

# Making the Transition Real





# **About this Report**

This is the second annual Sustainability Report for ESC, covering our performance and progress from January 1 to December 31, 2024. Building on our inaugural report, this document reinforces our commitment to transparency and accountability as we solidify our role in facilitating the energy transition in Asia.

The scope of this report includes all of ESC's operations and projects across our key markets: Singapore, Malaysia, Indonesia, Hong Kong, Vietnam, India, and the Philippines.

Our reporting methodology is guided by the Global Reporting Initiative (GRI) Standards, ensuring a comprehensive and transparent disclosure of our material topics. Where applicable, our reporting also aligns with the United Nations Sustainable Development Goals (SDGs), specifically highlighting our contributions to goals such as SDG 7: Affordable and Clean Energy and SDG 13: Climate Action. This report is intended for all stakeholders, including our employees, clients, partners and the wider community, who share our vision of a sustainable and resilient future.

## Our 2024 Report Theme

Making the Transition Real captures the essence of our work in FY2024. Building on our foundational commitment to Asia's energy transition, this report moves beyond strategy to showcase the tangible outcomes and measurable impact of our projects. Through dedicated partnerships and innovative solutions, we are actively turning ambitious goals into concrete, sustainable realities for our clients and the Asia Pacific region.

For feedback on this report, contact us via enquiries@envirosc.com



## **Table of Contents**

01

## **INTRODUCTION**

Message from our Group CEO	<u>5</u>
2024 Year in Review	<u>6</u>
About Us	8

02

## **MATERIALITY**

Material Topics	<u>12</u>
How Our Services Address	
Material Topics	<u>13</u>

03

## **ENVIRONMENTAL**

Environmental	<u>15</u>
Decarbonisation	20
Environmental Compliance	23

04

## **SOCIAL**

People	28
Continuous Talent Scaling	29
Diversity, Equity, and Inclusion	<u>3</u> 1
Talent Attraction & Retention	32

05

## **GOVERNANCE**

Strategic and Operational Leadership	<u> 36</u>
Risk Management	<u> 38</u>
Business Ethics & Professional	
Integrity	<u>39</u>

06

## **PERFORMANCE DATA**

GHG Emissions Assessment	<u>4</u> ]





# Message from our Group CEO

I am very proud to share that 2024 was a year of strengthened impact for ESC. Building on our long-standing track record in enabling Asia's energy transition, we supported a growing portfolio of complex, high-value projects. This reflects both the rising demand for our services and the expanding role we play across the region.

Through our theme "Making the Transition Real", we focused on turning ambition into action. Central to this was the broad suite of environmental, social, technical and regulatory services we provide. Our services enable clients to unlock investment, meet regulatory and lender expectations, strengthen compliance and manage transition risks. These capabilities underpin the diverse projects we support, from renewable energy development and energy-efficiency improvements to green planning, decarbonisation data-centre programmes and the integration of regional grids and subsea power cables. In every case, our role is to help clients move with clarity and confidence through an increasingly complex landscape.

This year's delivery was reinforced by the continued strengthening of our technical capacity and regional footprint. In 2024, we expanded our workforce across Asia Pacific, reflecting both the scale of opportunity ahead and the trust our clients place in ESC. Our multicultural and multidisciplinary teams remain at the centre of our impact, combining deep local knowledge with global expertise to deliver solutions that are practical, science-based and aligned with international best practice.

We recognise, however, that the transition is a long-term journey. As climate ambition intensifies across the region, the work becomes more complex - from cross-border power integration and just transition whole considerations to value-chain decarbonisation and stringent ESG governance requirements. Our responsibility is to provide the insight, assurance and strategic guidance needed to ensure that economic development proceeds with environmental integrity and social responsibility.

Looking ahead to 2025, our focus will remain on enabling renewable power integration, decarbonising industry and guiding clients through robust ESG frameworks. We will continue building partnerships, aligning with global standards and embedding innovation into service delivery so that our clients can accelerate progress with confidence.

Our success is driven by the trust of our clients, the commitment of our people and the collaboration of our partners across Asia Pacific. I hope this report provides a clear picture of our impact and the ambition that guides our work. We remain steadfast in our commitment to support the region's sustainable growth and to continue delivering practical, high-quality solutions in 2025 and beyond.

Andrew Young
Group CEO, ESC



## 2024 Year in Review



Start of ESC 2.0 expansion plan to increase headcount to over 350 consultants by 2030

50% of our project BANK portfolio was driven by the finance sector

of our project of portfolio was in Infrastructure and Development sector

Increase workforce from



ISO Certification in Singapore and Hong Kong, and AMDAL certification in Indonesia **#20%** 

Strategic advancement in Energy & Utilities projects



Added Philippines in country operations

44% of our staff consists of women, reflecting our commitment to gender balance and inclusivity.

Enabled over Gigawatts of renewable energy projects in Asia since 2019

# ESC's Thought Leadership



Dr. Lee Song Ha, Principal Consultant, represented ESC at the Plastic Recycling Innovation Solution event in Hanoi, Vietnam



ESC at BritCham's Climate Hubadvancing Indonesia's sustainable investment future



ESC's biodiversity expert, Ngo Kang Min, led ESG workshops in Singapore.



Insights from Group CEO Andrew Young featured in ECO-Business' White Paper, 'Future of Data Centre'



Global Podcast - EHS, Energy Transition, Mergers & Acquisitions



ESC recognised as **EIA Experts** at the Hong Kong Institute of Qualified Environmental Professionals (KHIQEP)



ESC facilitates workshop on Data Centres and Environmental Sustainability at MDEC's Data Centre Conference in Kuala Lumpur, Malaysia



ESC's Tessa Morton and Nigel Landon featured at ADB's Urban Resilience Forum, highlighting our Biodiversity Master Plan for Nusantara.



Eeda Wallbank, Sector Leader, moderated the sustainability and subsea panel at Submarine Networks World



## **About Us**

ESC is Asia's leading Environment, Safety, and Sustainability consultancy. For over two decades, our multidisciplinary experts have combined strategic transformation with onthe-ground technical delivery. We partner with clients to navigate their most complex EHS and ESG challenges, accelerating their transition to a sustainable future.

## The ESC Difference

Our core strength is integrating deep local legislative insight with global strategic expertise. We deliver comprehensive, integrated solutions across multiple technical disciplines, ensuring projects are both strategically sound and locally compliant. We provide everything from high-level strategic guidance at the Group level to practical technical support directly at major project sites.

## **Our Asia Footprint**

With a growing footprint across Asia, we ensure our solutions are not only innovative but also practical and effective.

Years of

impact

80+

Consultants

Offices in Southeast Asia

Member of:





# Our Vision and Mission

## **Vision and Mission Statement**

To be the leading provider of EHS and ESG solutions and professional services in the Asia Region.

To bring our talent, expertise, and experience across the ESG spectrum to provide smart, cost-effective and practical solutions to the challenges our clients and the broader community face.



## **Values**

Our Shared Values define who we are as a company and who we are as ESC employees:



## Accountability

Each of us is responsible for our words, actions, and our results. We accept responsibility for tasks and projects assigned to us from start to end.



## Passion

Each of us has a sense of energy for something, an issue or an action or behaviour – it is our internal energy source, the fire or determination that drives us to achieve our goal.



## Insight

Each of us cultivates the capacity to gain an accurate and deep understanding of someone or something, which is an essential ingredient that supports innovation.



## Integrity

Our integrity defines who we are as individuals and as a company. It reinforces our commitment to serve and holds trust and confidence with others – we will be honourable in all dealings with employees, clients, shareholders, business associates and the community through honesty and respect, and that we will seek guidance from management when confronted with any ethical dilemma.

## **Our Global Network**

In 2024, ESC leveraged our long-standing, vital connection with the Inogen Alliance—a global network of over 70 EHS and sustainability firms in 60+ countries.

This Alliance is fundamental to how we bring diverse global perspectives, expertise, and resources to every client. It allows us to instantly scale our services, staying current on global trends and best practices, which is essential for successfully meeting the complex needs of our multinational clients across Asia.

Our engagement this year reinforced our position as a thought leader and ensures our services meet the highest international standards.



## ESC's Global Engagement

## **Global Strategy Sessions**



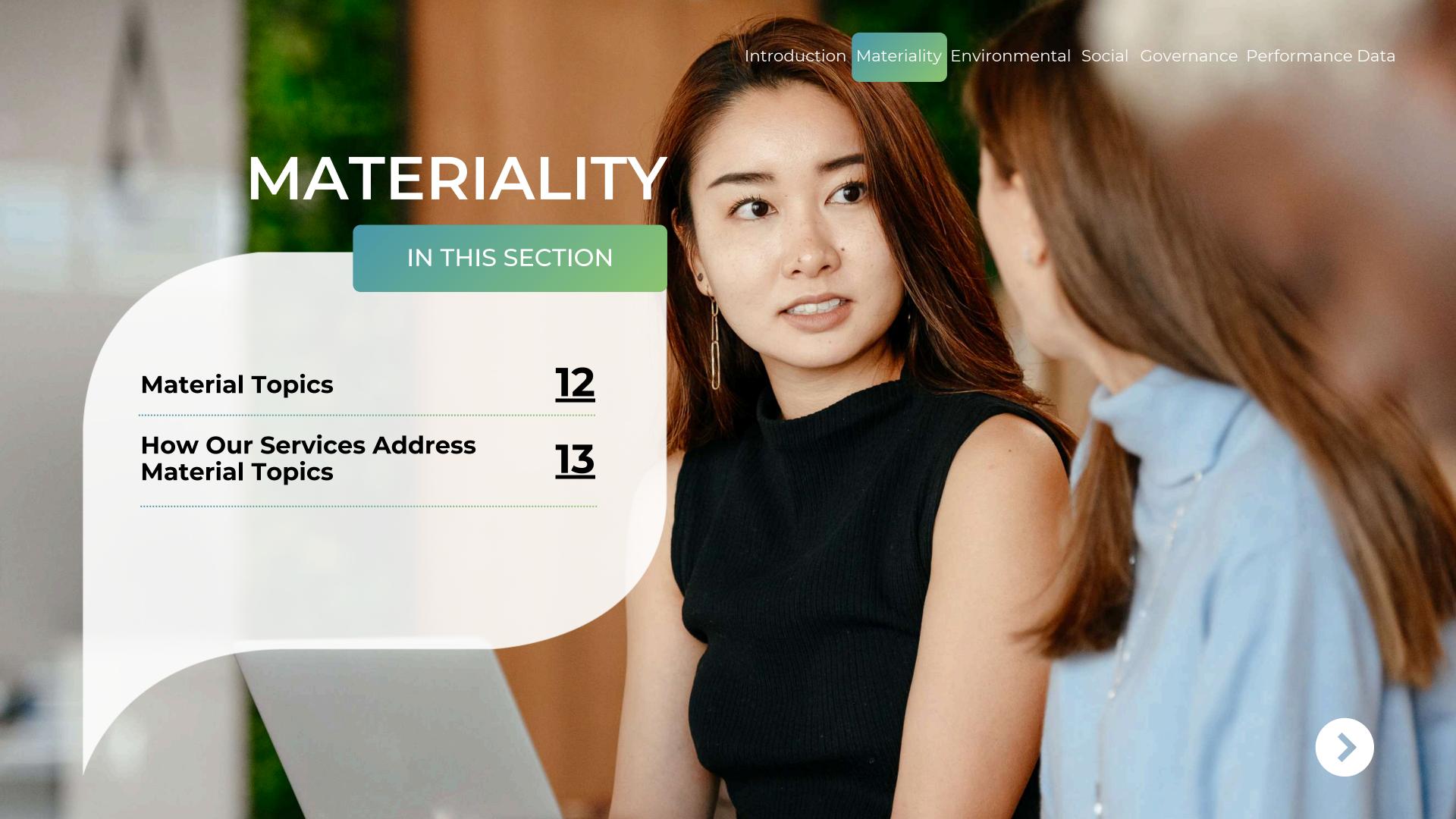
We participated in Associate meetings in **Greece** and **Dubai**, where we engaged in deep discussions on advancing global EHS and sustainability delivery.





### **Leading the Conversation**

ESC was a major voice in the Alliance's firstever podcast, ReThinking EHS. We contributed our regional expertise to three episodes, covering critical subjects such as the Energy Transition, Mergers & Acquisitions, and EHS compliance.





# **Material Topics**

Our strategy is anchored by a continuous materiality assessment, which identifies the key impacts on stakeholders and our business. This process led us to reaffirm our three core ESG pillars (Environmental, Social, and Governance) in 2024. By aligning with GRI Standards, we ensure transparent reporting that manages operational risk and creates sustained value for our regional clients.





**Energy Transition** 



Decarbonisation



**Environmental Compliance** 



## Social



People



Fostering an Inclusive Workplace



Developing our Talent Pipeline



## Governance



Governance & Strategic Direction



Risk Management



Upholding Ethical Standards

## **Our Contribution to the Global Goals**













# **How Our Services Address Material Topics**

ESC's services are designed to address the material ESG topics that relate to our client work. These services are applied across the full project lifecycle — from early planning and permitting to construction, operations, and decommissioning. We help clients meet regulatory requirements and deliver measurable sustainability outcomes.

## **ESC's Core Services**

#### **Environmental & Social**

- Planning & Assessment
- Permitting
- Air Quality & Noise
- Transactional Due Diligence

#### **EHS & Risk Management**

- EHS & Risk Management
- EHS Compliance
- Safety and Risk Assessment

#### **Contamination and Waste**

- Waste Management Studies
- Site Assessment Studies
- Remediation & Site Closure

#### **Sustainability & Climate Change**

- Sustainability & Climate Change
- Strategy & Reporting
- Carbon Footprinting

## **How Our Services Address Material ESG Topics**

SERVICE AREA	LINKEDIN ESG PILLARS	MATERIAL TOPICS ADDRESSED
Environmental & Social	Environmental, Social	Energy Transition, Decarbonisation
Contamination and Waste	Environmental	Environmental Compliance
EHS & Risk Management	Social, Governance	Risk Management, Upholding Ethical Standards
Sustainability & Climate Change	Environmental, Social	Energy Transition, Decarbonisation

**Note:** This table focuses on how ESC's external services support client delivery. Internal material topics related to ESC's own people and governance practices are addressed in the Social and Governance sections of this report.

The following pages provide a snapshot of our 2024 project portfolio, highlighting the diversity and scale of ESC's contribution across industries and geographies. These examples illustrate how our multidisciplinary teams work together to deliver measurable, lasting impact through science-based, locally relevant and sustainability-driven solutions.

# ENVIRONMENTAL

IN THIS SECTION

**Energy Transition** 

<u>15</u>

Decarbonisation

<u>20</u>

**Environmental Compliance** 

<u>23</u>



# **Energy Transition**

The energy transition in the Asia Pacific region is a critical global mandate, demanding unprecedented capital mobilisation and strict adherence to international standards.

Successfully navigating this market requires addressing complex regulatory challenges, including securing regional energy import stability embedding and rigorous environmental and social governance across all new projects.

Our commitment is to ensure that every project serves the dual purpose of achieving net-zero targets while securing long-term stakeholder value.

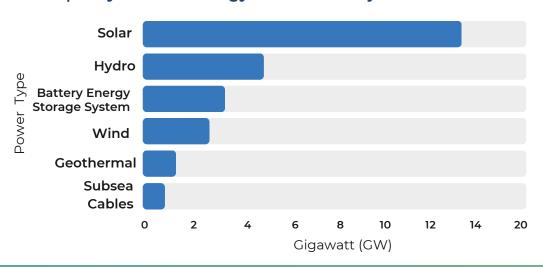
ESC serves as a strategic enabler of this transition. We deliver the necessary technical due diligence, strategic regulatory advice, and verified compliance with global ESG frameworks.

To sustain this long-term commitment, we continually invest in developing workforce technical and internal capabilities, ensuring our expertise evolves ahead of market demands.

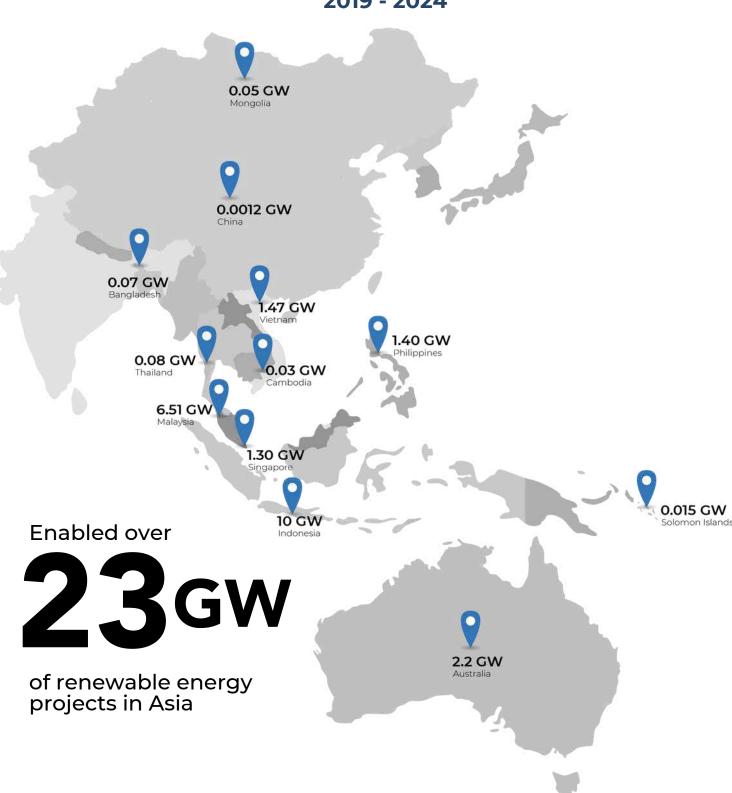
We achieve this by providing our strategic solutions directly to the key industries and stakeholders driving this change, ensuring project success and policy alignment for:

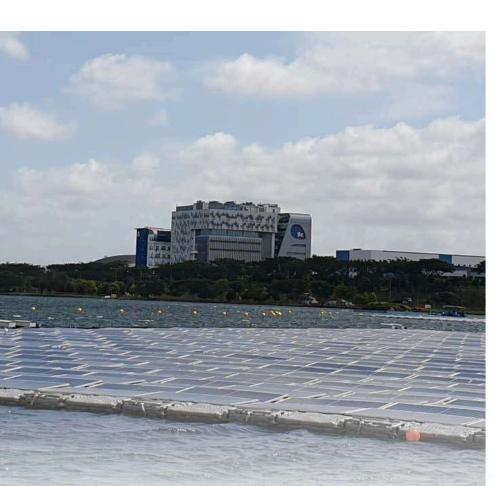
- Energy & Utilities Providers
- Financial Institutions and Investors
- Infrastructure & Project Developers
- Government & Regulators

#### Capacity of ESC's Energy Transition Projects 2019-2024



### **Total Renewable Energy Projects** 2019 - 2024





PUB, Singapore's National Water Agency, develops floating solar farms on reservoirs to generate clean electricity while managing water resources





CASE STUDY: Energy Transition

## **PUB: DRIVING ENERGY TRANSITION WITH 130 MW** FLOATING SOLAR AT LOWER SELETAR RESERVOIR

The Public Utilities Board (PUB) engaged ESC to conduct an Environmental Impact Assessment (EIA) for the installation of floating photovoltaic (FPV) solar panels at Lower Seletar Reservoir. The project aimed to advance Singapore's renewable energy ambitions while safeguarding the ecological health of the reservoir system. Given the sensitive nature of freshwater ecosystems, a comprehensive EIA was required to evaluate potential effects on water quality, aquatic biodiversity, and overall reservoir management. Building on our prior experience conducting the EIA for Tengeh Reservoir, ESC applied proven methodologies to ensure robust, science-based insights.

#### **SOLUTIONS**

- Conducted detailed water modelling studies to assess potential impacts of FPV installation on reservoir water quality.
- Evaluated implications for aquatic biodiversity, integrating findings from both modelling and ecological assessments.
- Reviewed and incorporated historical biodiversity survey reports into the analysis for a robust, data-driven assessment.

#### **IMPACT**



Provided PUB with a science-based understanding of potential environmental risks and mitigation measures



Strengthened stakeholder confidence through transparent engagement with nature groups and agencies



Supported the sustainable implementation of floating solar technology while safeguarding reservoir ecosystems



**Contributed to Singapore's** clean energy transition by facilitating renewable energy deployment in harmony with environmental protection



SPIRE is a joint venture between SUSI Partners and Pacific Impact Development, dedicated to developing utility-scale renewable energy projects across Southeast Asia





CASE STUDY: Energy Transition

## SPIRE: ENVIRONMENTAL & SOCIAL SCREENING FOR 99 MW ALBAY WIND PROJECT

SPIRE Philippines Holdings Pte. Ltd. (SPIRE) is developing a 99 MW greenfield wind project in Albay Province, Philippines, to support the country's energy transition. The company required a robust environmental and social assessment to establish the project's baseline context and ensure alignment with local regulations and stringent international finance standards. ESC conducted the initial Environmental & Social Impact Assessment (ESIA), which was critical for managing risks upfront. This allowed the client to immediately refine the project's design, minimising potential development risks and ensuring compliance with Philippine regulations and IFC Performance Standards from the outset.

#### **SOLUTIONS**

- Conducted on-site investigations and document reviews to understand the existing environmental and social landscape
- Reviewed all Philippine legal requirements and assessed compliance with the required IFC Performance Standards
- Provided critical, early-stage guidance to refine the project's location and design, minimising future environmental and social risks

#### **IMPACT**



Identification of key sensitivities and potential cumulative impacts within the Project area



Integration of mitigation strategies to safeguard local communities and biodiversity



Strengthening the Project's alignment with international sustainability standards



Maximising long-term project viability and accelerating contribution toward the national net-zero goal





Ormat Geothermal Indonesia is part of Ormat Technologies, a leading geothermal and renewable energy company





CASE STUDY: Energy Transition

## **ORMAT GEOTHERMAL INDONESIA: ESIA & ESMP FOR 20MW WAPSALIT GEOTHERMAL**

The project focuses on developing a geothermal resource within the Wapsalit Geothermal Working Area on Buru Island, with the goal of establishing a 20 MW Wapsalit Geothermal Power Plant. To ensure responsible and sustainable development, an Environmental and Social Impact Assessment (ESIA) was undertaken to identify and evaluate potential environmental and social impacts and risks. Based on the findings, a comprehensive set of management, mitigation, and monitoring measures was formulated to minimise these impacts and ensure full compliance with applicable national and international standards. The resulting Environmental and Social Management Plan (ESMP) provides a structured framework for implementing these measures, encompassing biophysical and biodiversity management, community engagement, and health, safety, and security protocols throughout the project's pre-construction, operation, and post-operation phases.

#### **SOLUTIONS**

- Conducted a comprehensive ESIA to identify and evaluate potential environmental and social risks associated with the geothermal development.
- Developed a detailed ESMP outlining management, mitigation and monitoring measures to ensure compliance with applicable standards.
- Integrated safeguards for biophysical, biodiversity, social, community, health, safety, and security aspects across all project phases.

#### **IMPACT**



Established a robust management framework that met international lender standards for project financing



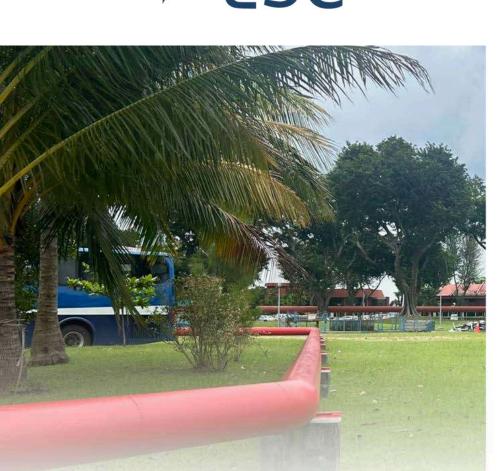
Embedded safeguards promoting community relations and occupational health, securing the project's long**term license** to operate



Ensured a net **positive impact** on biodiversity and promoted equitable benefit sharing with local communities



Supported the responsible development of a 20 MW asset vital to **Indonesia's low-carbon** energy targets



SP PowerAssets operates as a utility services company providing electricity, gas transmission, distribution, and market support services







CASE STUDY: Energy Transition

## **ENVIRONMENTAL SITE ASSESSMENT AND FEASIBILITY SUPPORT FOR 18 POWER CABLE SITES**

SP PowerAssets (SP) engaged ESC to conduct a comprehensive Environmental Site Assessment (ESA) and Feasibility Study for the installation of critical import power transmission cables. This project was crucial for enhancing regional energy stability while navigating the highly sensitive marine habitats and coastal environments of the proposed routes. A review of publicly available data and site visits were conducted to evaluate the physical and biological conditions along the proposed cable installation route. It identified sensitive receptors, compiled preliminary environmental concerns and potential red flags, and provided recommendations for mitigation measures to address environmental risks and prevent significant impacts. ESC focused on demonstrating the viability of Horizontal Directional Drilling (HDD) technology to minimise environmental footprint and protect the cables from external damage, thereby supporting responsible and sustainable energy infrastructure development.

#### **SOLUTIONS**

- Conducted an ESA to identify environmental constraints and sensitive receptors along the proposed transmission routes
- Developed conceptual HDD design and feasibility assessment confirming technical and environmental viability
- Collaborated with HDD specialists to integrate best practices and minimise ecological impacts
- Outlined permitting and implementation plans to ensure regulatory compliance and timely project delivery

#### **IMPACT**



Minimised environmental footprint by significantly reducing seabed and intertidal disturbance



Enhanced project feasibility and safety, ensuring reliable, damageprotected transmission routes



Strengthened governance and compliance, supporting long-term operational resilience

## Decarbonisation

Decarbonisation is a core priority for ESC, aligning closely with our mission to advance sustainability and respond to the urgent global challenges of climate change. With global warming posing significant risks to the planet, immediate and sustained efforts to reduce greenhouse gas emissions are imperative across all sectors.

ESC is well-positioned to guide both public and private sector clients through this transition, drawing on our expertise to design and implement robust decarbonisation strategies.

Our comprehensive knowledge of energy systems and climate dynamics allows us to deliver tailored solutions that meet the specific requirements of our clients while fostering sustainable practices.

This commitment is reflected in the diverse portfolio of projects we have delivered, which both mitigate climate risks and support progress toward net-zero objectives.

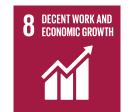
Our approach is strategic and forward-looking, emphasising risk assessment, mitigation, and the integration of sustainable practices that deliver longterm value.

Through these efforts, we enable our clients to build climate resilience and transition confidently toward a sustainable, low-carbon future.





The Singapore Tourism Board (STB) is the leading economic development agency for Singapore's tourism sector







CASE STUDY: Sustainability & Climate Change

## SINGAPORE TOURISM BOARD: CARBON EMISSIONS AND WASTE BASELINE STUDY FOR THE MICE INDUSTRY

The Singapore Tourism Board (STB) is committed to building a more sustainable Meetings, Incentives, Conferences, and Exhibitions (MICE) industry as part of its long-term climate strategy. ESC was engaged to conduct a baseline emissions study across Singapore Expo (EXPO), Marina Bay Sands (MBS), Raffles City Convention Centre (RCCC), Suntec Singapore (SUNTEC), Resorts World Singapore (RWS) and Changi Exhibition Centre (CEC), assessing emissions from energy use, waste generation and water consumption. The study established an aggregated sustainability baseline aligned with the global Net Zero Carbon Events Methodology.

#### **SOLUTIONS**

- Carbon and Waste Baseline Study across 6 major purpose-built MICE venues.
- Establishment of aggregated emissions and intensity metrics (Energy, Water, Waste)
- Aligned with the global Net Zero Carbon Events Methodology, adhering to ISO 14068 standards

#### **IMPACT**



**First National Baseline** Provided Singapore's MICE industry with its first aggregated sustainability dataset



Venue-related CO<sub>2</sub> emissions established at 14.13 kgCO<sub>2</sub> per attendee, enabling targeted reduction strategies



Identified that 94% of venuerelated emissions stem from energy, highlighting opportunities for renewable energy adoption



STB takes a pioneering role in global MICE sustainability, committing to carbon-neutral participation at key international tradeshows from 2024



Knauf is one of the world's leading manufacturers of modern insulation materials, drylining systems, plasters and accessories, thermal insulation composite systems, floor screed, floor systems, and construction equipment and tools







**CASE STUDY: Decarbonisation** 

## **DECARBONISING KNAUF'S GYPSUM** PLASTERBOARD PRODUCTS

To strengthen its environmental performance and support the transition toward low-carbon construction, Knauf approached ESC to conduct a comprehensive Life Cycle Assessment (LCA) for its gypsum plasterboard product range. The LCA evaluated the environmental impacts across the entire product life cycle, from raw material extraction and manufacturing to distribution, use, and end-of-life management. Using the findings, Environmental Product Declarations (EPDs) were developed in accordance with ISO 14025 and EN 15804 standards and verified under the EPD International System. These verified EPDs provided Knauf with transparent information on embodied carbon and other environmental indicators. The data also supports compliance with green building certification schemes such as GreenMark, LEED, BREEAM, and BEAM, reinforcing Knauf's leadership in sustainable construction solutions.

## **SOLUTIONS**

- Comprehensive LCA was performed to quantify environmental impacts across the entire product life cycle
- Development of third-party verified EPDs.
- EPDs published on the EPD International System, ensuring global accessibility and transparency

#### **IMPACT**



Verified EPDs enable Knauf to make informed material choices and integrate low-carbon solutions in their projects



The LCA findings guide Knauf's ongoing efforts to enhance manufacturing efficiency and reduce environmental impact



Highlighted emissions hotspots for operational improvements

# **Environmental Compliance**

Environmental compliance is one of the most critical challenges for businesses in Asia-Pacific. Complex regulations, evolving standards, and cross-border requirements create significant risks for project delivery and operational continuity. These regulatory drivers are the primary reason clients engage ESC. Compliance is a critical enabler for project approvals and operational continuity. For many of our clients, meeting these obligations is essential to maintain market access, secure financing, and uphold credibility with regulators and stakeholders.

## **ESC's Role:**

Clients trust ESC because of our regional advantage and ability to navigate complexity. We bring together multidisciplinary teams with deep local knowledge and global expertise, ensuring compliance strategies are practical, robust, and aligned with international best practices. Our consultants understand the nuances of regulatory frameworks across the region and integrate them with global standards such as IFC Performance Standards, ISO certifications, and lender requirements.

This combination of local insight and international perspective allows ESC to anticipate regulatory changes, reduce risk, and embed compliance into project planning from the start. By doing so, we help clients transform compliance from a reactive obligation into a proactive enabler of sustainable growth and operational resilience.

## **Key Outcomes We Deliver:**



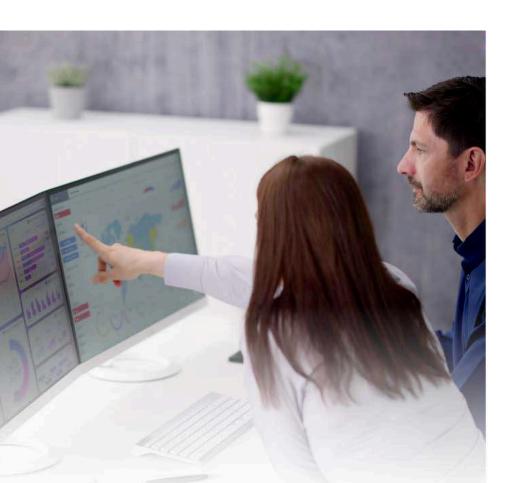
Assurance of meeting complex environmental and EHS regulations across multiple jurisdictions



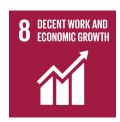
Reduced risk of delays and disruptions through proactive compliance planning



Embedding compliance into broader ESG and sustainability strategies for long-term resilience



An international market research company operating across 90+ countries, providing market research, insights, and consulting in brand guidance, media effectiveness, consumer behaviour, and public opinion



CASE STUDY: EHS Compliance

## **GLOBAL HSSE ASSURANCE FOR MARKET RESEARCH COMPANY**

ESC supported an international market research company in enhancing their HSSE compliance across its international offices. In 2023–2024, the client conducted desktop audits across its global offices through individual site representatives. The review identified several first-priority sites that required additional support to meet HSSE standards. Managing complex and diverse regulatory requirements across multiple regions, the client needed a unified approach to confirm compliance and safeguard employee well-being globally.

ESC was engaged to review audit checklists and conduct general onsite inspections across 33 sites in 15 countries spanning Asia Pacific, Europe, Middle East, Africa, and Latin America — a project continuing until July 2025.

#### **SOLUTIONS**

- Acted as the central project hub, aligning local delivery teams and ensuring seamless communication.
- Designed standardised audit frameworks, reporting templates, and training for participating consultants.
- Conducted meticulous checks on all reports to ensure accuracy, consistency, and actionable findings.

#### **IMPACT**



Strengthened health & safety management across 33 sites in **15 countries** 



Delivered clear, actionable findings to guide immediate corrective actions and close compliance issues



Provided robust reports to inform **strategic decisions** on lease renewals or relocation



A landfill site in Indonesia, reflecting the

waste management challenges

addressed through the Project

CASE STUDY: Waste Management

## PARTNERING WITH THE GOVERNMENT OF INDONESIA TO STRENGTHEN SUSTAINABLE SOLID WASTE MANAGEMENT

Indonesia generates nearly 39 million tons of waste annually, with only 62% treated and a significant portion of plastic waste mismanaged. Each year, an estimated 3-4 million tons of plastic are burned in the open, releasing hazardous pollutants such as dioxins, carbon monoxide, and greenhouse gases.

To support national waste management targets, the Government of Indonesia partnered with ESC to strengthen solid waste management (SWM) systems across the country. Through this collaboration, a large-scale SWM project was launched, covering ten cities and districts and representing a population of approximately 11 million people.

#### **SOLUTIONS**

- Supported the preparation of key project documents across ten locations, including Feasibility Studies, Detailed Engineering Designs, environmental and social safeguard documents
- Applied an end-to-end SWM approach, covering collection, transport, processing, and final disposal, while also incorporating institutional reforms, regulatory strengthening, capacity building, and behaviour change programmes
- Ensured all safeguards were aligned with international financing institution standards



#### **IMPACT**



**Facilitated loan negotiation** processes for project financing



The project is expected to deliver significant social and environmental benefits



**Boosted compliance** with international standards, enhancing the sustainability of projects



A chemical storage and blending facility in Singapore implementing advanced remediation measures to restore site conditions and reduce legacy pollution risks





CASE STUDY: Environmental Health, and Safety Compliance

## **ENVIRONMENTAL SITE ASSESSMENT AND** SITE REMEDIATION

A chemical storage and blending facility in Tuas, Singapore had a past leak of their underground fuel storage tank and distribution system. To address this, In-Situ Chemical Oxidation (ISCO) was implemented as a sustainable remediation approach. ISCO offers an effective means to rapidly destroy contaminants in the subsurface while minimizing environmental disturbance. Contaminants are directly oxidized into harmless end-products such as carbon dioxide, water, and chloride, supporting long-term site recovery and reducing legacy pollution risks.

ESC successfully removed TPH and PAH impacted groundwater at the remediation treatment area through installation of injection wells and treatment with sodium persulphate and hydrogen peroxide.

#### **SOLUTIONS**

- Delineation of impact associated with historical TPH/PAH pipeline leaks
- Installation of injection wells and cost-effective treatment with excellent results.
- Applied in-situ treatment methods to reduce greenhouse gas emissions, truck movements and landfill dependence.

#### **IMPACT**



Accelerated remediation and site recovery with reduced lifecycle costs



Lower environmental footprint, avoiding soil removal and minimising disturbance to nearby communities



**Enhanced worker and public safety** through reduced dust, noise, and heavy vehicle traffic





# People

Our people are the cornerstone of ESC's success and the foundation of our continued growth. More than employees, they represent our most valuable assets, driving both our operations and our culture.

Their contributions are essential in sustaining business functions, fostering a positive workplace environment, and ensuring that ESC consistently delivers innovative solutions and client satisfaction.

We are committed to cultivating a people-focused culture that integrates our team into the heart of every strategy and decision. We recognise that our achievements are directly tied to the passion, expertise, and diverse perspectives of our staff. By valuing and empowering their contributions, we create an environment where their commitment translates into exceptional outcomes that make a meaningful impact.















# **Continuous Talent Scaling**

In 2024, ESC's workforce grew by 20%, expanding from 72 to 87 employees across our offices in Singapore, Indonesia, Malaysia, Hong Kong, India, and Vietnam. This growth reflects ESC's strategic focus on strengthening project delivery capacity and enhancing cross-border collaboration to meet increasing regional demand.

Of the new hires made during the year, 51% were male (20) and 49% were female (19), with roles spanning 9 senior, 14 mid-level, and 16 junior positions. This balanced recruitment across all levels underscores FSC's continued emphasis on maintaining a diverse and capable talent pipeline to support long-term business growth.

Through targeted recruitment, ESC not only exceeded its workforce expansion target for 2024 but also enhanced overall diversity and inclusion. The increase in both headcount and gender balance demonstrates our commitment to building a resilient, inclusive, and futureready organisation where every individual contributes meaningfully to shared success.





# **Opportunities &** Development

ESC believes the real value we offer our people is the opportunity to work on nationally and internationally significant environmental projects that matter.

Our team members have the chance to engage directly with regulatory, operational and strategic challenges across diverse jurisdictions, developing real-world expertise and building careers in highimpact environments.

By focusing on professional growth, cross-border collaboration and continuous learning, we empower our people to advance their skills, broaden their perspectives and become trusted advisers in the field.

In this way, we create a workplace where the work itself, of tackling critical environmental issues and supporting clients to meet evolving regulatory and sustainability demands, becomes a source of motivation, development and purpose.















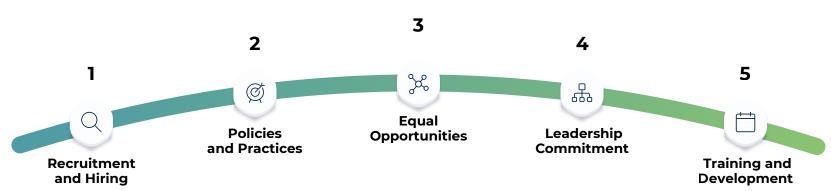
# Diversity, Equity, and Inclusion (DEI)

We believe in encouraging our employees at every step, recognising their efforts, and providing guidance when needed. This approach ensures that our support is not just a policy, but a practice, felt and appreciated by every member of our team.

Our goal is to create a workplace where everyone feels valued, respected, and empowered to contribute to their fullest potential, regardless of their background or identity.

To measure our DEI performance, we monitor key factors including demographic representation, pay equity, employee satisfaction, and the promotion of a diverse culture.

#### How we demonstrate DEI



## Our diverse nationalities are a core strength of ESC's regional team







Senior Team



**Philippines** 







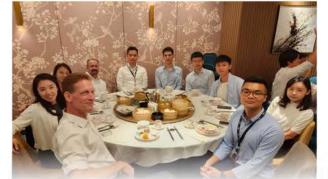
Vietnam



India



Malaysia



Hong Kong



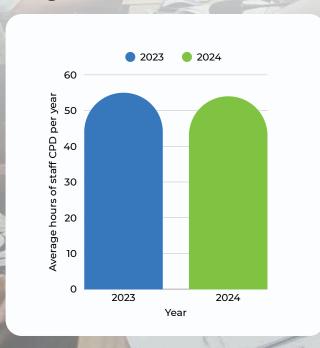
Indonesia



# **Talent Attraction** & Retention

ESC continues to regard its people as the foundation of its growth, innovation, and credibility. Our efforts to attract, retain, and train talent are sharpened in response to evolving ESG expectations, global competition for sustainability skills, and the need for resilience in a changing business landscape.

## **Average Hours of Staff CPD Per Year**



## **Our Talent Strategy**

ATTRACT	RETAIN	TRAIN
Positioning ESC as an employer of choice within the sustainability and environmental consulting industry	Providing competitive and equitable compensation and benefits packages	Encouraging employees to actively pursue Continuous Professional Development (CPD)
Highlighting our commitment to employee growth, a positive workplace culture, and clear career pathways	Offering continuous learning and development opportunities for all employees	Supporting career advancement and leadership development across all levels
Engaging potential talents through internship collaborations and targeted recruitment initiatives	Fostering a supportive, inclusive, and collaborative work environment	Providing structured internship programmes with potential career opportunities at ESC
Showcasing our workplace culture and employee achievements through social media and digital platforms		



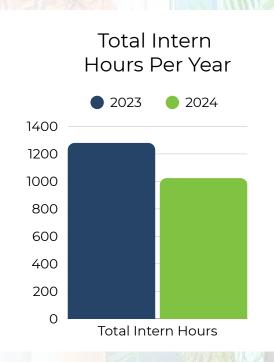
# **Internship Programs**

ESC welcomes interns as part of our commitment to nurturing future sustainability leaders. In 2024, we hosted students from leading universities in Australia, Singapore, and Malaysia, including Deakin University, Griffith University, RMIT University, University of Technology Sydney, The University of Queensland, Curtin University, and Nanyang Technological University.

Through hands-on involvement in real projects, interns gained practical experience in environmental consulting and learned how sustainability principles are applied in business contexts. They explored regulatory compliance, ESG integration, and the importance of balancing technical detail with clear communication. These experiences equip them with skills they can apply in future careers as engineers, consultants, and policy professionals.

ESC proudly shares these stories on social media to celebrate their contributions and reinforce our commitment to developing talent and driving positive impact across Asia-Pacific.

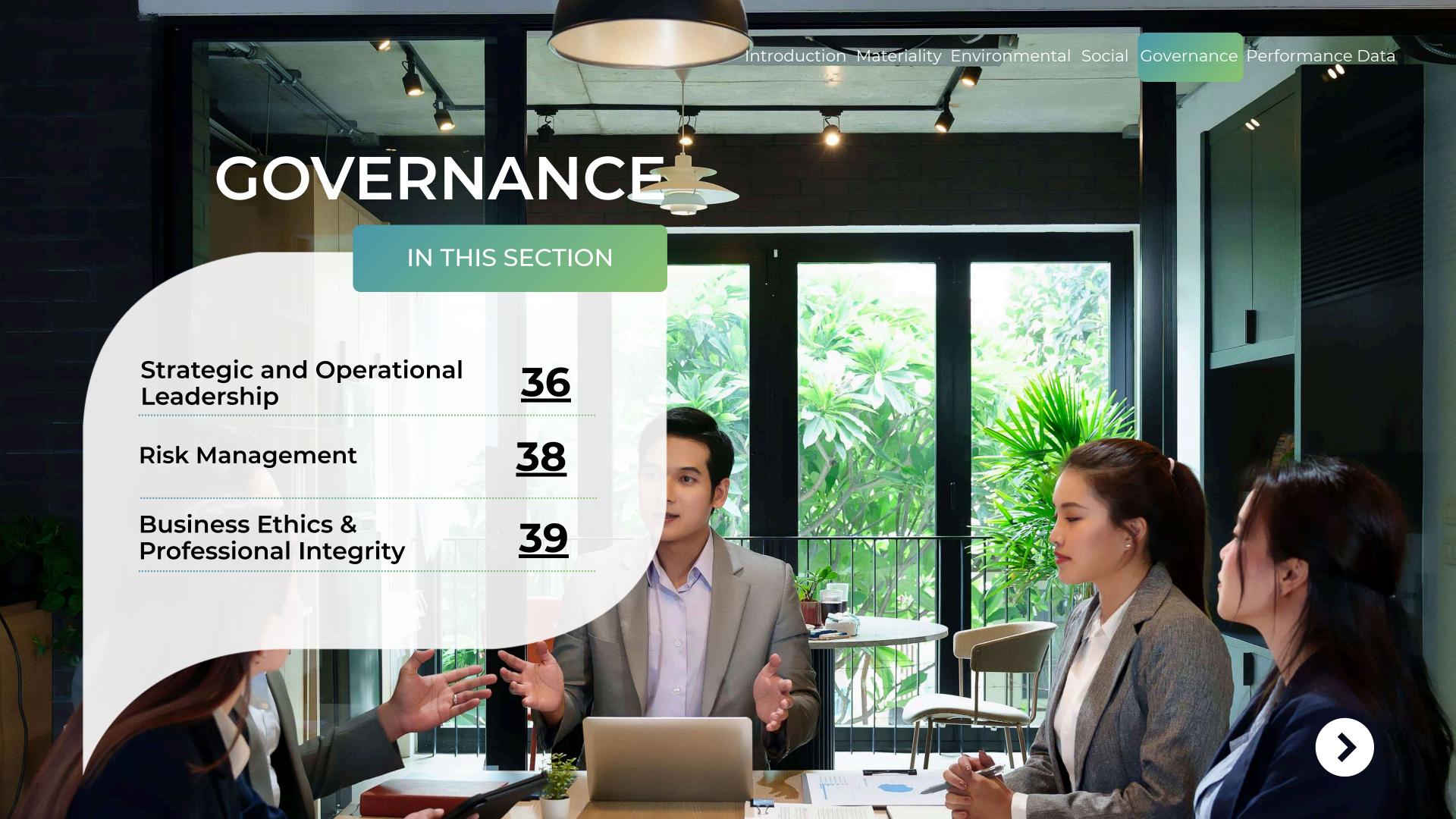
## Celebrating Interns' Work on Social Media





ESC My experience at ESC Initially, I was nervous as I had no prior experience in working in an office and all I had going for me was my Chemical Engineering Degree which I am nearing completion. Thanks to Boon, and the rest of my coworkers, all of my doubts and nervousness were dispelled. I was in the presence of a group of people who took things seriously and had the time to show that they do have fun every now and then.









# Why Governance is Important for us?

We recognise that strong corporate governance and responsible business practices are fundamental to sustaining our growth and success. Our governance framework is structured to align decision-making with our purpose, ensuring that we deliver on our mission, uphold our values, and create a positive impact on both society and the environment. In 2024, we continued strengthening our governance framework by enhancing internal oversight and reinforcing alignment across all regional offices.

We believe that sound governance is essential to meeting the expectations of our clients, investors, partners, suppliers, and contractors, while also enabling us to attract, develop, and retain top talent. Our framework is underpinned by a robust set of policies and procedures that promote accountability, transparency, and ethical conduct across all aspects of our business.

By embedding these principles into our operations, we build trust with stakeholders and strengthen our reputation within the industry. Our governance principles also guide our approach to risk management, ethical conduct, and operational oversight across the organisation. Furthermore, our governance framework is continuously reviewed and enhanced to reflect evolving regulations and leading practices, ensuring that ESC remains at the forefront of corporate governance standards.

# ESC has group policies covering the following areas:









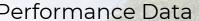














# Strategic and Operational Leadership

We place strong emphasis on effective decision-making structures and leadership development to support regional growth and continuous improvement. In 2024, we refined these structures to strengthen alignment across our offices and reinforce consistent governance practices.

Through clear lines of authority and accountability, we empower leaders to make informed decisions that reflect our mission and values. Our leadership model supports the governance principles within our groupwide framework, ensuring consistency in decision-making across the organisation.

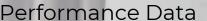
## **Executive Leadership and Sector Expertise**

At the core of our purpose is the guidance of our Executive Leadership Team (ELT), which sets ESC's overall strategy, governance standards, and expectations. They are supported by the Group Operations Executives, who oversee key functions including project delivery, systems management, and special projects.

To strengthen industry expertise, three Sector Leaders appointed in late 2023 continue to drive excellence across Industrial, Infrastructure & Development; Financial Services + Energy & Utilities; and International Development Agencies. In addition, ESC Country Managers oversee operations in Singapore, Malaysia, Indonesia, Hong Kong, and Vietnam, ensuring effective implementation of governance and operational standards across the region.









# **Integrated Management Systems**

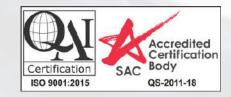
In 2022, the ELT committed to strengthening operational excellence by introducing Integrated Management Systems (IMS) across ESC's operations. The rollout began in Singapore in 2023 and is being extended to additional locations through 2025.

Singapore achieved ISO 9001, ISO 14001, and ISO 45001 certifications, along with BizSAFE Level 3 renewal and BizSAFE STAR attainment. In 2024, ESC's Hong Kong office also achieved full IMS certification, marking another milestone in aligning operations with international standards.

These achievements reinforce ESC's commitment to continuous improvement, best-in-class practices, and stronger risk management. As IMS is expanded further, it will enhance operational efficiency and strengthen ESC's position as an industry leader.

## **ISO & Safety Certifications Achieved**

### Singapore



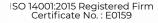






Hong Kong





## **Continuous Improvement and Stakeholder Interests**

ESC is committed to ongoing improvement, which involves constantly bettering our business practices to protect the interests of our stakeholders.



Clients: Ensuring that they receive exceptional service and sustainable solutions



**Employees:** Fostering a work environment that promotes their well-being and professional growth



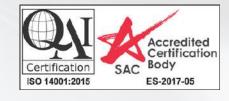
Shareholders: Maintaining robust financial health and delivering long-term value



**Vendors:** Building strong partnerships based on mutual respect and integrity



**Communities:** Contributing positively to the social and environmental fabric of the areas in which we operate









# **Risk Management**

At ESC, risk management is a cornerstone of our commitment to clients, employees, shareholders, partners, and the communities we serve. All risks are systematically identified, assessed, and mitigated.

Through continuous monitoring and transparent reporting, we proactively address potential challenges and make informed decisions that safeguard stakeholder interests. This disciplined approach strengthens ESC's governance framework and reinforces the long-term sustainability and resilience of our organisation.

## **Occupational Health & Safety**

The safety and well-being of our employees are ESC's highest priority, whether they are working in the office, remotely, or at client project sites. We are committed to maintaining a hazard-free workplace and upholding the highest legal and regulatory standards.

Our EHS team, together with the ELT and senior management, ensures a safe environment by monitoring risks, reporting incidents, and implementing timely corrective measures. In 2024, we strengthened cross-office coordination to support consistent safety practices and maintained an incident-free record across all operations.

Our Occupational Health & Safety Policy is fully integrated into our activities and extends to employees, contractors, guests, and volunteers. As a member of the Inogen Alliance, we also align with its ESG Policy on Health & Safety, reinforcing our commitment to global standards and continuous improvement.

To build a strong safety culture, we have established processes that guide the organisation in prioritising health and safety. Our EHS team conducts regular training to equip employees with the knowledge and tools needed to embed safety into their daily work.





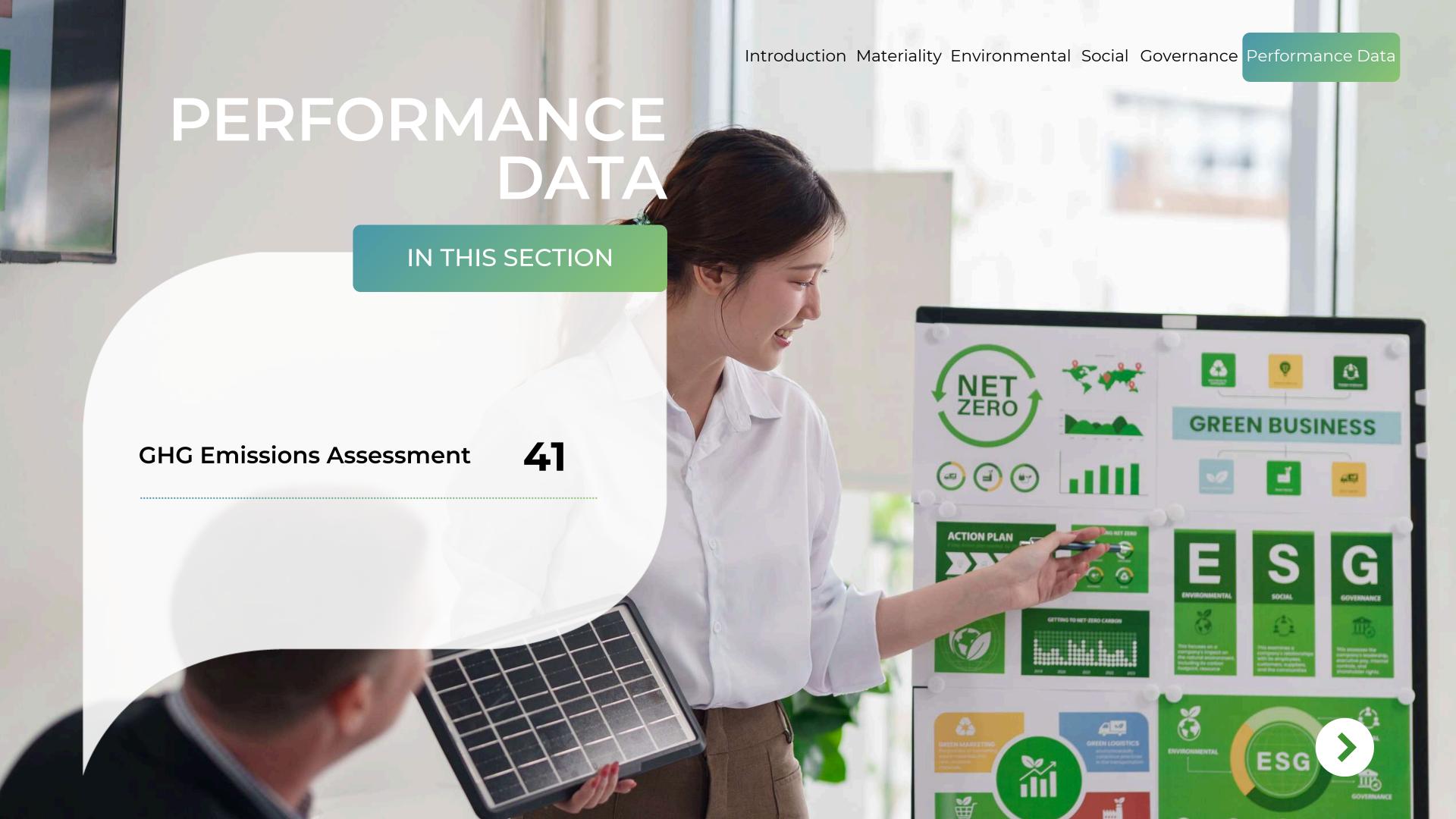
# **Business Ethics and Professional Integrity**

At ESC, we place strong emphasis on business ethics and integrity as the foundation for building trust with our stakeholders. Ethical principles guide our decision-making processes, ensuring transparency, accountability, and fairness across all aspects of our operations.

We nurture a culture of integrity by encouraging open communication and equipping employees to make responsible choices in their daily work. Our Anti-Bribery and Corruption Policy underscores our zero-tolerance stance towards bribery, ensuring all interactions remain fair and transparent. In 2024, we continued reinforcing ethical expectations across our offices through targeted awareness efforts and updated guidance for employees.

As an Associate of the Inogen Alliance, ESC complies with the Alliance's ESG Policy, particularly its commitment to Business Ethics and Governance. This alignment strengthens the consistency of our ethical standards and supports ongoing improvements across our regional operations.

Through these efforts, we aim to maintain a strong ethical foundation that supports responsible growth and reinforces ESC's reputation as a trusted partner.





## **GHG Emissions Assessment**

ESC continues to monitor its greenhouse gas (GHG) emissions to better understand the environmental impact of our operations and identify opportunities for reduction. Our company-wide GHG inventory provides a consistent framework for tracking performance across all operating locations.

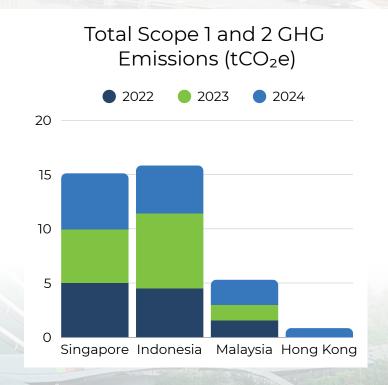
The assessment for FY2024 covers our offices in Singapore, Malaysia, Indonesia, and Hong Kong. Operations in Vietnam, India, and the Philippines remain fully remote and are therefore excluded from this year's reporting boundary.

Total GHG emissions for FY2024 amounted to 12.68 tCO<sub>2</sub>e, representing a 5% decrease from 13.31 tCO₂e in 2023. The reduction was mainly driven by lower emissions in Indonesia, which offset moderate increases in Singapore and Malaysia, as well as the inclusion of Hong Kong's data for the first time.

At the country level, emissions were: Singapore 5.17 tCO<sub>2</sub>e, Indonesia 4.39 tCO₂e, Malaysia 2.28 tCO₂e, and Hong Kong 0.84 tCO₂e. Hong Kong's emissions are estimated, as electricity consumption data was unavailable. Figures were calculated using the local grid emissions factor (0.39), which is lower than Malaysia's (0.774), explaining the difference despite similar office size and staffing.

When normalised by workforce size, emissions intensity improved from 0.64 tCO2e per employee in 2023 to 0.52 tCO2e in 2024, reflecting increased operational efficiency across offices.

As a professional services firm, ESC's operational emissions remain relatively low due to our limited reliance on carbon-intensive processes. We continue to adopt energy-efficient practices, including hybrid work arrangements and responsible energy consumption initiatives, to minimise our environmental footprint and support continuous improvement.





Hong Kong emissions are estimated, as electricity consumption data was unavailable from the building.

