAI will establish computing and energy centers around the world to provide clean energy solutions to more customers.

Being the world's first digital asset company to sign UN Climate Neutral Now Initiative, SAI's value proposition is simple: to provide its customers with lower-cost access to clean computing power and help them realize improved ROI on BTC investments.

2050 Achieve carbon neutrality

According to the recent SAI Carbon Footprint Report, SAI is able to achieve carbon neutrality before 2050.

SAI's development philosophy has always been to do its best to make contributions to society. As the first company in the industry to publish a carbon footprint report and ESG report, SAI wants to set an example and lead other companies in the industry to make changes and contribute their efforts to promote carbon neutrality for the entire society.

While the world will need to reach net-zero carbon emission, those of us who can afford to move faster and go further should do so.

Together, we make world better.

Environment

Addressing Climate Change

Climate change includes both global warming driven by human-induced emissions of greenhouse gases and the resulting large-scale shifts in weather patterns. Though there have been previous periods of climatic change, humans have since the mid-20th century had an unprecedented impact on Earth's climate system and have caused change on a global scale.

The largest driver of warming is the emission of gases that create a greenhouse effect, of which more than 90% are carbon dioxide (CO2) and methane. Fossil fuel burning (coal, oil, and natural gas) for energy consumption is the main source of these emissions, with additional contributions from agriculture, deforestation, and manufacturing. The human cause of climate change is not disputed by any scientific body of national or international standing.

Temperature rise on land is about twice the global average increase, leading to desert expansion and more common heat waves and wildfires. Warmer temperatures are increasing rates of evaporation, causing more intense storms and weather extremes. Impacts on ecosystems include the relocation or extinction of many species as their environment changes, most immediately in coral reefs, mountains, and the Arctic. Climate change threatens people with food insecurity, water scarcity, flooding, infectious diseases, extreme heat, economic losses, and displacement.

The debate about Bitcoin's massive carbon emissions and environmental degradation has not reached its goal. According to the analysis below, the result shows that the consumption of Bitcoin mining is less than the goldmining, financial and computer industries.

Bitcoin has been dealing with scepticism since its inception. Some theories are wilder than others, but arguably one of the most latched-onto debates has been around Bitcoin's energy consumption and its alleged harmful level of emissions. The traditional banking system, according to a recent research, total consumption for banks during a year only on three metrics, is around 26 TWh on servers, 87 TWh on branches and 26TWh on ATMs for a total of close to a 140 TWh a year. Bitcoin consumes 1/4 the power of banks. But, this is just the start for bitcoins. As we move towards making every transaction using cryptocurrency, the power consumption decreases.

As the clean computing industry develops more mature, Bitcoin mining is more conducive to reducing the total carbon emissions of human society, and then achieving the goal of carbon neutrality.

Renewable energy approach

CoinShares asserts that, given the amount of energy used, Bitcoin mining is more driven by renewable energy than almost every other large industry in the world. A more useful comparison is the way the industry has developed compared to gold and traditional finance (see below).

Comparison of Environmental Costs

	Energy Used (GJ)	Tonnes CO_2 Produced	Emission Trend
Gold Mining	475 million	54 million	Increasing
Gold Recycling	25 million	4 million	Decreasing
Paper Currency & minting	39.6 million	6.7 million	Increasing
Banking System	2340 million	390 million	Increasing
Bitcoin Mining	3.6 million	0.6 million	Decreasing

As a result, estimates of the percentage of renewable energy used in Bitcoin mining vary widely. According to a CoinShare report, published in December 2019, it showed that 73% of Bitcoin's energy consumption was carbon neutral, mainly due to the abundance of hydropower in major mining centers such as Southwest China and Scandinavia.

In summer, all the electricity that SAI consumed are 100% from renewable energy. SAI will keep increasing the proportion of the renewable energy in its energy consumption portfolio.

SAI entered into a long-term renewable energy supply agreement with regional renewable energy power stations. Those power stations agreed to supply SAI's Data center and crypto mining center with a 100% renewable energy supply.

Environment

Energy efficiency

SAI increases the energy efficiency and helps reduce global carbon emissions in the computing, energy and heating industries.

Heating industry

The energy structure

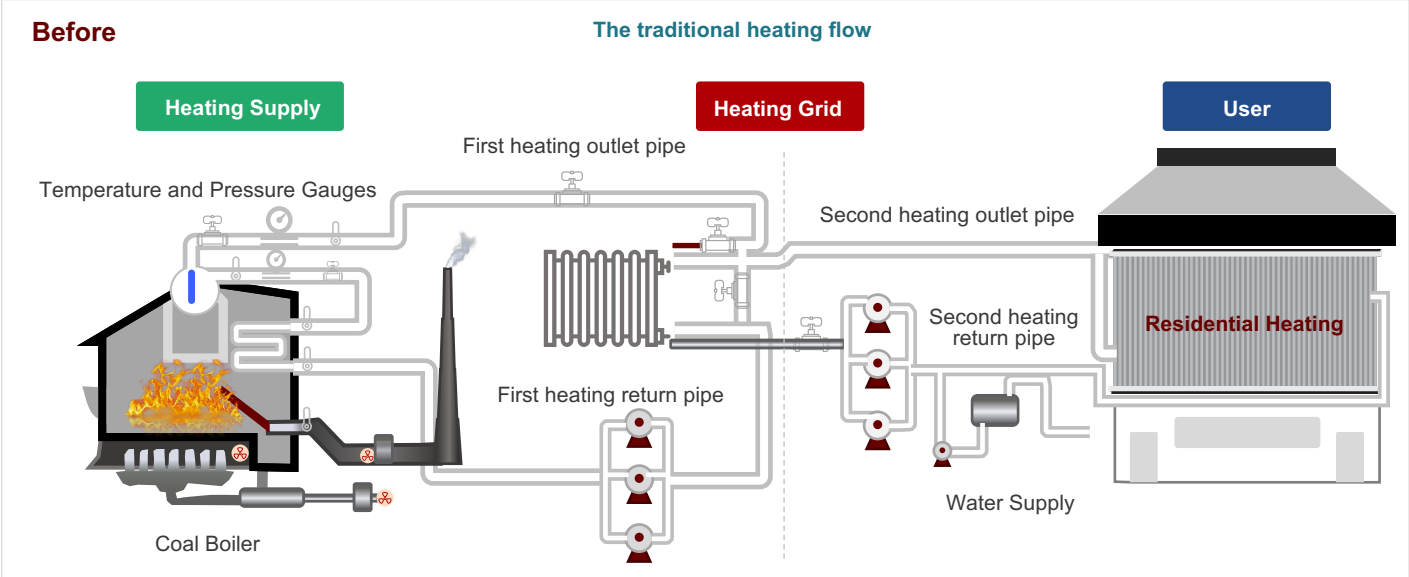
Buildings use more than one-third of the world's energy, most of it for heating spaces and water. Most of this heat is generated by burning natural gas, oil, or propane. And where these fossil fuels are consumed, greenhouse gas emissions are a given.

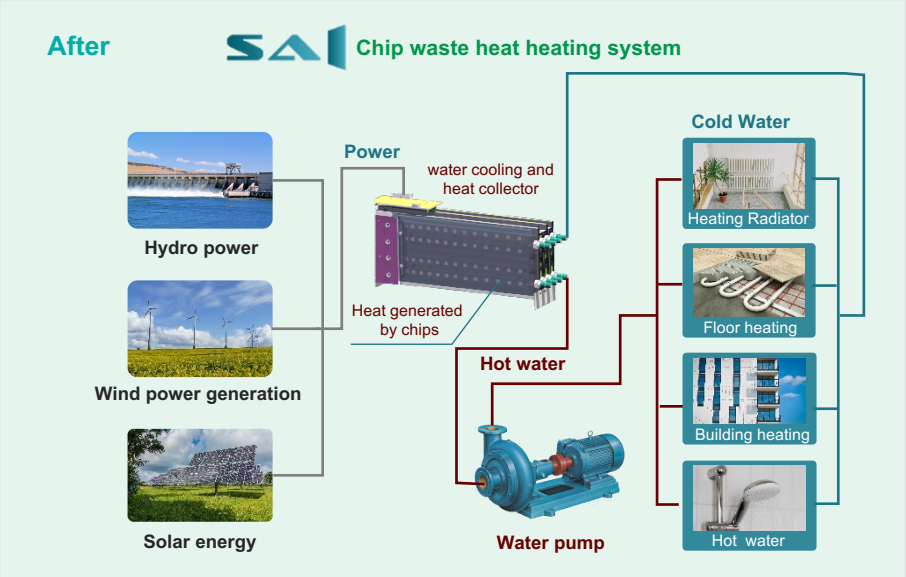
Electric heat pumps

Electric heat pumps, first widely used in the 1970s in Europe, could be the best solution to cut that fossil fuel use. They could slash the carbon emissions of buildings by half. A heat pump uses a compressor and refrigerant to move heat from one place to another. It can extract heat from outside air, even in the winter, and release it inside a house, basically like an air-conditioner running in reverse.

The traditional heating flow

The traditional heating flow is shown as below. It involves many components in order to build up the whole system. It will generate massive carbon emissions during the production of those machines, pipes, etc. Also, considering about the transportation, maintenances charges, the traditional heating industry needs a brand-new revolution which can reduce the carbon emissions of the whole system and enable the whole society to reach to carbon neutrality in near future.





Environment

Hydro Power Peak Cut

During water season, taking the hydropower plant as an example, 37.5% of the generated electricity will be wasted because it is over the capacity that required by the consumers.

We built up a few assumptions to test how much carbon emissions can we reduce:

1

Hydropower abandonment + **Coal powered computing**

The excess electricity that hydropower produced will be abandoned and the computing center will be powered by electricity generated by coal.

2

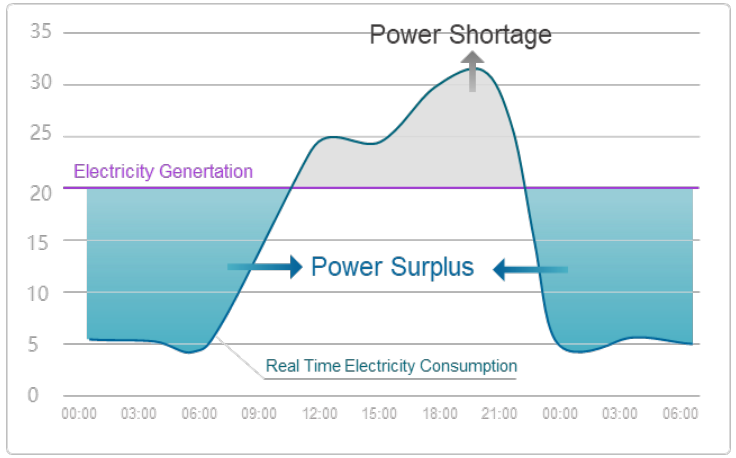
Hydropower storage + **Coal powered computing**

The excess electricity that hydropower produced will be stored and the computing center will be powered by electricity generated by coal.

3

Hydropower powered computing

The excess electricity that hydropower produced will be used to power the computing center.



By using the hydropower electricity, computing centers can achieve 0 emissions while accelerating the return on both energy and computing investments.

Environment

Associated Gas Electricity

Natural gas is often produced as a by-product (i.e. associated gas) during oil extraction. If the oil project has been planned in a way that does not incorporate access to a gas market or other productive uses, then there are only a few options left for the gas: an operator must choose whether to use it onsite for its own operations, reinject it into the ground, flare it or vent it to the atmosphere.

It will be important to minimize the flow of new projects that might require flaring; this is a question of regulation and careful project selection and design. For existing sources of flaring, in the majority of cases the optimal solution to flaring is to extend the natural gas grid.

1

Associated gas burning + **Coal powered computing**

The associated gases will be burned out and the computing center will be powered by electricity generated by coal.

2

Associated gas liquified + **Coal powered computing**

The associated gases will be liquified and send to natural gas powers stations, and the computing center will be powered by electricity generated by coal.

3

Associated gas powered computing

The associated gases will be used to power the computing center onsite.

Comparing with traditional “Burning” solution and “Liquified” solutions, SAI can use the associated gases onsite and power its computing system. It can save over 43,630 tonnes of CO2 equivalent emissions per year.

All the industries listed above will cause huge carbon emissions to society. In the solution given by SAI, the three industries can reduce their carbon emissions and improve their energy efficiency.

The more the solutions offered by SAI are used, the more carbon emissions can be reduced, thereby we can achieve a carbon neutrality sooner than we expect.

Environment

Regional energy solutions

A Central Asia example: Heat Recovery

Pilot operating center in Central Asia

The SAIHEAT Energy & Computing Center

Waste heat generated by computing

90%

31.5℃

-20℃

Greenhouse

SAI has successfully deployed a pilot operating center in Central Asia. The SAIHEAT Energy&Computing Center can use technical means to recover the waste heat generated by computing, and then use the heat for greenhouse heating.

The greenhouse can be maintained at 31.5 degrees (the outdoor environment is minus 20 degrees). The average heat recovery rate of the whole process exceeds 80%.

1

Wind turbines and hydropower add renewable energy to the electric grid that supplies our data centre and crypto mining centers.

2

Heat from the servers& chips is directed over water coils to heat water

3

The hot water delivers the heat to the community via the district heating network.

90%

Consumed in our crypto mining and supercomputing centers

90%

Collected and reuse

The electricity used by the chips count for 90% of total electricity consumed in our crypto mining and supercomputing centers. 90% of the heat generated by the chips were collected and reuse for central heating of residential houses, farms, public facilities

35%

Reduce the cost of computing power and heating power

This allows customers to reduce the cost of computing power and heating power by about 35% while effectively reducing the power supporting invest-ment, realizing a clean computing power solution.

Renewable energies to power the mining chips

Use the renewable energies to power the mining chips, reuse the heat the chips self-produced.

Environment

Pathway to Eliminate Carbon Emissions

SAI will take the following strategies to reduce its carbon emissions. SAI aims to achieve carbon neutrality before 2050 and gradually reduces its carbon emissions.

Renewable Energy

SAI entered into a long-term renewable energy supply agreement with regional renewable energy power stations. Those power stations agreed to supply SAI's Data Centre and crypto mining centre with a 100% renewable energy supply.

Heat recovery

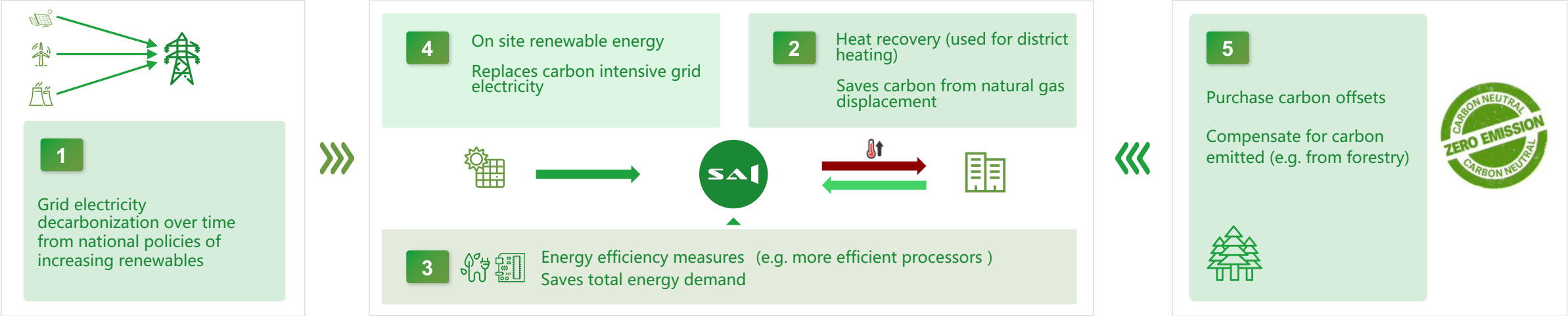
In addition to its renewable power purchases, SAI is collaborating with the district heating company to develop heat recovery infrastructure. The goal of the heat recovery infrastructure is to recover excess heat from SAI's data centre and crypto mining centres and send the recycled heat back to the community. Energy will be recovered from SAI's computing chips and upgraded by a newly constructed heat pump facility.

Water stewardship

SAI prioritises water stewardship across its operations and the many communities it serves. Its data centres are among the most water-efficient in the world. SAI invests in circular systems that reuse water as many times as possible before discharging it to wastewater treatment plants.

Carbon Offset

Carbon neutrality is achieved when emissions from a product, activity or a whole organization are netted off, either through the purchase of an equivalent number of offsets or through a combination of emissions reduction and offsetting. There are some carbon emissions that cannot be eliminated by using renewable energy only. Based on the Carbon Offset strategies proposed by CarbonTrust, we will take the following steps to buy needed carbon credits to indirectly offset the carbon emissions of SAI.



Environment

Environmental Data

The main carbon emissions of SAI came from scope 2. Over 99% of the carbon emissions are from the electricity used for powering the chips.

Carbon Footprint

Carbon footprint	2021 emissions (tCO2e)
Scope 1	
Petrol use	7.58
Scope 2	
Facilities energy use	103,081.51
Heat recovery emissions saved	10,351.25
Net facilities emissions	92,730.26
Scope 3	
Flight emissions	23.35
Train emissions	1.30
Taxi (didi) emissions	1.66
Trucks (for chip relocation)	247.28

Travel

Emissions from transport fuel used		
Total fuel cost	23,552.00	CNY
Fuel unit cost	7.19	CNY/litre
Fuel use	3,276.12	litres
Carbon factor	2.31	kgCO2e/litre
Total carbon emissions	**7,583.13**	**kgCO2e**
Emissions from Didi trips		
Total trip cost	15,801.00	CNY
Trip unit cost	1.60	CNY/km
Total distance	9,875.63	km
Carbon factor	0.16844	kgCO2e/km
Total carbon emissions	**1,663.45**	**kgCO2e**
Flights emissions		
Carbon factor	Short haul	0.1555
	Long haul	0.1909
	Average	0.1732
Total emissions	**23.35**	
Rail emissions		
Carbon factor	0.03694	kgCO2/pax km
Total emissions	**1.3004616**	**tCO2e**

Grid Factor

	2011
China Grid Region Map	tCO2/10MWh
North China Regional Power Grid	11.2816
Northeast Regional Power Grid	11.3672
East China Regional Power Grid	7.8427
Central China Regional Power Grid	7.03
Northwest Regional Power Grid	8.1189
Southern Regional Power Grid	6.6937

Environment

Environmental Data

Main Stats

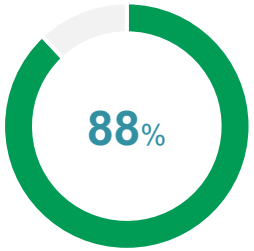
	2020										2021		
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Electricity usage (kWh)													
Total		-	-	-	-	207,138.0	111,414.0	235,623.0	332,106.0	2,095,006.2	3,740,828.4	4,839,695.1	4,709,900.4
Heat recovery (GJ)													
Total		-	-	-	-	-	-	243.60	1,223.56	5,486.56	5,727.12	5,249.58	6,364.13
Heat recovery (MWh)													
Total						-	-	67.67	339.88	1,524.06	1,590.88	1,458.23	1,767.83
Number of chips													
Total						213	213	285	792	1201	2167	2167	2167

Social

We make the world better

SAI strives to provide the communities the best energy solution and contributes to the sustainable development of a better world. We prioritize employee innovation and encourage employee diversity, connecting them with communities to foster a harmonious neighborhood and create new mechanisms that benefits the society we are serving. SAI makes every effort to ensure the building of a highly reliable and safe business environment, thus helping to solve all sorts of societal issues and contributing to a cleaner and energy-efficient future.

Social Progress



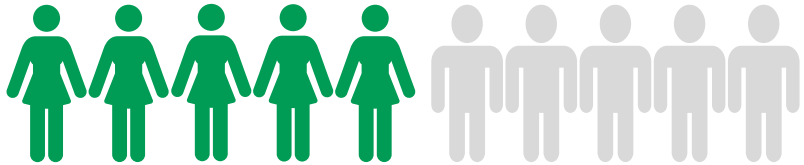
Participation Rate

Employee satisfaction

Employee Satisfaction

88% of SAI's employees participated in the employee satisfaction survey in 2020, scoring 85 in employee satisfaction.

50% Female Leaders



Women Leaders

5 in 10 SAI leaders are women.

Employee Mental health

SAI cares about employees' inner peace by providing seminars and virtual classes of mental health awareness, and meditation.

- Seminars
- Virtual classes of mental health awareness
- Meditation

Pride Community

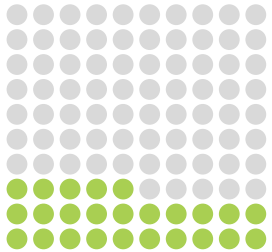
Launched SAI's employee LGBTQ+ network to encourage an open and equal corporate culture.

LGBTQ + Network

Voluntary Activity

25% of SAI's employees volunteered time or made donations for voluntary activities.

25%



Commitment to International Community

Being first to sign UNFCCC Climate Neutral Now Initiative

SAI joined the UNFCCC Climate Neutral Now (hereinafter referred to as the "Neutral Initiative") launched by the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). Being the world's first digital asset company to join the UNFCCC, SAI is also the first in the industry to sign a commitment with the United Nations to reduce the cost by providing clean computing power. SAI is committed to reducing carbon emissions and achieving carbon neutrality by providing clean computing power.

CLIMATE NEUTRAL NOW

Solutions with Business Partners

In order to lead to momentum changes of the industry and contributing to the proposition of carbon neutrality, SAI found a non-profit membership association called OCEC (Organization of Clean Energy and Computing) to help any organizations involved in cryptocurrency mining and energy industries to reach to a number of resources, including connections with clean energy suppliers, technical guidance for the transformation of traditional thermal power mines in order to reduce their carbon emissions, etc. As initiator, **SAI will help members of OCEC to connect with third party carbon credits purchases agents and organizations to help neutralize their carbon dioxide emissions**, thus to accelerate the carbon neutralization of the industry.

Looking into the Future

Invest in programs that support in employee's overall welling, including expanding employee benefits in supplementary business insurance, annuity, parental leave, etc.

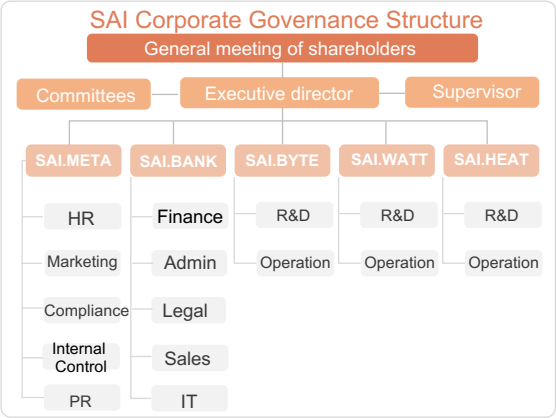
Launch different campaigns to motivate SAI's employees to dedicate their time to make social impact, and use SAI's resources to help people who are less privileged.

Governance

Strong and efficient corporate governance with strict alignment to Code of Conduct and Integrity, leading to a green future. As the leading global computing power operator and energy solution provider, SAI is dedicated to empowering its stakeholders and connecting them with the environmental ecosystem in a sustainable and responsible way.

Efficient and Optimized Corporate Governance Structure

SAI strictly abides by the requirements of laws and regulations, and constantly improves the corporate governance structure to ensure the efficiency and standardization of the cooperate operation process. The company has established a standardized and orderly corporate governance structure composed of general meeting of shareholders, executive director, supervisors and managers, forming a transparent and powerful governance mechanism which effectively guarantees the legitimate rights and interests of all stakeholders.



Stakeholders	Major Concerns	Responsible Business Lines
Customers	Product Safety and Quality, Data Security	R&D, IT, Operation, Sales
Employees	Organizational Structure, Equality, Human Capital, Compensation, Code of Conduct	Human Resource
Shareholders	Managing Structure, Business Ethics, ESG Investment	Finance, Internal Control, Legal Department, Audit Committee
Business Partners	Anti-Bribery and Corruption	Internal Control, Legal Department, Audit Committee
Government	Taxation	Finance, Audit Committee, Compliance
Industry	Clean Energy, Carbon Neutrality	R&D, Compliance, Marketing
Environment	Carbon Footprint, Clean Energy	R&D, Public Relations
Society	Community Relations	Public Relations, Marketing

Complete Internal Control System

SAI's internal control system is compliant to the latest laws and regulations. In order to improve the compliance, standardization and efficiency of the company's internal control management, SAI adopts distributed online collaboration platform in daily work, where organizational structure, budgeting, accounting records, assets, procurement, performance reports, are all managed and supervised strictly under standardized procedure. Thus, SAI's business was not influenced by the COVID-19 pandemic, and still achieved remarkable progress.

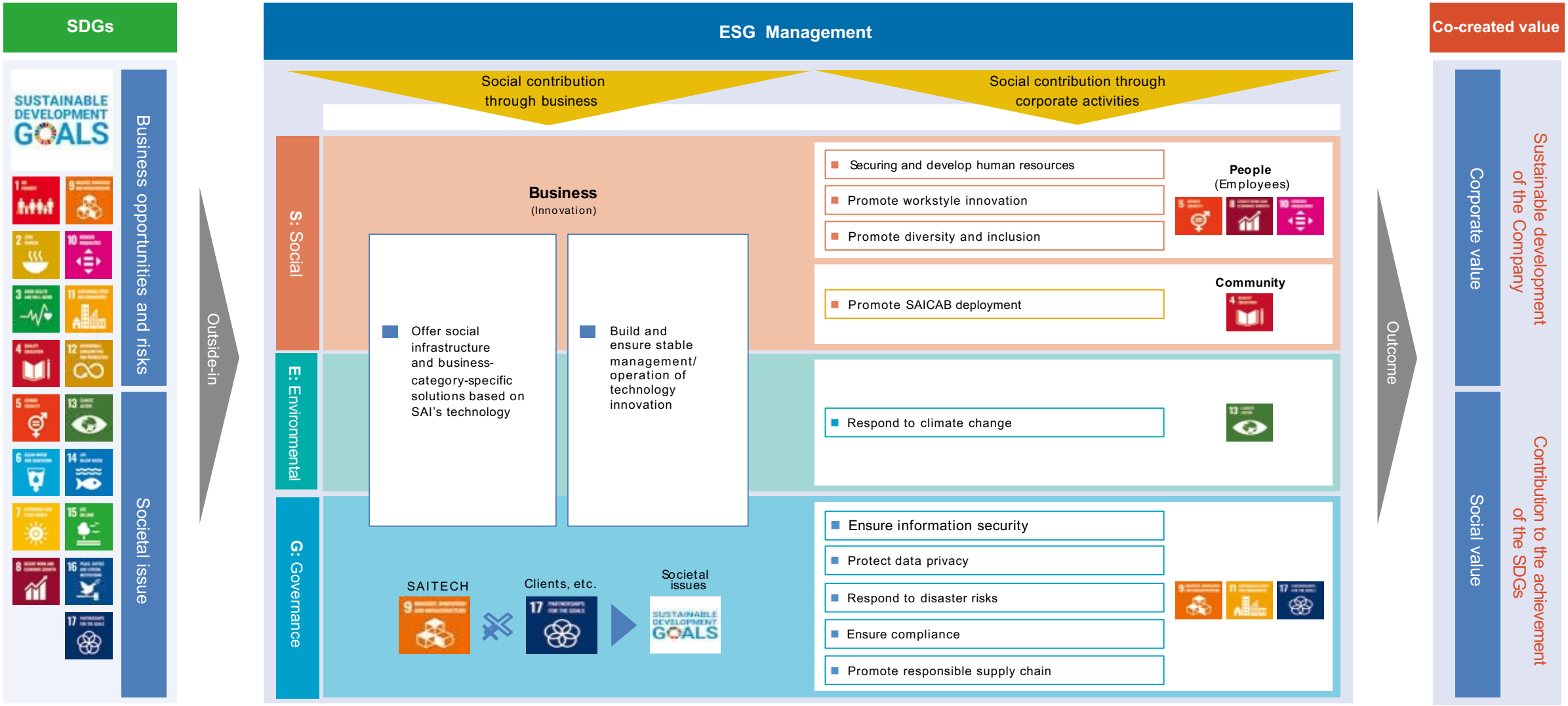
In the meantime, SAI constantly reviews its internal control process with external professionals to sort out the company's business process, finds problems in the internal control design, and explores the most feasible scheme. In the opinion of the executive director, SAI's internal control system is sound and effective, with no major defects in the design or implementation are found.

Business Ethics and Integrity

SAI takes business ethics and integrity as core to its value. 100% of employees, management officers, and directors received online Code of Conduct and Anti-Bribery and Corruption training when joining SAI. Internal resources of ethics are available for all employees to visit to ensure the highest level of compliance.

SAITECH and ESG Management

SAI's development philosophy has always been to make every effort to contribute to society. When we plan our ESG management system, we take into account the United Nations' 17 Sustainable Development Goals(SDGs), provide solutions to reduce greenhouse gas emissions for society, provide services to our customers and stakeholders, and provide all for our employees. The necessary support. We hope to set an example for our peers, lead them to disclose their ESG reports, and work together to make the world better.



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102-45	Entities included in the consolidated financial statements	——
102-46	Defining report content and topic Boundaries	——
102-47	List of material topics	P16-18
102-48	Restatements of information	Not applicable
102-49	Changes in reporting	Not applicable
102-50	Reporting period	P1
102-51	Date of most recent report	P1
102-52	Reporting cycle	P3
102-53	Contact point for questions regarding the report	P21

102-54	Claims of reporting in accordance with the GRI Standards	——
102-55	GRI content index	P18-20
102-56	External assurance	——
103: Management Approach		
103-1	Explanation of the material topic and its Boundary	P13
103-2	The management approach and its components	——
103-3	Evaluation of the management approach	——

▶ Topic-Specific Standard (300: Environmental 400: Social)

300: Environmental		
301: Materials		
301-1	Materials used by weight or volume	Not applicable
301-2	Recycled input materials used	Not applicable
301-3	Reclaimed products and their packaging materials	Not applicable
302: Energy		
302-1	Energy consumption within the organization	P12
302-2	Energy consumption outside of the organization	——
302-3	Energy intensity	——
302-4	Reduction of energy consumption	P12
302-5	Reductions in energy requirements of products and services	——
303: Water 2018		
303-1	Interactions with water as a shared resource	——
303-2	Management of water discharge-related impacts	——
303-3	Water withdrawal	——
303-4	Water discharge	——
303-5	Water consumption	——

304: Biodiversity		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	——
304-2	Significant impacts of activities, products, and services on biodiversity	——
304-3	Habitats protected or restored	——
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	——
305: Emissions		
305-1	Direct (Scope 1) GHG emissions	P12
305-2	Energy indirect (Scope 2) GHG emissions	P12
305-3	Other indirect (Scope 3) GHG emissions	P12
305-4	GHG emissions intensity	——
305-5	Reduction of GHG emissions	P12
305-6	Emissions of ozone-depleting substances	——
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	——
306: Effluents and Waste		
306-1	Water discharge by quality and destination	——
306-2	Waste by type and disposal method	——
306-3	Significant spills	——
306-4	Transport of hazardous waste	——
306-5	Water bodies affected by water discharges and/or runoff	——
307: Environmental Compliance		
307-1	Non-compliance with environmental laws and regulations	——
308: Supplier Environmental Assessment		
308-1	New suppliers that were screened using environmental criteria	——
308-2	Negative environmental impacts in the supply chain and actions taken	——

400: Social		
401: Employment		
401-1	New employee hires and employee turnover	P14
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	——
401-3	Parental leave	——
402: Labor/Management Relations		
402-1	Minimum notice periods regarding operational changes	——
403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	——
403-2	Hazard identification, risk assessment, and incident investigation	——
403-3	Occupational health services	——
403-4	Worker participation, consultation, and communication on occupational health and safety	——
403-5	Worker training on occupational health and safety	——
403-6	Promotion of worker health	——
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	——
403-8	Workers covered by an occupational health and safety management system	——
403-9	Work-related injuries	——
403-10	Work-related ill health	——
404: Training and Education		
404-1	Average hours of training per year per employee	P14
404-2	Programs for upgrading employee skills and transition assistance programs	——
404-3	Percentage of employees receiving regular performance and career development reviews	——
405: Diversity and Equal Opportunity		
405-1	Diversity of governance bodies and employees	P14
405-2	Ratio of basic salary and remuneration of women to men	——
406: Non-Discrimination		
406-1	Incidents of discrimination and corrective actions taken	——
407: Freedom of Association and Collective Bargaining		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	——
408: Child Labor		
408-1	Operations and suppliers at significant risk for incidents of child labor	——

409: Forced or Compulsory Labor		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	——
410: Security Practices		
410-1	Security personnel trained in human rights policies or procedures	——
411: Rights of Indigenous Peoples		
411-1	Incidents of violations involving rights of indigenous peoples	——
412: Human Rights Assessment		
412-1	Operations that have been subject to human rights reviews or impact assessments	——
412-2	Employee training on human rights policies or procedures	——
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	——
413: Local Communities		
413-1	Operations with local community engagement, impact assessments, and development programs	——
413-2	Operations with significant actual and potential negative impacts on local communities	——
414: Supplier Social Assessment		
414-1	New suppliers that were screened using social criteria	——
414-2	Negative social impacts in the supply chain and actions taken	——
415: Public Policy		
415-1	Political contributions	P14
416: Customer Health and Safety		
416-1	Assessment of the health and safety impacts of product and service categories	——
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	——
417: Marketing and Labeling		
417-1	Requirements for product and service information and labeling	——
417-2	Incidents of non-compliance concerning product and service information and labeling	——
417-3	Incidents of non-compliance concerning marketing communications	——
418: Customer Privacy		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	——
419: Socioeconomic Compliance		
419-1	Non-compliance with laws and regulations in the social and economic area	——

The information shown here is provided in reference to categories in the GRI Standards; it is not disclosed in conformance with the GRI Standards. Unless otherwise stated, topics are based on Year 2021 edition.

If you have any questions or concerns, please contact us:

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