SES AI Cares

Our Inaugural Sustainability Report

SES AI Cares: Powering the Future
2024 Sustainability Report

CONTENTS

SES AI Cares: Sustainability at SES AI

Pioneering a New Path

At SES AI, we take a different view about what is commonly called Sustainability or Environment-Social-Governance (ESG). For more than 20 years, many corporations have made substantial progress on a wide range of "ESG metrics". But those metrics for the most part are not revealing the "full" story. The full story is that major elements of our industrial systems are causing ever-worsening global environmental and social catastrophes – and the Sustainability movement, as it has been practiced, is not bending that arc anywhere near the scale and speed required.

Our "Sustainability" view is that we must be part of pioneering a new path. We operate with the data-driven conviction that the planet and our global society are facing fundamental existential challenges – and that the core purpose of both our business and our Sustainability initiatives is to make a significant contribution to providing what the world truly needs to solve those challenges. At the scale and speed required.

Our approach is focused on evolving Sustainability to the next level. For us, that means making our business strategy and our Sustainability efforts a single, deeply integrated whole. We are committed to comprehensively analyzing these global challenges and prioritizing actions within our business that significantly contribute to their resolution. Sometimes this means we are choosing to ignore some low-priority more traditional ESG metrics. The heart of our work, in both Sustainability and our business, is to support the world in significantly reducing carbon emissions in order to avoid catastrophic climate change. We don't conceive of our mission as battery-making. We think of our mission as driving the global transformation to sustainable electric transportation on land and in the air.

We are not pursuing Sustainability or ESG as a stand-alone effort. We are pursuing a world that truly works.

We refer to all our Sustainability efforts as "SES AI Cares".

We care for the future, for our people and for the communities and societies in which we are embedded. We care about the ecosystems upon which all economies and life depend. Moreover, we care about creating solutions that help the world achieve truly sustainable transportation – and about achieving those solutions, not in theory, or in the lab, or in relatively narrowly defined ESG areas, but in systemic ways, that work at scale, in the real world, for the highest priorities.

"SES AI Cares" for us means true Sustainability.

Four Sustainability Commitments

Our company's mission and our Sustainability work are fully intertwined, one and the same. This integrated effort – our core business strategy in concert with SES AI Cares – revolves around four fundamental commitments. These commitments characterize who we are as a company, how we are driving our business forward, how we are implementing SES AI Cares, and how we are reporting here on our progress.

01

Relentless Innovation

At SES AI, relentless innovation is our superpower. Going beyond limits every day is what we do. We're passionately focused on developing new approaches to make Li-Metal work.

02

A Traceable, Sustainable Value Chain

We take it as a vital priority to reduce the social and environmental impacts inherent in the sourcing and production of our products. We are committed to reducing the CO_2 emissions from our manufacturing and are developingnew technologies and processes to achieve this.

03

A New Era of Sustainable Mobility

Our core mission is powering the world's transition to sustainable mobility. Our battery products are designed to provide the central ingredient to create that transformation: cells that are high energy density, safe, smart, and manufacturable at scale.

04

Empowering People

What makes everything work at SES AI is the alchemy created by brilliant, dedicated, highly talented people working together toward a shared higher purpose. We are committed to our people and to serving our communities and society.

Powering the Future: A Message from Our CEO

Whether it's battery GWh or AI for Science computing GPUs, gigafactories consume extraordinary amounts of energy. From building super-light Li-Metal batteries to power the future of flying cars, to processing large amounts of battery data to ensure nearly 100% safety in the field, to mapping the vast molecular universe to accelerate the discovery of next-generation battery materials, SES AI cares deeply about powering the future of electric transportation in a sustainable way.

The future of transportation is electric, both on land and in the air.

The transition to an all-electric future continues to accelerate even with short-term supply chain disruptions and market uncertainty in some geographies. Most major economies across the globe have seen Electric Vehicle (EV) new car market share exceed the critical 5% tipping point. In many countries, EVs now make up more than 40% of new car sales. Worldwide, about 1 in every 5 new cars sold is an EV. In China, 1 out of every 3 new cars sold is an EV; in Norway, it's 4 out of 5. In the US, a record 1.2 million EVs were sold last year.

And this is just the beginning. Coming on the heels of EVs is Urban Air Mobility (UAM). This new frontier of electric helicopters and regional planes carrying passengers and goods between metropolises is expected to take off as more UAM manufacturers receive certifications for aircrafts.

SES AI is powering a sustainable future of electric transportation.

The key to democratizing EV and UAM is a low-cost, lightweight, and safe battery, manufactured using a sustainable and traceable supply chain. For more than a decade, SES AI has been developing such a battery, using Li-Metal.

2024 is poised to be a great year for the growth of EV, and the tipping point in the acceptance of UAM worldwide. We are excited to advance the future of mobility with our breakthrough AI-protected Li-Metal battery technology.

Last year, we launched an initiative within SES AI Cares, applying advanced drones powered by Li-Metal batteries to protect our humanity and environment. We collaborated with filmmaker and marine activist Director Lim Wan Ho to track and study dolphins on Jeju Island. In the Gobi Desert, we delivered medication to a family via air in just 20 minutes. We are pleased to see that our technology is enabling new sustainable solutions and improving people's lives.

Our mission at SES AI is to power a truly sustainable future. We invite you to join us on this journey.

Dr. Qichao Hu
Founder, Chief Executive Officer, and Chairman

About This Report

This is our first "SES AI Cares" report. "SES AI Cares" is our unique approach to Sustainability, a path we are pioneering in which we view Sustainability as fundamentally inseparable from and fully integrated with our core business purpose, strategy, and operations. This report outlines our "SES AI Cares" four-commitment framework, our foundational leadership vision and commitments, and our Sustainability-related performance for calendar year 2023, across all of our operations at all three of our locations: Boston, Shanghai and Chungju.

SES AI is committed to transparency in disclosing our journey as we build our Sustainability-related governance structures, policies, management systems, key performance indicators (KPIs), data management systems, goals and targets, and relationships. We have been guided by frameworks from the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), and leading Sustainability analysts and raters. The data in this report have not been externally assured but we have taken care to ensure that the information we share here is accurate and complete.

June 2024

Materiality Analysis for SES AI

As part of "SES AI Cares", we have assessed what the leading sustainability frameworks and analysts have determined to be the most material sustainability priorities for our sector. We view these frameworks and material issue weightings as important indicators of our stakeholders' most material concerns. We take these material issues to be guideposts in prioritizing our "SES AI Cares" work, in driving our business strategy, and in what we report here.

These seven most material sustainability issues reflect both our company's environmental and social risk exposure and the major impacts of SES AI activities on the planet and society.

SES AI Most Material Sustainability Issues		
1 Carbon footprint 2 Toxic emissions 3 Clean tech and renewable energy opportunities 4 Water stress	5 Safety: product, worker, chemical 6 Labor management	7 Governance

Throughout this report we discuss each of these material issues within our "SES AI Cares" framework of four Sustainability Commitments – Relentless Innovation, A Traceable, Sustainable Value Chain, A New Era of Sustainable Mobility, and Empowering People. Our governance policies and sustainability-related performance data are presented in the Appendix.

Beyond Li-ion: The SES AI Story

SES AI was founded in 2012 in the basement of Building 4 at MIT with the goal of developing next-generation Li-Metal battery technology. We are the first in the world to introduce 100 Ah Li-Metal cells and the first to enter automotive A-sample and B-sample joint development agreements in Li-Metal with major OEMs like GM, Hyundai and Honda.

SES AI is spearheading an AI-powered transformation company-wide to drive greater progress in material development, cell manufacturing quality, battery health monitoring & incident prediction, supply chain and sustainability management, building superintelligent AI and machine learning platforms that enable truly sustainable electric transportation.

Our Global Presence

Boston

HQ, AI Electrolyte Foundry

Shanghai

OEM #1: A-sample line
OEM #1: B-sample line
UAM line

Chungju

OEM #2: A-sample line
OEM #3: B-sample line
UAM line

Our Milestones

2012

We spun off from MIT and built our first team Hermes for new material development.

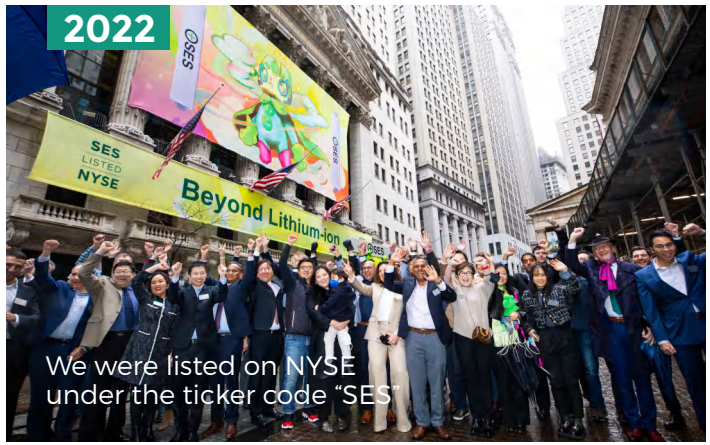
2017

To address Li-Metal battery safety as a system, we started training Avatar, our AI-powered safety software, to monitor battery health.

2021

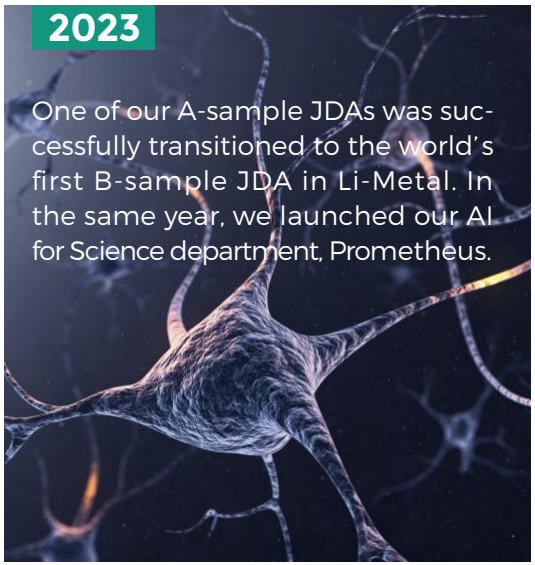
We unveiled the world's largest Li-Metal battery and signed the world's first EV A-sample JDAs with GM, Hyundai, Honda.

2022



We were listed on NYSE under the ticker code "SES"

2023



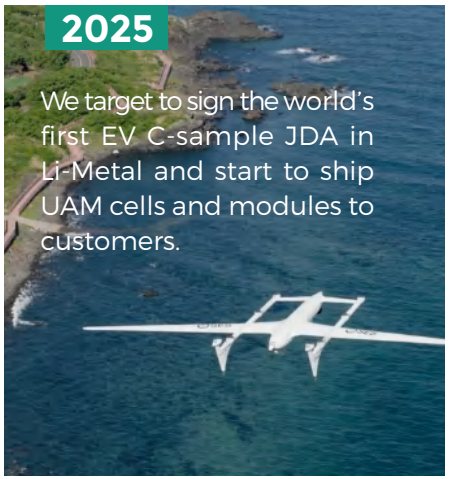
One of our A-sample JDAs was successfully transitioned to the world's first B-sample JDA in Li-Metal. In the same year, we launched our AI for Science department, Prometheus.

2024

We signed our second EV B-sample JDA with Hyundai and are building two EV B-sample lines and two UAM lines in Shanghai and Chungju.

HYUNDAI

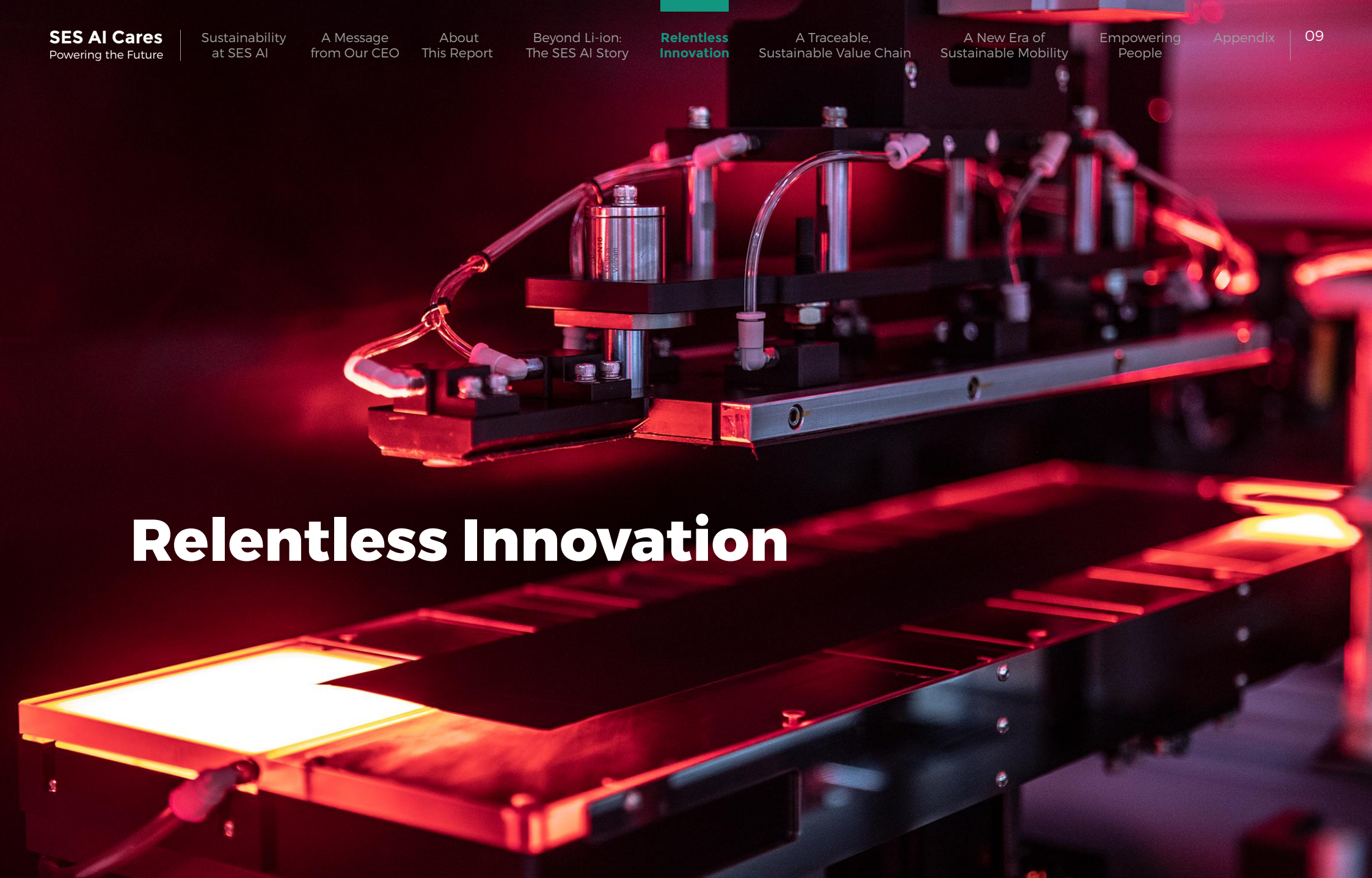
2025



We target to sign the world's first EV C-sample JDA in Li-Metal and start to ship UAM cells and modules to customers.

2026

We target to sign the world's first EV SOP in Li-Metal.



Relentless Innovation

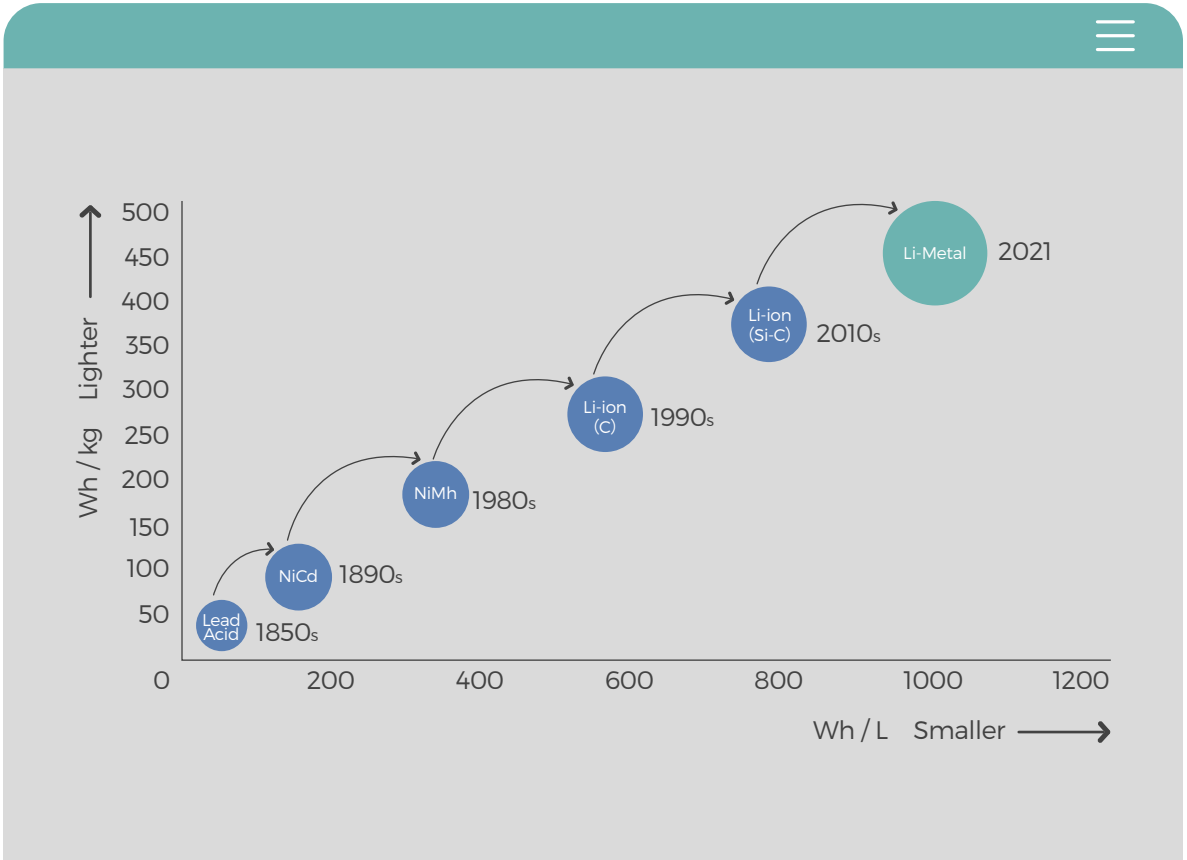
A Step-change from Li-ion Batteries

The development of batteries has been a long journey marked by numerous innovations. From lead-acid batteries to nickel-cadmium and nickel-metal hydride batteries, each advancement has paved the way for new technological horizons. The groundbreaking collaboration of Stanley Whittingham, John Goodenough, and Akira Yoshino culminated in the development of the first commercially viable lithium-ion (Li-ion) batteries in the 1980s, kicking off the era of consumer electronics.

After 30 years since their commercialization, Li-ion batteries are encountering a performance bottleneck, particularly evident in the transportation sector. With an energy density of 200-300 Wh/kg, they limit the range of electric vehicles.

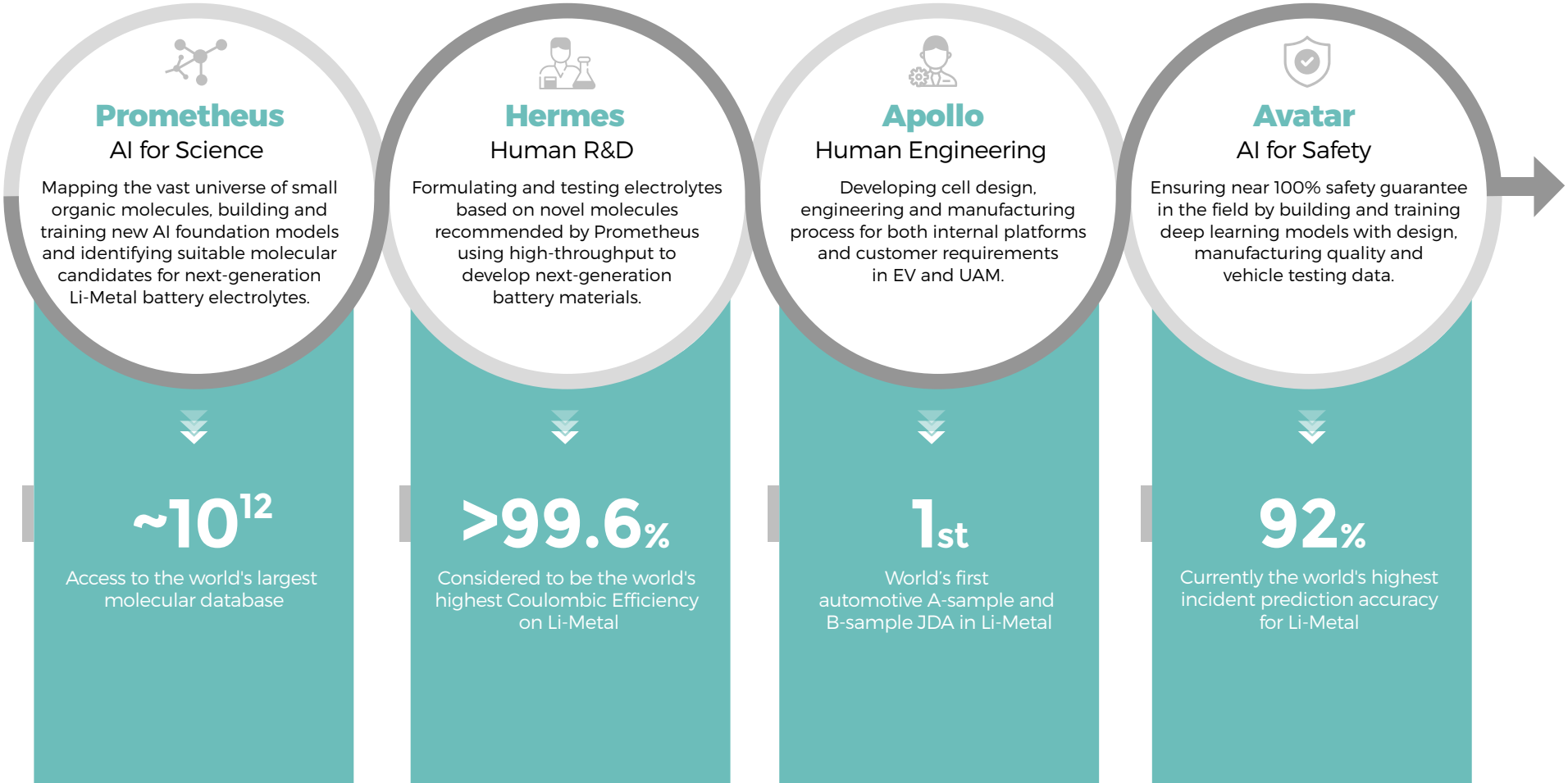
Li-Metal is considered by many to be the end-game of battery technology. Featuring an anode composed of pure lithium, the lightest metal in nature, Li-Metal batteries promise unparalleled energy density exceeding 400 Wh/kg, representing a remarkable increase compared to Li-ion batteries.

SES AI has been leading the way in Li-Metal battery technology development since 2012, steadily advancing Li-Metal performance and safety.



Our Innovation Process

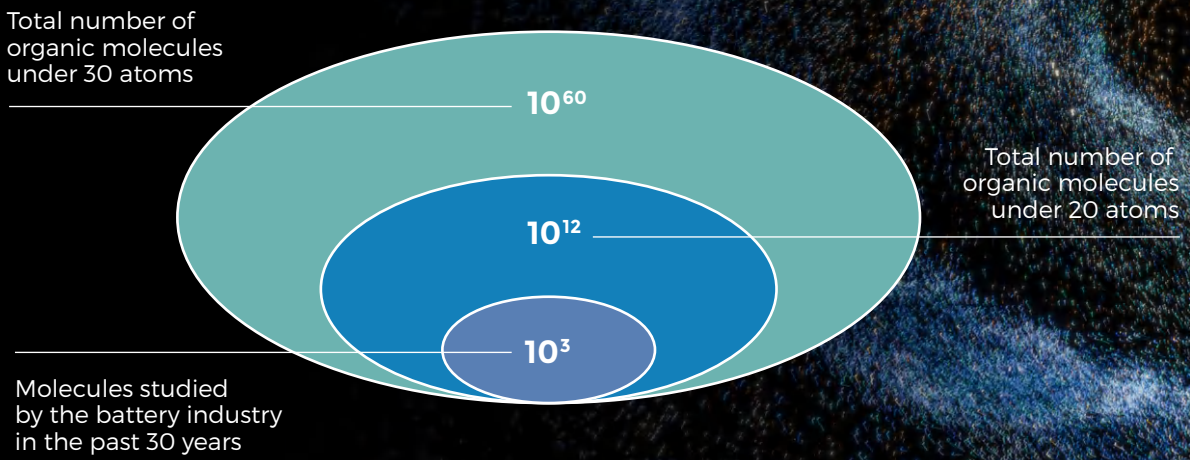
For more than a decade, SES AI has been on a hard but rewarding journey to make Li-Metal work. To address intricate R&D requirements, we employ an innovation-driven process that combines advanced human expertise with the power of AI to achieve continuous breakthroughs in battery development.



Prometheus: AI for Science

The key to safe and stable performance of Li-Metal batteries for EV and UAM applications is electrolyte, which consists of solvents, salts, and additives, all of which are small molecules. While the entire universe of molecules is infinite, the universe of small molecules is about 10^{60}, and the number that could be used for batteries is about 10^{12}. However, the entire battery industry in the past three decades has only studied less than 10^{3}. If we can already achieve a Coulombic Efficiency of >99.6% with molecules that we found in 10^{3} small universe, imagine how much more improvements we can gain in performance if we study molecules in a bigger universe of 10^{6}, or 10^{9}, or 10^{12}.

SES AI's Prometheus platform has developed proprietary molecular databases, applying physics simulations to map their battery-relevant properties, and training and building AI/Machine Learning generative models with these properties and public data, to accelerate the discovery of roadmap battery electrolytes and the consequent improvement in Li-Metal battery performance.



Hermes: New Material Development

Hermes serves as our cutting-edge material development platform, utilizing small R&D cells (4-9 Ah) for next-gen material validation. Our team of industry-leading scientists and engineers conducts extensive research across various areas such as electrolyte, anode, anode coating, separator, cathode, and cycling protocol, with approximately 220 patents in material development and related fields.

Proprietary Electrolyte Technology

One of the most innovative and most critical advancements we have achieved is in electrolyte, a key enabling technology that significantly enhances the optimal performance and safety of our cells.

A conventional liquid electrolyte is low concentration, where the salt is coordinated by solvent and there are free solvent molecules and the overall electrolyte stability on Li-Metal is poor. In our high concentration solvent-in-salt electrolyte, the solvent is coordinated by the salt and there are no free solvent molecules. This allows the electrolyte to achieve unprecedented Coulombic Efficiency of >99.6% on Li-Metal. Without this high concentration approach, it was thought liquid electrolyte could never achieve such high stability on Li-Metal and high voltage cathode at the same time.

Through the success achieved in electrolyte and other key areas, we have been able to transition from developing Li-Metal batteries solely in coin cells in the lab to producing large automotive cells on a real production line.

Our Development Roadmap

Apollo: Large Automotive Cell Engineering

In 2021, SES AI unveiled the world's first and largest Li-Metal cell, marking a significant breakthrough for the battery industry. This remarkable achievement was made possible through Apollo, our engineering platform for large automotive cells.

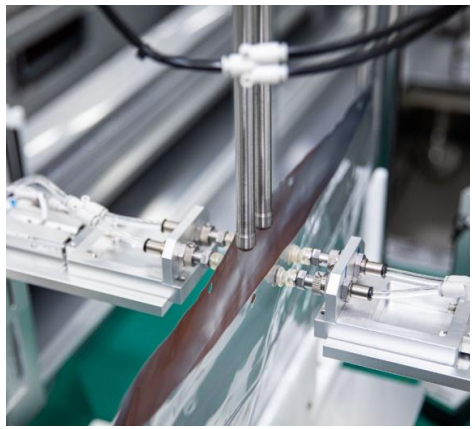
Our Apollo platform is designed to produce large-format EV and UAM cells, integrating the latest material developments from Hermes with the best in Li-Metal cell engineering and manufacturing. Currently, we are developing and manufacturing (at pilot scale) 50 Ah to >100 Ah Li-Metal cells for EV and UAM applications in collaboration with GM, Hyundai, and Honda. This work is being conducted at our facilities in Shanghai and Chungju.

In 2022, when we first started making large cells, we produced fewer than 1,000 cells over the entire year, each with only 200 quality check points. By 2023, we were manufacturing 500 to 1,000 cells per month, each with 600 quality check points. In 2024, we are producing more than 1,000 cells per month per production line, each with 1,500 quality check points.

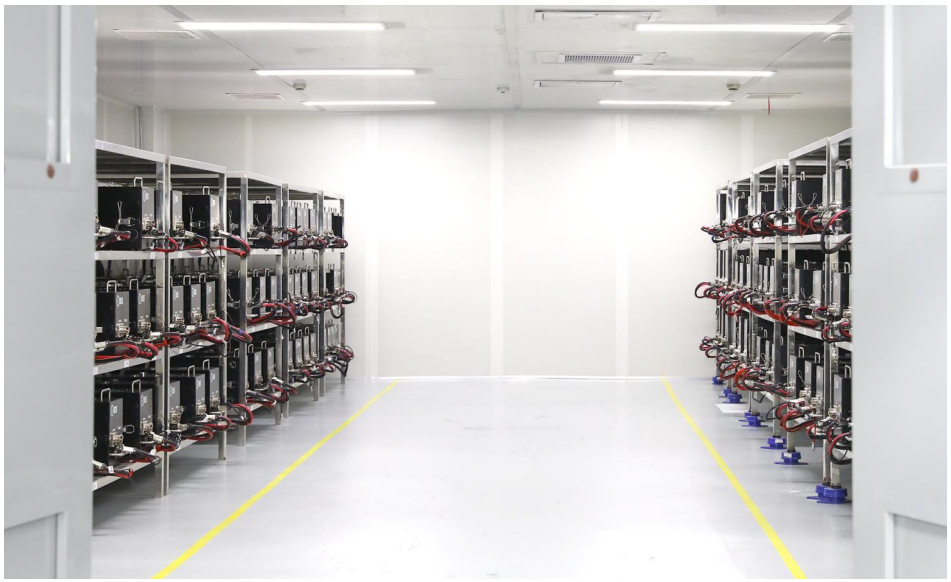
In 2022-2023, our 50 Ah and 100 Ah Li-Metal cells successfully passed the UN38.3 certification, which involves a series of safety tests like nail penetration, thermal stability, external short circuit, and overcharge. This demonstrates that Li-Metal batteries have indeed become significantly safer compared to their initial introduction 30 years ago.

SES AI believes in full transparency on this journey to make Li-Metal batteries work. We regularly publish our own cell test data as well as testing reports conducted by third-parties. We will continue to share with the community as we improve everything from materials to engineering to manufacturing quality.

Operator checking cells



Electrolyte filling



Test bunker for automotive Li-Metal cells

Avatar: AI for Safety

Just as human health depends on factors like DNA, prenatal nutrition, and lifestyle choices, a battery's well-being is influenced by its material, design, manufacturing quality, and operational conditions. Today, AI is revolutionizing battery manufacturing and safety with data collected throughout the battery lifecycle.

Launched in 2017, Avatar, our AI-powered safety software for monitoring battery health, has become increasingly accurate as we build more large automotive batteries. The increase in data has improved Avatar's prediction accuracy from 60% in 2022 to 92% in 2023. We are on track to improve that rate to 95% in 2024, with a nearly 100% safety guarantee expected next year.

Avatar also improves manufacturing. Pinpointing battery failures used to be challenging due to the hundreds to thousands of batteries typically found in an EV. By making the manufacturing process data-driven, we can identify the source of issues in individual cells, greatly enhancing the efficiency of quality management and thus reducing battery-related EV recalls.

We envision our Avatar AI being applied not only to Li-Metal batteries but also to Li-ion batteries in the future, for both EV and UAM. This potential widespread application of our Avatar AI platform expands even further SES AI's ability to contribute to the societal transition to transportation powered by renewable energy.

Avatar collecting data during flight

A Traceable, Sustainable Value Chain

Building Greener Facilities

As we transition from A-sample to B-sample cell production, we are introducing a series of sustainable initiatives at our Shanghai and Chungju facilities to reduce environmental footprint.

These efforts encompass various aspects, including equipment upgrades and the implementation of sustainable practices in our daily operations.

Our Shanghai facility boasts a 27% reduction in energy consumption.

In Chungju, our dry room is designed to save 38.3% energy thanks to more energy-efficient dehumidifiers.

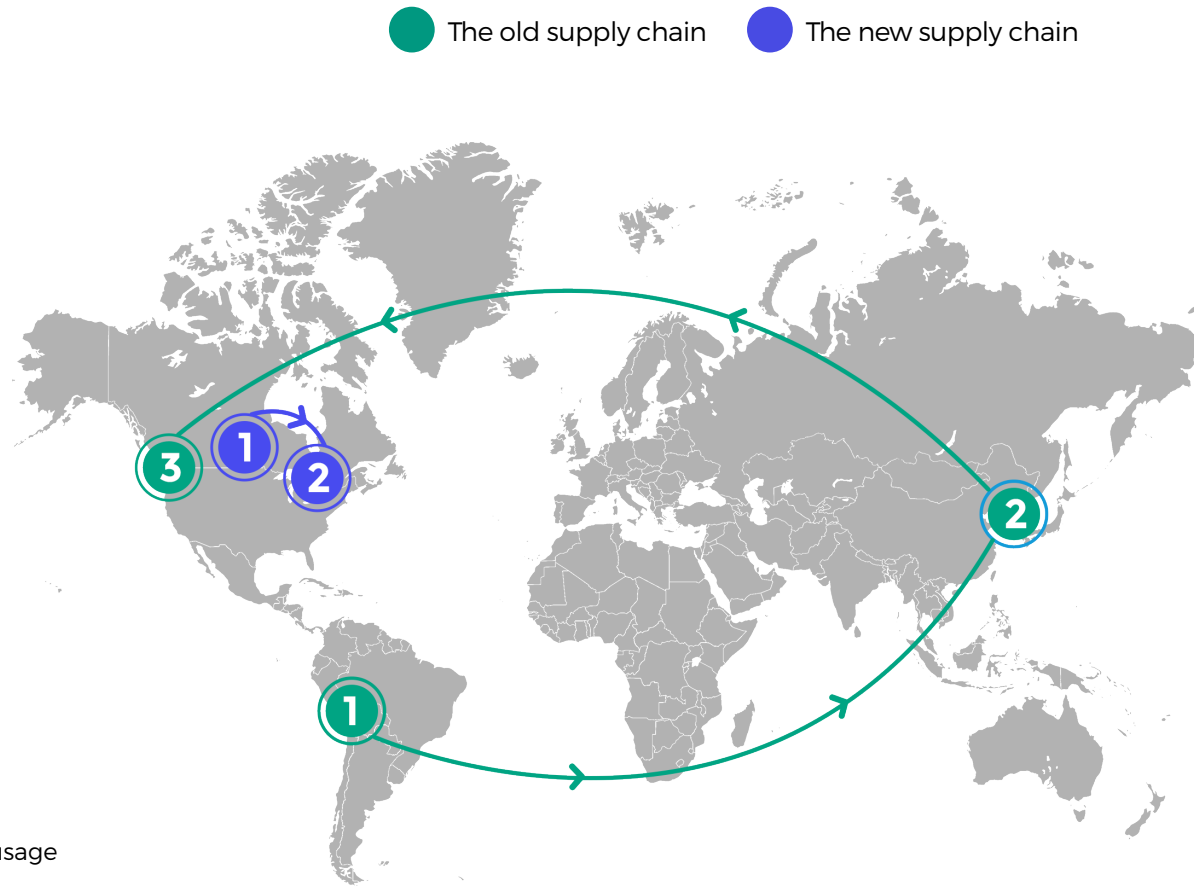
	Energy Consumption
Shanghai	↓ 27%
Chungju	↓ 38.3%

Pioneering Li-Metal Recycling

The battery supply chain is a complex network spanning multiple stages and involving numerous stakeholders across the globe.

Raw material extraction typically occurs in regions with the world's largest lithium reserves, such as South America and Australia. After lithium ore is mined, it needs to be shipped to Asia, particularly countries like China and South Korea, for processing and refinement to produce lithium carbonate or lithium hydroxide. Thanks to their substantial manufacturing capacity and advanced infrastructure, China and South Korea are also recognized as global leaders in large-scale production of batteries and related components. Once assembled, battery packs are distributed to markets worldwide where the growth of EVs is surging. This process often entails long-distance transportation among continents, facilitated by truck, rail, or sea transport.

With recycling technology, the previous global supply chain can be transformed into a continental supply chain, significantly reducing the distance required for shipment. At the end of their life cycle, batteries can be recycled to recover valuable materials, eliminating the need for new material extraction and long-distance transportation for processing. By closing the loop and keeping materials in circulation, recycling contributes to a more efficient and resilient supply chain, aligning with the principles of a circular economy.



705.5GWh
2023 global EV battery usage

38.6%
YoY growth of GWh of battery usage

Data source: SNE

SES AI x WPI Collaboration on Li-Metal Recycling

While recycling technology for Li-ion batteries is well-established, the recycling technology for Li-Metal batteries has not yet been developed.

In 2024, SES AI launched a new research program in collaboration with Worcester Polytechnic Institute (WPI) to pioneer cutting-edge recycling technology tailored specifically for Li-Metal batteries.

The project is led by Dr. Yan Wang, the William Smith Foundation Dean's Professor of Mechanical and Materials Engineering at WPI. Dr. Wang is a globally recognized expert in materials research and a co-founder of Massachusetts-based companies AM Batteries and Ascend Elements. His extensive expertise in Li-ion battery recycling and materials research positions him and his team as ideal partners for this pioneering project.

The primary objective of this collaboration is to devise a safe, closed-loop, environmentally friendly recycling strategy wherein we can recover and reuse the materials, thereby reducing dependence on new raw materials and minimizing the environmental impact of battery production.

By investing in advanced recycling technologies and collaborating with leading academic institutions, SES AI is committed to advancing sustainable solutions and securing a green future for energy storage technology.

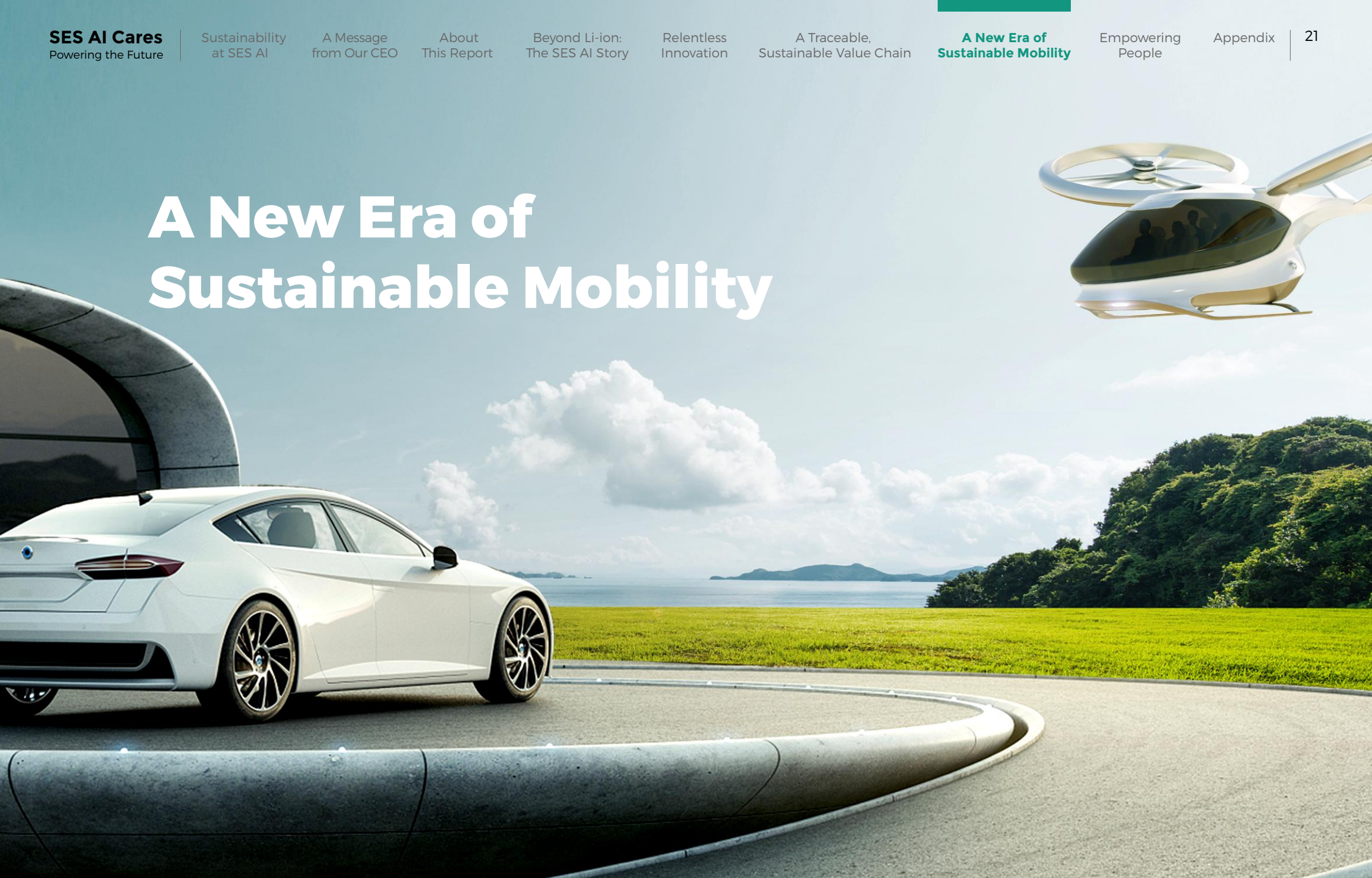
Responsible Procurement & Supply Chain Sustainability

Our Sustainability initiative and business management involve extensive analysis of our supply chain-related risks. These are particularly relevant given our reliance on raw materials crucial to battery production, and the volatility of geopolitical instability, price fluctuations, supply availability, and ESG issues.

Our focus is on Sustainability and traceability throughout our entire value chain. Two foundational elements of this are building our internal processes for responsible procurement, and ensuring social, ethical, and environmental responsibility within our suppliers and their suppliers all the way upstream to mining. SES AI has developed and published our Supplier Code of Conduct (link in the Appendix), and we are actively incorporating sustainability-related considerations into our partnerships, contracts, and expectations with vendors of critical materials.

We are also proactively developing the management policies, practices, relationships, implementation, and assessment processes to fulfill our commitment to proactively ensuring a sustainable and traceable supply chain.

A New Era of Sustainable Mobility



Electric Vehicles

Creating the future of transportation on land and in the air is the heart of what we are about at SES AI.

The need for transportation that is truly sustainable is among a handful of the greatest challenges facing us as a global society. Human life on earth now literally depends on our ability to create a new era of sustainable mobility. Because of this reality, SES AI is dedicated both strategically and from a Sustainability perspective to powering that future.

For more than a century, vehicles and aircraft powered by fossil fuels have provided people all over the world with unprecedented freedom and mobility. Transportation and its whole infrastructure have also contributed to enormous economic development. But transportation is the leading direct contributor to climate change, currently creating more than 7 billion tons of carbon emissions annually worldwide. And over the past 30 years, those emissions have increased faster in absolute terms than those from other sectors.

Therefore, the highest priority for both our Sustainability work and our core business strategy is electrifying transportation globally. All of our efforts are dedicated to achieving this as effectively and as quickly as possible.

And starting with automotive transportation, we are rapidly achieving our intentions.

We are the first company in the world to enter into A-sample JDAs in Li-Metal with three major automotive OEMs – Honda, GM, Hyundai.

We are the world's first battery company to have two B-sample JDAs in Li-Metal with major automotive manufacturers.

We are building two A-sample lines and two B-sample lines and target to produce 1,000 100 Ah cells per month per line.

As we build more cells, we are sharing this data with the world, and using it ourselves to dramatically accelerate our progress at scaling up the development and commercialization of our cells. This is a vital part of the path we are pioneering to create the global transformation to sustainable mobility.

> Honda will make a CAD$15 billion investment in EV plants in Canada, including investment by joint venture partners, to strengthen its EV supply system and capability to prepare for a future increase in EV demand in North America. (April 2024)

HONDA

> Hyundai will spend USD$51 billion over the next three years to bolster its growth potential in EVs and new mobility business. More than half of the investment will be for R&D infrastructure and assembly lines for EVs, including software and battery technology. (March 2024)

HYUNDAI
MOTOR GROUP

Urban Air Mobility

While transforming how the world powers automobiles is a central part of our strategy and our Sustainability effort, it is becoming clearer to us that air transport and air travel will provide the major step-leap breakthrough. Truly sustainable UAM is likely to be even more crucial for solving global climate change than the automotive sector – and is therefore a core application that we are driving hard now to lead worldwide.

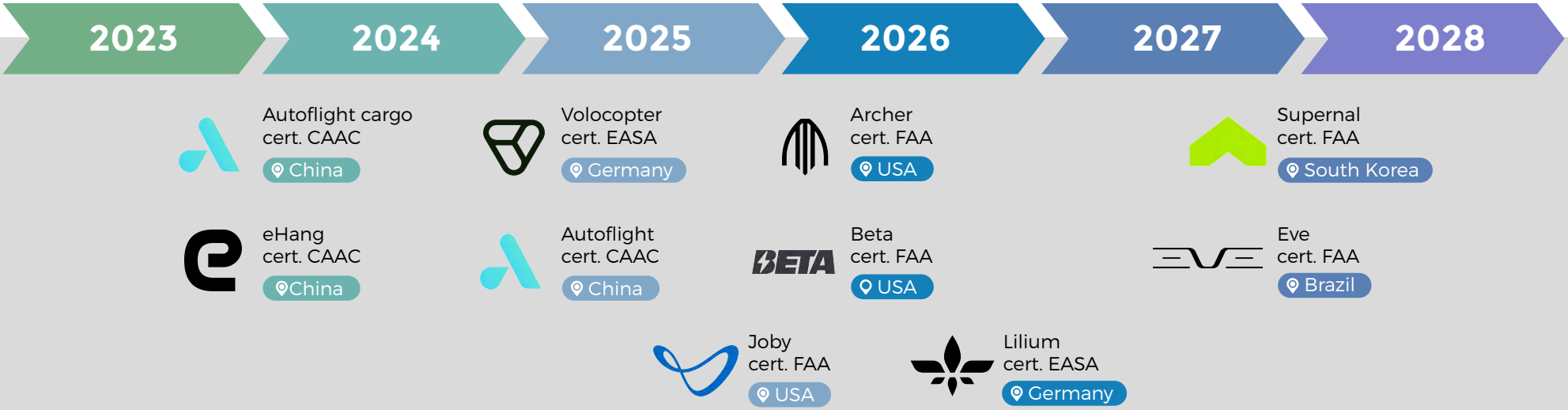
UAM brings significant sustainable benefits:

UAM vehicles, which are usually Electric Vertical Take-off and Landing aircrafts (eVTOLs), emit zero emissions during flight and can be powered by renewable energy sources. This leads to a significant decrease in greenhouse gas emissions and air pollution.

By taking to the skies, eVTOLs can alleviate traffic congestion on roads, leading to smoother traffic flow and reduced travel times for ground-based vehicles. This can result in lower carbon emissions from idling vehicles stuck in traffic.

eVTOLs can improve transportation accessibility, especially in regions lacking robust public transit. They also serve a vital function in emergency response efforts, facilitating swift transportation for medical emergencies, disaster relief, and urgent scenarios.

Today, a number of aircraft OEMs worldwide are advancing certification tests, while regulatory frameworks and infrastructure planning also in progress.



Li-Metal is Born to Fly

Compared with traditional Li-ion batteries, Li-Metal batteries have a significantly higher energy density, allowing them to store more energy in the same amount of space. The lightweight nature of Li-Metal batteries contributes to overall weight reduction in eVTOLs. Lighter batteries enable the aircraft to achieve longer flight times and greater range, essential for the efficiency and practicality of UAM operations. Additionally, Li-Metal batteries can deliver higher power output, which is beneficial for the quick acceleration and vertical take-off and landing capabilities required in eVTOLs.

SES AI has been actively engaging with leading eVTOL OEMs and is approaching UAM in three phases: subsize aircraft, full-size aircraft unmanned, and full-size aircraft manned.

UAM Cells:

We are leveraging our expertise in designing and engineering automotive B-samples to develop UAM cells, which are set to become our first commercial products.

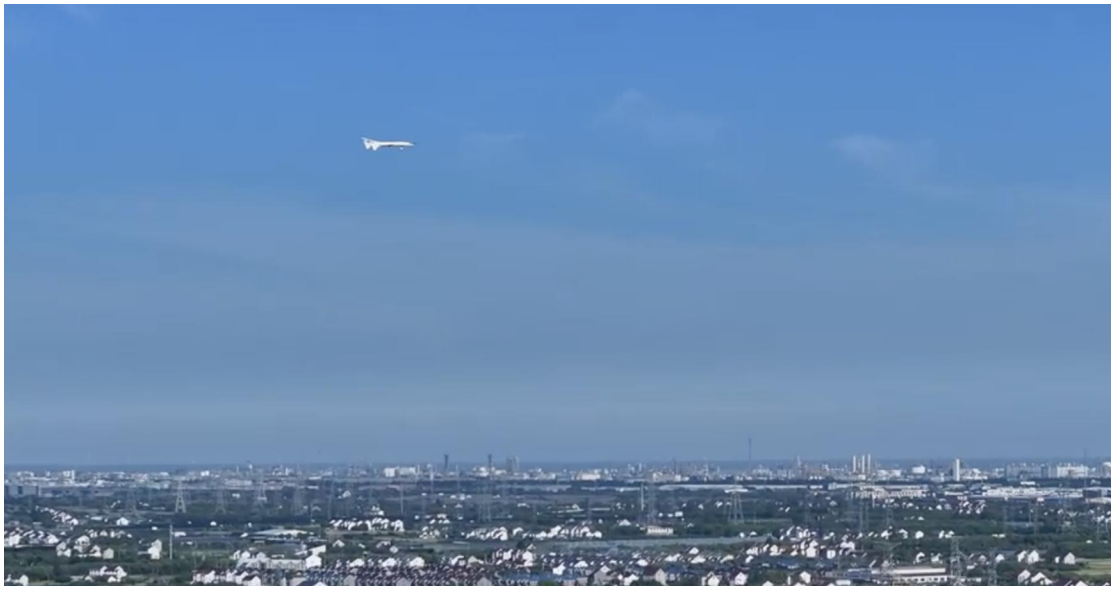
Dedicated Line:

We are currently building two Li-Metal battery production lines in Shanghai and Chungju specifically tailored for UAM applications.

Mission Profile Tests:

The goal is to monitor battery performance and collect as much data as possible for Avatar during real flights. This data will provide guidance for optimization in future R&D.

Li-Metal test in real flight



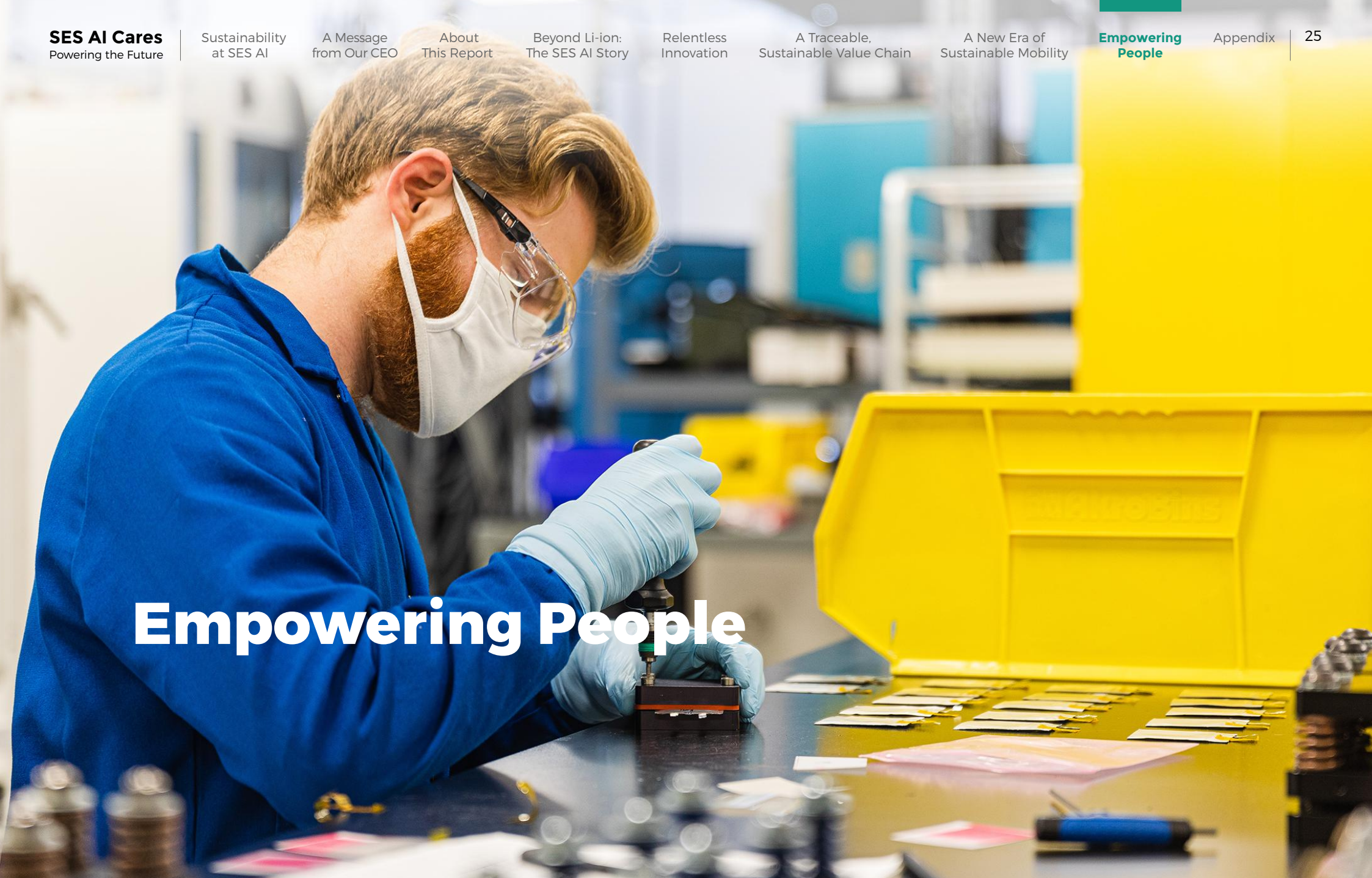
104.5 Ah
Cell capacity

417 Wh/kg
Cell GED*

5.56 kWh
Pack energy
(14 cells)

301 Wh/kg
Pack GED*

* GED stands for gravimetric energy density.



Empowering People

Empowering Our People

Bringing together the world's leading scientists and experts and empowering them to create extraordinary breakthroughs is central to our business strategy and to our Sustainability efforts. As a foundation for empowering our people, we adhere to best practices in the areas of compensation and benefits, safety in our workplaces, labor rights, non-discrimination, diversity and inclusion, and training. Data about those foundational elements are shared in the Appendix.

These practices, however, are just the price of admission. The world's most talented people care about three critical factors:

- **Working with the strongest people in the field**
- **Working on meaningful projects that have major impacts on important issues**
- **Supported and empowered to be able to innovate and bring innovations into reality**

These three factors form the core of our approach to empowering employees and creating the highest levels of employee satisfaction.

Our Five Values Nurture Our Culture of Innovation

1 Move fast and break limits.

We will always be a challenger to the status quo and established limits. We don't take things personally. We don't allow bureaucracy. We move with a sense of urgency, and solve real fundamental issues.

2 Focus on real results, not process on paper.

Real world common sense and intuition should always go before process. We need to be data driven, but also think about how to properly interpret data and what data we have not collected.

3 Make it work.

The world doesn't need another battery company or another battery breakthrough. What the world needs is someone that can take a battery breakthrough and make it work. Truly, practically and completely work.

4 Enter Battery Metaverse.

The fundamental fabric of our industry is being disrupted. Throw away everything we know and implement new technologies to guarantee safety and develop entirely new business models.

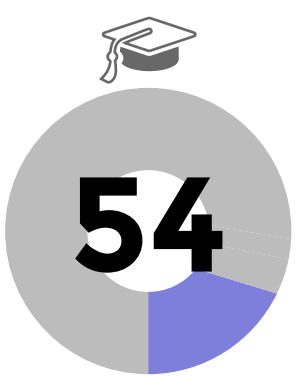
5 One.

One means elemental. We break things into elemental building blocks governed by laws of physics. One also means synergy. We work as one to achieve one goal – delivering the world's first commercial Li-Metal battery to automakers.

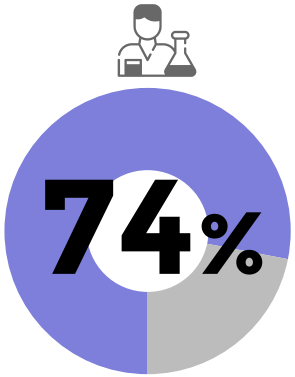
We are Recruiting and Retaining the Best Talent in the World

SES AI is committed to recruiting, hiring, and retaining the leading scientists and experts in the world of materials, electrochemistry, cell engineering, AI and machine learning, and manufacturing.

Among our nearly 300 employees worldwide, many hold advanced scientific and engineering degrees, and dozens are recognized as the preeminent experts in their fields. Our employees also bring extensive experience from prominent Li-ion battery and automotive companies. Our team members collectively speak 13 languages: English, Cantonese, Mandarin, Korean, Russian, Spanish, Tamil, Hindi, Telugu, Portuguese, Arabic, Khmer, and Vietnamese, bringing an enriching tapestry of diverse experiences and expertise to our collaborative environment.



Ph.D.s



Employees dedicated to R&D

SES AI Academy

In 2023, we inaugurated the SES AI Academy, a monthly internal program inviting eminent experts from academia and industry to share insights and exchange ideas on topics spanning new electrification trends, cutting-edge battery technology, and the transformative role of AI in advancing battery development.

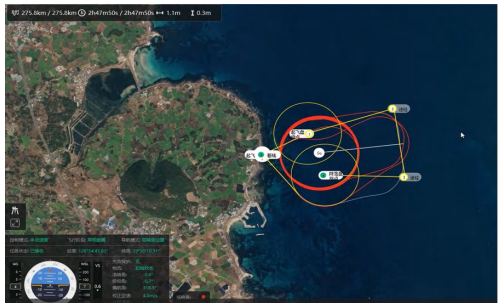
Next Generation STEM Education

SES Boston hosted a Bring Your Kids to Work event, allowing employees' children to witness where their 'heroes' collaborate to push beyond Li-ion. SES AI's Chief Scientist, Dr. Kang Xu, delivered an insightful Battery 101 lecture and conducted interactive battery experiments with kids using household items like potatoes and lemonade.

SES AI Cares Initiative: Applying Advanced Drones Powered by Li-Metal Batteries to Protect Our Humanity and Environment

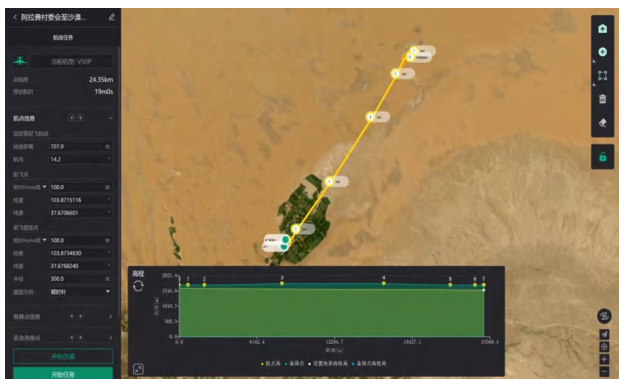
In addition to empowering our own people, we are also committed to empowering humanity and environment more broadly. Long-range drones powered by SES AI's Li-Metal batteries enable unprecedented efforts toward sustainability and improving human conditions, and we profile two examples here. We are continuing to grow this initiative, because it creates a powerful win-win for us: we serve humanity and environment and meet important human needs, which in many cases can be met only by our long-range drones, and we strengthen our data collection and the power of our Avatar AI, accelerating our cell development further and faster.

We collaborated with filmmaker and marine activist Director Lim Wan Ho to track and study endangered Indo-Pacific bottlenose dolphins in the waters off Jeju Island, South Korea. Lim has dedicated more than 20 years to marine animal conservation and wildlife filmmaking. It has been difficult finding the dolphins in the vast ocean, and even harder to spend enough time studying them, especially when the weather is bad. Our drone flew for nearly 3 hours over the sea, equipped with a 30x magnification nighttime thermal imaging device. This capability far exceeds that of traditional drones, which typically last 30 minutes on a single charge.



Total mileage: 275.8 km
Total working hours: 2h47m

In Inner Mongolia, China, the town of Wendu'erletu is home to 430 inhabitants including 27 elders who do not have viable access to medical supplies. We delivered drugs to An Ke Jie's family, including his 80-year-old mother, residents in the Gobi Desert town, transforming what was once for them a half-day perilous journey over land into just 20 minutes for us in the air.



Total mileage: 24.35 km
Total working time: 20min

SES AI Cares Open Contest

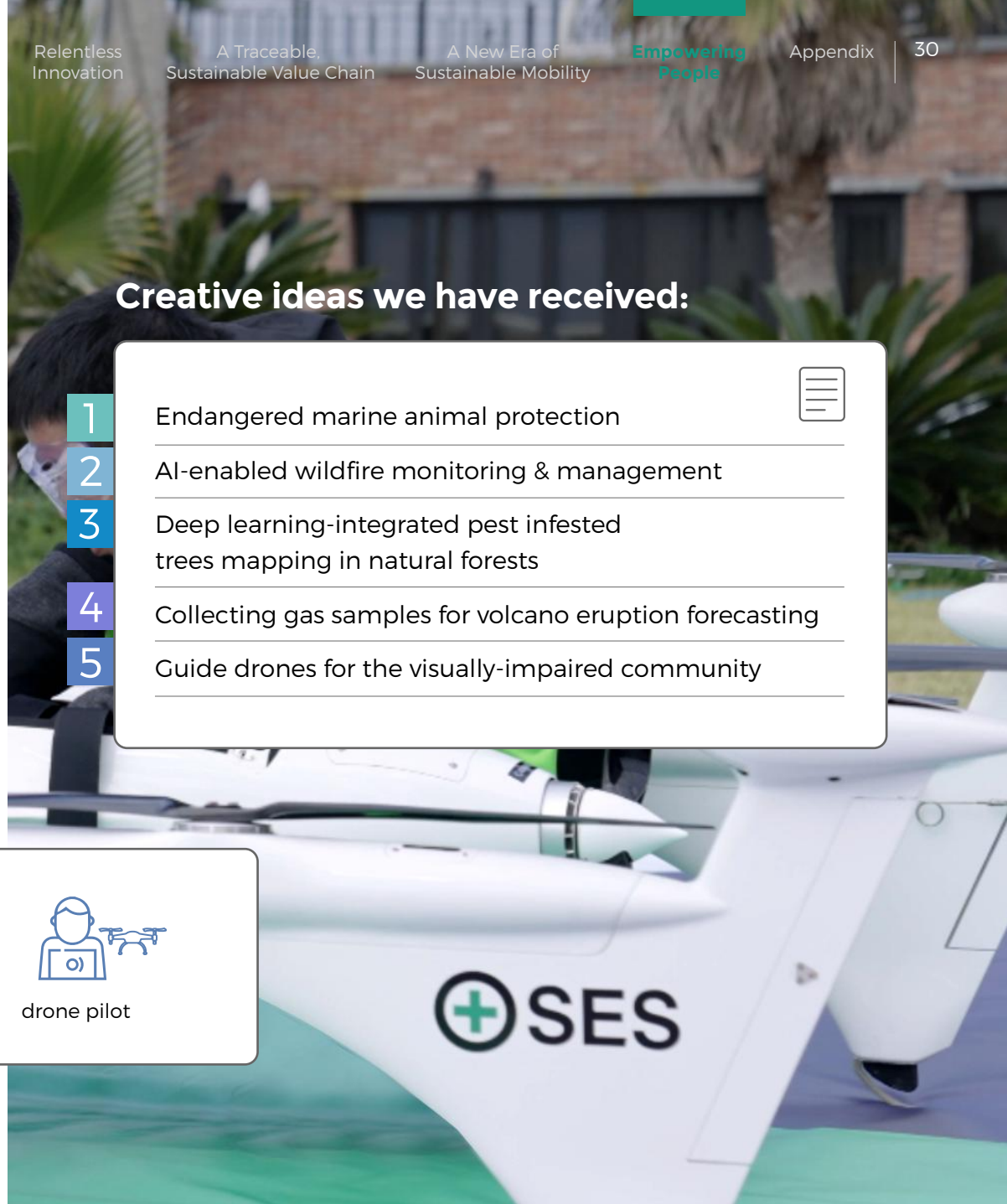
Starting this year, we have launched an exciting open contest that invites innovative minds from around the globe to propose creative applications for drones. Our aim is to harness our cutting-edge technologies to address and solve pressing social and environmental challenges. We are looking for ideas that span a wide range of areas, including disaster response, environmental improvements, urban mobility, and scientific discovery. This initiative not only encourages global collaboration but also empowers individuals to contribute to impactful solutions that can drive positive change in society and the environment.

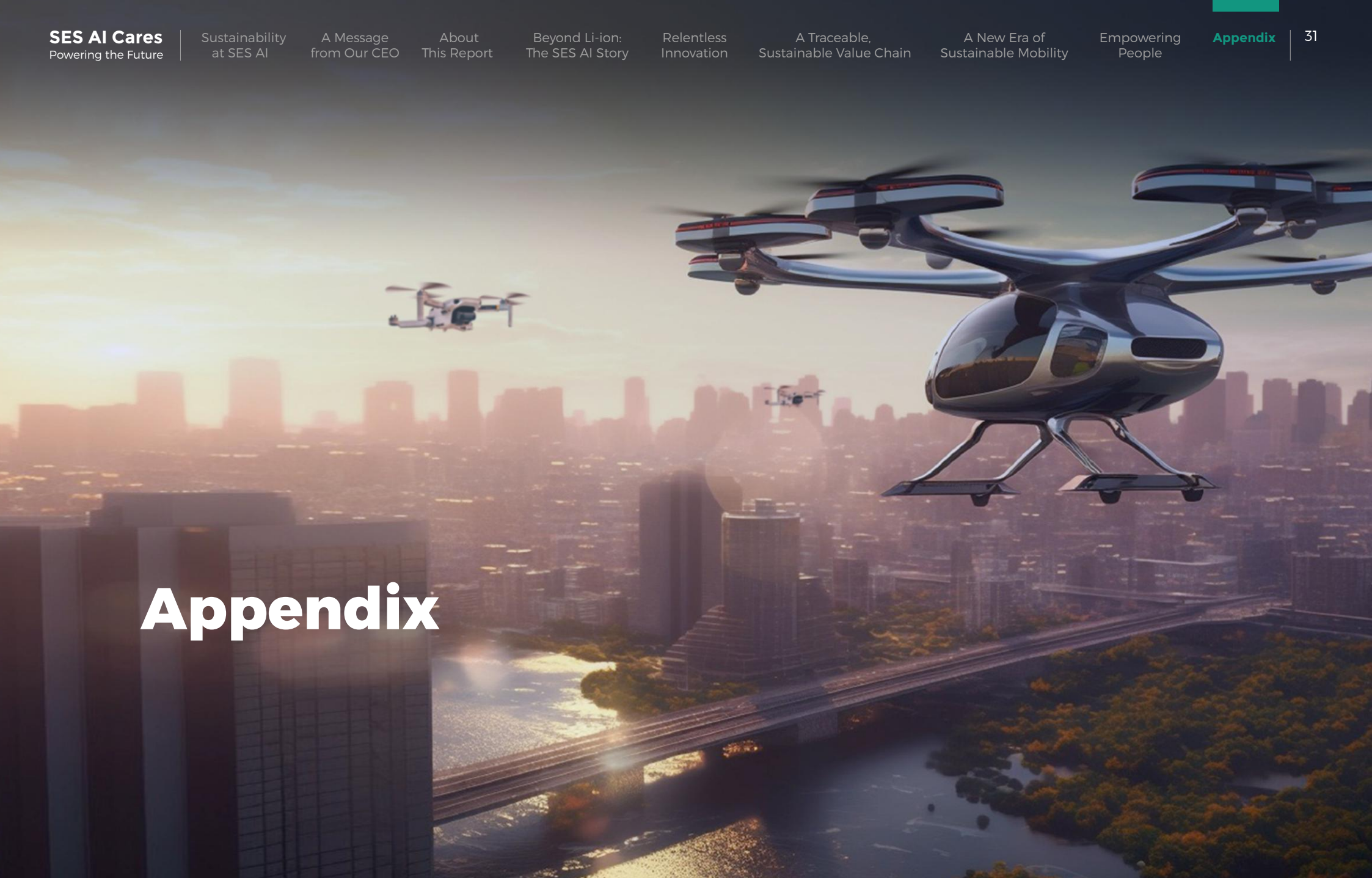
Beyond drones for rapid delivery of medical supplies to remote areas or deploying drones for marine animal protection research, we are eager to see how newly suggested ideas can make a difference. This year we have received more than 100 total submissions from three continents just within the first three months.

Background of participants

Creative ideas we have received:

1. Endangered marine animal protection
2. AI-enabled wildfire monitoring & management
3. Deep learning-integrated pest infested trees mapping in natural forests
4. Collecting gas samples for volcano eruption forecasting
5. Guide drones for the visually-impaired community





Appendix

Governance & Disclosure Information, Sustainability-related Policies, Data, and Links

The information and data in this Appendix cover the period January 1 - December 31, 2023.

Sustainability Dimensions	Specific Disclosures	Data or Management Approach	Commentary
Governance & Reporting	Entities included	Unless otherwise noted, all the data and information in this Appendix refer to SES AI's total across all three of our locations: Boston, Shanghai and Chungju.	
	Reporting period and frequency	January 1 - December 31, 2023	Beginning with this inaugural report, we intend to publish annual Sustainability Reports each June, covering the prior calendar year.
	Contact point	ir@ses.ai	
	External assurance		This year's report has not been externally assured, but we have made every good faith effort to provide complete and accurate data. We intend to evaluate obtaining external assurance in future years.
	Number & location of employees	287 Full Time, 12 Part Time – Boston: 109 FT, 2 PT – Shanghai: 150 FT, 3 PT – Chungju: 28 FT, 7 PT	As of June 5, 2024
	Gender diversity	54 women (18%), 245 men (82%)	
	Cultural diversity	We speak 12 additional languages besides English: Mandarin, Cantonese, Korean, Russian, Spanish, Tamil, Hindi, Telugu, Portugese, Arabic, Khmer, Vietnamese.	

Sustainability Dimensions	Specific Disclosures	Data or Management Approach	Commentary
Governance & Reporting	Diversity on the Board of Directors	71% of our Board of Directors are ethnic minorities and 14% of our directors are women.	
	Governance structure and composition	SES AI Board of Directors SES AI Corporate Governance Guidelines SES AI Governance Documents	
	Chair of the highest governance body	Dr. Qichao Hu, Chairman, Founder, CEO	
	Nomination and selection of the highest governance body	SES AI Nominating and Corporate Governance Committee Charter	
	Role of the highest governance body in overseeing the management of impacts	Dr. Hu, the Board, and senior executive management oversee the development of Sustainability-related strategies and their implementation.	
	Role of the highest governance body in sustainability reporting	Dr. Hu leads SES AI's Sustainability reporting team, and reviews and approves our sustainability reporting.	
	Board of Directors independence	5 of our 7 directors are classified as independent. We have a Lead Independent Director. The Chairs of both our Audit and Compensation Committees are independent.	
	Anti-corruption policy	We have a strong Anti-corruption policy, highlighted in our SES AI Code of Business Conduct and Ethics and supported by a detailed internal Anti-corruption Policy document.	
	Whistleblower policy	We have a strong Whistleblower Policy, which is emphasized in our SES AI Code of Business Conduct and Ethics, including our Whistleblower Hotline in 6 languages and 3 websites in English, Chinese, and Korean, and further supported by a detailed internal Whistleblower Policy document.	

Sustainability Dimensions	Specific Disclosures	Data or Management Approach	Commentary
	No conflicts of interest	We are all bound by our SES AI Code of Business Conduct & Ethics which requires no conflicts of interest and specifies reporting any concerns.	
Governance & Reporting	Remuneration policies and processes	SES AI Compensation Committee Charter	
	Annual total compensation ratio	Highest paid to median compensation ratio: 40-to-1	
	Compliance with laws and regulations	We are not aware of any material instances of non-compliance with any laws or regulations in 2023, do not have any pending from prior years, and have incurred no material fines or non-monetary sanctions.	
Materiality	Process to determine material topics	Review of GRI, SASB, TCFD, and MSCI frameworks for the most material issues in the four industry sectors most relevant to our business: energy, renewable electricity, automobile manufacturing, and automobile parts and equipment.	
	List of material topics	See P6	
Biodiversity	Locations with biodiversity impacts	None	SES Shanghai is located within the scope of Class I industrial land and is not within the ecological protection red line area. It has no impact on biodiversity. After the implementation of various pollution prevention and control measures, it will not have adverse effects on the surrounding environment.
	Significant impacts of activities, products and services on biodiversity	None	
	IUCN Red List species and national conservation list species with habitats in areas affected by operations	None	

Sustainability Dimensions	Specific Disclosures	Data or Management Approach	Commentary
Energy Consumption	Total electricity consumption (MWh)	20,979.97	
	% of total electricity consumption from renewable sources	57.2%	11,994.13 MWh of our total electricity consumption was from renewable sources.
	Total natural gas consumption (MMBTU)	0	
	Total diesel fuel conumption (MMBTU)	0	
	Total energy consumption (GJ)	75,527.87	Total electricity, natural gas & diesel combined (in GJ)
	Intensity of electricity consumption (MWh/Ah Produced)	0.0704	
	Intensity of energy consumption (GJ/Ah Produced)	0.2533	
Water Consumption	Total water consumption (cf)	547,422.68	
	Intensity of water consumption (cf/Ah Produced)	1.8361	
GHG Emissions	Scope 1 GHG emissions (metric tons)	0	We have no Scope 1 GHG emissions.
	Scope 2 GHG emissions (metric tons)	8,304.84	
	Total Scope 1 & 2 GHG emissions (metric tons)	8,304.84	
	Intensity of Scope 1 & 2 GHG emissions (metric tons/Ah Produced)	0.0279	
Air Emissions & Spills	Air emissions (VOC's, pollutant gases) (metric tons)	0.1135	
	Significant spills	None	
Waste	Total waste generated (metric tons)	60.17*	

*One portion of the total waste from our Boston location includes a good faith estimate.

Sustainability Dimensions	Specific Disclosures	Data or Management Approach	Commentary
Waste	Total hazardous waste generated (metric tons)	13.97	
	Total waste recycled (metric tons)	1.62	We recycled 4.74% of total waste generated in our Shanghai location.
	Total non-hazardous waste to landfill (metric tons)	44.58	
	Intensity of waste generated (metric tons/Ah Produced)	0.0002	
	Intensity of hazardous waste generated (metric tons/Ah Produced)	0.000047	
Quality Management System	Quality management system certification	We achieved IATF 16949 Certification (RA02-0271/2022) for our Quality Management System in Shanghai.	
Supplier Management	Supplier code of conduct	SES AI Supplier Code of Conduct	
	Environmental impacts in the supply chain & actions taken	See P20. SES AI conducted a thorough supply chain risk analysis as part of our strategic planning. Our supplier policies, management and reporting about controversial materials and conflict minerals are reflected in our supplier selection.	
Employee Policies and Benefits	Employee policies, benefits, non-discrimination, non-harassment	SES AI has a detailed set of employee policies, competitive benefits, and strong non-discrimination and non-harassment policies, contained in our internal company "SES AI Handbook" and our "SES AI Harassment Prevention Guide".	
Occupational Health and Safety	Total recordable incident rate	1.02	Total number of incidents per 200,000 hours worked
	Lost-time incident rate	0.00	Number of lost-time incidents per 200,000 hours worked
	Fatalities	0	

Sustainability Dimensions	Specific Disclosures	Data or Management Approach	Commentary
Training and Education	Average hours of training per year per employee	10 (Shanghai)	In addition, in 2023 we have created the SES AI Academy, open to all employees, within which we hold regular sessions hosting eminent experts from academia and industry who share their leading-edge ideas and insights on electrification trends, advanced battery technology, and the transformative role of AI in accelerating battery development.
Environmental Impact	Environmental impact assessment and management	Following Chinese regulations, SES in Shanghai conducts project environmental impact assessments, environmental impact management and monitoring, and establishes supplier environmental protection rules.	
Non-discrimination	Incidents of discrimination and corrective actions taken	We had ZERO actions filed with any formal body about any incidents of discrimination in 2023, with no corrective actions required or taken.	
Freedom of Association and Collective Bargaining	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	None of our operations currently have freedom to associate at risk and we support freedom of association and collective bargaining across all our operations, locations, and suppliers.	
Child Labor	Operations and suppliers at significant risk for incidents of child labor	None of our operations currently have significant risk for incidents of child labor and we have a policy against the use of child labor across all our operations, locations, and suppliers.	
Forced or Compulsory Labor	Operations and suppliers at significant risk for incidents of forced or compulsory labor	None of our operations currently have significant risk for incidents of forced labor and we have a policy against the use of forced labor across all our operations, locations, and suppliers.	
Rights of Indigenous Peoples	Incidents of violations involving rights of indigenous peoples	We had ZERO incidents of violations in 2023 involving the rights of indgenous people.	

Legal Disclaimer

This Sustainability Report should under no circumstances be understood as an offer to sell or the solicitation of an offer to buy the securities of SES AI.

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All statements other than statements of historical facts contained in this Sustainability Report are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, statements relating to expectations for future financial performance, business strategies or expectations for our business. These statements are based on the beliefs and assumptions of the management of SES AI. Although SES AI believes that its plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, it cannot assure you that it will achieve or realize these plans, intentions or expectations. These statements constitute projections, forecasts and forward-looking statements, and are not guarantees of performance. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this presentation, words such as "anticipate", "believe", "can", "continue", "could", "estimate", "expect", "forecast", "intend", "may", "might", "plan", "possible", "potential", "predict", "project", "seek", "should", "strive", "target", "will", "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. You should not place undue reliance on these forward-looking statements. Should one or more of a number of known and unknown risks and uncertainties materialize, or should any of our assumptions prove incorrect, our actual results or performance may be materially different from those expressed or implied by these forward-looking statements. Some factors that could cause actual results to differ include, but are not limited to the following risks: risks relating to the development and commercialization of SES AI's battery technology and the timing and achievement of expected business milestones; risks relating to the uncertainty of achieving and maintaining profitability; risks relating to the uncertainty of meeting future capital requirements; the ability of SES AI to integrate its products into electric vehicles ("EVs") and Urban Air Mobility ("UAM") and other applications; risks relating to the development of the UAM market and demand for batteries from the UAM industry; the risk that delays in the pre-manufacturing development of SES AI's battery cells could adversely affect SES AI's business and prospects; potential supply chain difficulties; the ability of SES AI to engage target original equipment manufacturers ("OEMs") customers successfully and integrate SES AI's products into EVs manufactured by OEM customers; the ability to obtain raw materials, components or equipment through new or existing supply relationships; risks resulting from SES AI's joint development agreements and other strategic alliances, if such alliances are unsuccessful; our use of artificial intelligence and machine learning may result in legal and regulatory risk; product liability and other potential litigation, regulation and legal compliance; SES AI's ability to attract, train and retain highly skilled employees and key personnel; the willingness of vehicle operators and consumers to adopt EVs; developments in alternative technology or other fossil fuel alternatives; risks related to SES AI's intellectual property; risks related to SES AI's business operations outside the United States, including in China; SES AI has identified material

weaknesses in its internal control over financial reporting and may identify material weaknesses in the future or otherwise fail to maintain an effective system of internal controls; compliance with certain health and safety laws; changes in U.S. and foreign tax laws; and the other risks described in "Part I, Item 1A. Risk Factors" in our annual report on Form 10-K for the fiscal year ended December 31, 2023 filed with the Securities and Exchange Commission ("SEC") on February 27, 2024 and other documents filed from time to time with the SEC. There may be additional risks that SES AI presently knows and/or believes are immaterial that could also cause actual results to differ from those contained in the forward-looking statements. In addition, forward-looking statements reflect SES AI's expectations, plans or forecasts of future events and views only as of the date of this presentation. SES AI anticipates that subsequent events and developments will cause its assessments to change. However, while SES AI may elect to update these forward-looking statements at some point in the future, SES AI specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing SES AI's assessments as of any date subsequent to the date of this presentation.

This publication uses the term "material" (and other derivatives of the word "material") from an ESG perspective and contains references to a number of priorities, which may consider disclosure recommendations and broader definitions of materiality, including those used by certain voluntary external frameworks and reporting guidelines, that differ from mandatory regulatory reporting, including SEC. Within the context of this report, the term "material" (or any derivatives of the word material) is distinct from, and should not be confused with, such term as defined for SEC reporting purposes. Accordingly, any inclusion of priorities as "material" (or any derivatives of the word material) in this report is not an indication that such priorities are material to SES AI for SEC reporting purposes.

While the Company is actively working to achieve its ESG goals, these goals are forward-looking statements that reflect expectations as of the date of this report, not historical facts or guarantees of future performance, achievement, or results. There is no guarantee that SES AI will meet its goals or increasing stakeholder ESG expectations. In addition, historical, current, and forward-looking information included in this report may be based on standards and practices for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change. Accordingly, such historical, current, and forward-looking information or underlying assumptions may be subject to modifications in future reports due to such developing standards, practices and controls and processes. Readers are cautioned not to place undue reliance on any such information set forth in this report.

Unless otherwise provided, the information contained in this report is expressly not incorporated by reference into any filing of SES AI made with the SEC or any other filing, report, application, or statement made by the Company to any federal, state or local governmental authority.