

Sustainability Report

2024

For the period covering 01 Jan 2024 – 31 Dec 2024



Chang Hua Construction Pte Ltd

Corporate Registration Number:

199801369G

Address of Principal Executive Offices:

**112 LAVENDER STREET #04-01
CHANG HUA BUILDING SINGAPORE (338728)**

State of Jurisdiction of Incorporation



Singapore

Fiscal Year Ending

Dec 2024



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Managing Director Statement



It is with great pride that we present Chang Hua Construction's very first Environmental, Social, and Governance (ESG) Report. This marks a significant milestone in our journey toward greater transparency, accountability, and sustainable development. As a company with a strong regional presence in Singapore, the Maldives, and Myanmar, we believe this inaugural report reflects our deepening commitment to responsible construction and long-term value creation.

Chang Hua Construction is moving away from traditional construction methods and embracing innovative approaches to enhance on-site productivity, reduce environmental impact, and elevate the quality of our work. By adopting new construction technologies and digital tools, we aim to deliver projects more efficiently while contributing to broader climate and sustainability goals.

At the core of our transformation is our people. We continue to invest in developing a skilled, resilient, and future-ready workforce through structured retraining and upskilling programmes. This not only strengthens our project execution but also reinforces our role as a responsible employer across all regions where we operate.

Our ESG journey is just beginning, but we are steadfast in our commitment to building with purpose – creating infrastructure that serves communities, supports economic growth, and preserves the environment for future generations.

We invite all our stakeholders to walk this path with us, as we set the foundation for a more sustainable and resilient future.

Li Fei Chang

Managing Director
Chang Hua Construction Pte Ltd

About this Report

This report covers **Chang Hua Construction Pte Ltd's** sustainability performance from **01 Jan 2024 to 31 Dec 2024**.

Reporting Frameworks (GRI 2-3)



The report was meticulously crafted with reference to the Global Reporting Initiative (GRI) standard and the International Financial Reporting Standard S2, ensuring comprehensive coverage and alignment with internationally recognized sustainability reporting practices.



GREENHOUSE
GAS PROTOCOL

Our carbon accounting processes is aligned with the GHG Protocol methodology, ensuring a comprehensive, transparent, and standardized disclosure of our environmental impact. Carbon emissions were calculated on ESGpedia, an ESG software used for Environmental, Social, and Governance reporting.

External Assurance (GRI 2-5)

No external assurance was conducted for this sustainability report.

Feedback

We welcome feedback from our stakeholders to help us further our sustainability journey. Or, if you would like to learn more about our ESG initiatives, please contact:

Chang Hua Construction Pte Ltd

✉ Contact: enquiry@changhua.com.sg

📍 Address: 112 Lavender Street Chang Hua Building #04-01 Singapore 338728

🌐 Website: <https://www.changhua.com.sg/>

About Chang Hua



Chang Hua Construction is a major contractor of Architectural and Structural Engineering works. It's vast portfolio includes various kinds of building works such as private houses, government housings, factories, hotels, dormitories, offices, show flats, and private high-rise condominium, etc.

Chang Hua's team of professionals, skilled and unskilled workers totalling more than 1000 were recruited and selected internationally by our key personnel. They are managed under our direct management team, with our structured re-training and direct assignment of work packages in Singapore, Maldives and Myanmar which had resulted to a superior labour force in project bidding.

VISION

To be a world-class builder, recognised through our excellent project management and team which continually exceed expectations.

创建一流的建筑企业，团队、管理、业绩、品牌

MISSION

To fulfil our commitment, drive innovation, create value for projects, and improve the quality of life.

志在创新，信于坚守，赋予建筑价值，营造美好生活

Location of operations

Headquarters

Regional presence in:



Singapore

This report specifically addresses the operations conducted in Singapore.

Sustainability Certificates



**ISO 9001: 2015
Quality Management System**



**ISO 14001: 2015
Environmental
Management System**



**ISO 45001: 2018
Occupational Health and
Safety Management
System**



**BCA Green and Gracious
Builder Award (Merit)**



**BizSafe Partner
Certificate**

Sustainability Initiatives



Waste Segregation & Recycling

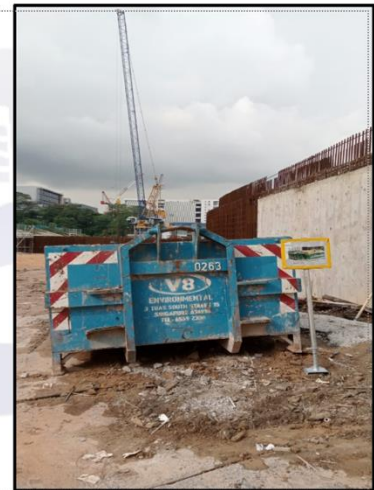
a) Implementing segregation of waste on site



Metal scrap Bin



Concrete Waste bin

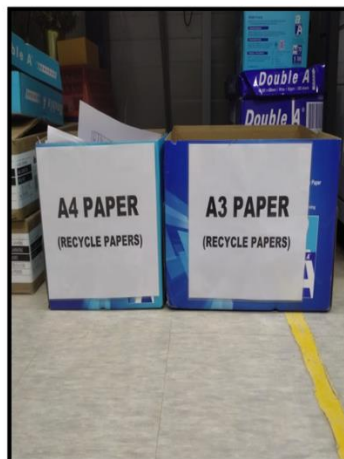


General waste bin

b) Implementing arrangement to recycle office waste



Recycle Tray for Printing



Reuse and Recycle Paper



Sustainability Initiatives



Reduction of Material Wastage via Technology and Reusing of Materials



PPVC / PBU construction method / technology used for all BTO projects to reduce wastage on concrete, rebar, timber etc. 100% saving on use of external scaffolding and timber usage.



Scrap rebar reused to fabricate bore piling casing cover



Scrap rebar reused to fabricate silo joint fitting rack



Scrap hollow section and zinc sheet reuse to construction overhead shelter and hoarding

Sustainability Initiatives



Usage of Solar Power for equipment usage & energy saving equipment



Usage of Solar powered equipment's to reduce carbon footprint & reducing greenhouse gases



Usage of energy saving/efficient & green label appliance to reduce greenhouse emissions & Carbon dioxide emissions

Sustainability Initiatives



Reusing water for other activities



Tap Point with Spray Gun to ECM Pond
Recycle Water Usage During Washing Boots



Treated Recycle Water for Vehicle Washing



Treated Recycle Water for Control Dust with Forklift



Treated Recycle Water for cleaning steel plates



Treated Recycle Water Reservoir for purposing

Using Green-certified materials/items



UPVC Door

Waterproofing Coating

Vinyl Coatings

Flooring Used at

Paint Coat Used at Site

Sustainability Initiatives



Social Initiatives: Cohesion Activities & Distribution of Welfare Packs



Conducting of WSH Training by external vendors for Workers



Memberships

Chang Hua Construction is an active member of various notable organizations that contribute significantly towards sustainability initiatives:

Singapore Chinese Chamber of Commerce & Industry

Established in 1906, the Singapore Chinese Chamber of Commerce & Industry (SCCCI) is an internationally renowned business organisation and the apex body of the Chinese business community in Singapore. It is the founder of the biennial World Chinese Entrepreneurs Convention and the World Chinese Business Network (www.wcbs.com.sg), a global online business information portal. It plays a key and pro-active role in representing the interests of the local business community.



The Singapore Contractors Association Ltd

The Singapore Contractors Association Limited (SCAL) is a not-for-profit organisation representing more than 3,000 construction firms and allied businesses in Singapore. Since 1937, SCAL plays a pivotal role in being the voice of the construction industry in Singapore through facilitating in various platforms such as bridging closer working relationships between businesses and government agencies, networking events for members, recognition and awards platforms and administering programmes to drive business success.



The Singapore Business Federation

The Singapore Business Federation (SBF) is the apex business chamber championing the interests of the Singapore business community in the areas of trade, investment and industrial relations. It represents more than 32,000 companies, as well as key local and foreign business chambers.



Material Topics

Material Topics Overview

Identifying material topics is a critical step in ensuring our sustainability reporting reflects the most important environmental, social, and governance issues affecting both our business and stakeholders. For this inaugural ESG report, **Chang Hua Construction** conducted an internal materiality assessment involving key departments and leadership teams to determine the issues most relevant to our operations. As we continue to mature in our ESG journey, we intend to expand this process to include external stakeholders, enabling us to capture a more holistic and balanced perspective in future assessments.

Methodology and Standards

We aligned our materiality assessment with reference to the Sustainability Accounting Standards Board (SASB) and Global Reporting Initiative (GRI) guidelines, which helped us identify the most material topics relevant to our industry. We also identified commonly disclosed topics in sustainability reports published by companies in the same Construction industry.

- Anti-corruption (GRI 205)
- Energy (GRI 302)
- Water and Effluents (GRI 303)
- Emissions (GRI 305)
- Waste (GRI 306)
- Employment (GRI 401)
- Occupational Health & Safety (GRI 403)
- Training and Education (GRI 404)
- Diversity & Equal Opportunity (GRI 405)

Key Metrics

Environmental

FY 2024 Progress

Total Electricity Consumption

238,919 kWh

**Total absolute GHG emissions of
Scope 1 and Scope 2**

1,693 tCO₂e

Total Water Consumption

21,701 m³

Social

FY 2024 Progress

**Average training hours
per employee is: 5**

**Ratio of male
to female employees: 3 : 1***

**Ratio of young to
older employees**: 1 :
10***

Governance

FY 2024 Progress

24/7 access to whistleblowing
channel to every employee

0 incident relating to
corruption and/or bribery

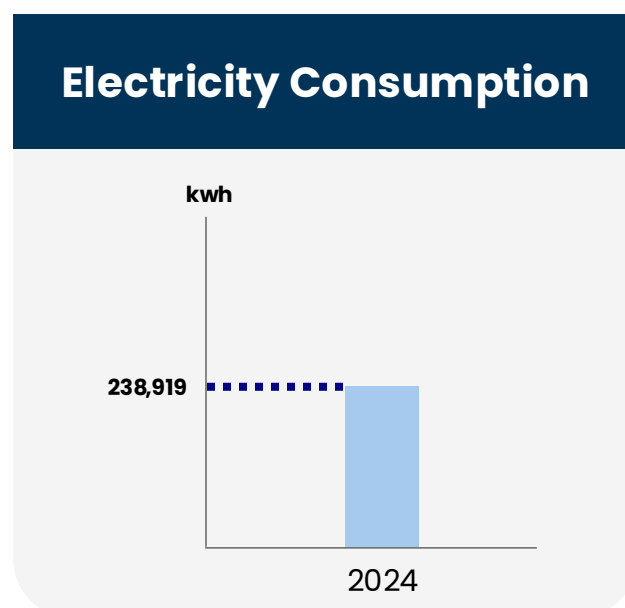
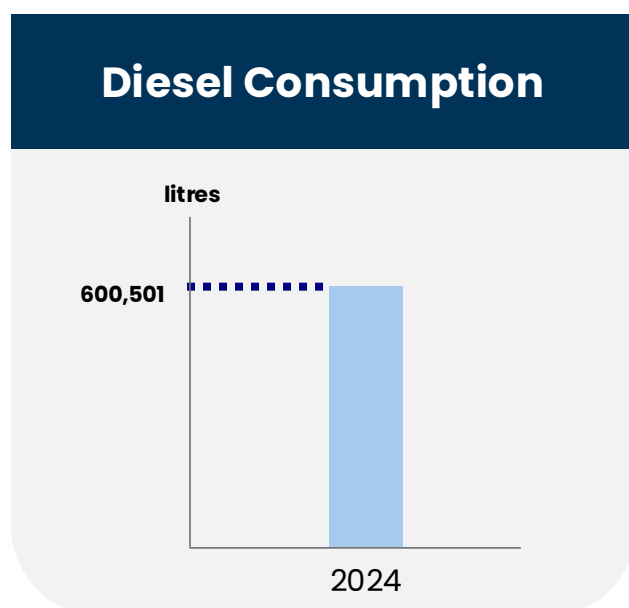
*Estimated ratio

**Young: under 30 years old, Older: over 30 years old

Environmental Metrics

Climate-related Data (GRI 302-1, IFRS S2 29 (a) (iii) (1))

Since 2024 marks our first year of tracking emissions data, it will serve as our baseline year. This baseline provides a foundational reference point, allowing us to measure and assess the effectiveness of future sustainability initiatives and improvements in reducing our carbon footprint. By establishing this baseline, we can set more informed and ambitious reduction targets moving forward.



S/N	Item	Datapoint	Units	Alignment to standards
1	Diesel Consumption	600,501	Litres	GRI 302-1, IFRS S2 29 (a) (i) (1)
2	Electricity Usage	238,919	kWh	GRI 302-1, IFRS S2 29 (a) (i) (2)

Diesel Consumption

Diesel remains a key energy source for powering on-site machinery, equipment, and generators across Chang Hua Construction's active projects. Recognising the environmental impact associated with diesel consumption, the company is committed to reducing its dependence on fossil fuels. As part of our long-term sustainability strategy, we are progressively shifting toward lower-emission alternatives — including electric and hybrid construction equipment — while investing in newer, energy-efficient machinery that can deliver better performance with reduced fuel input.

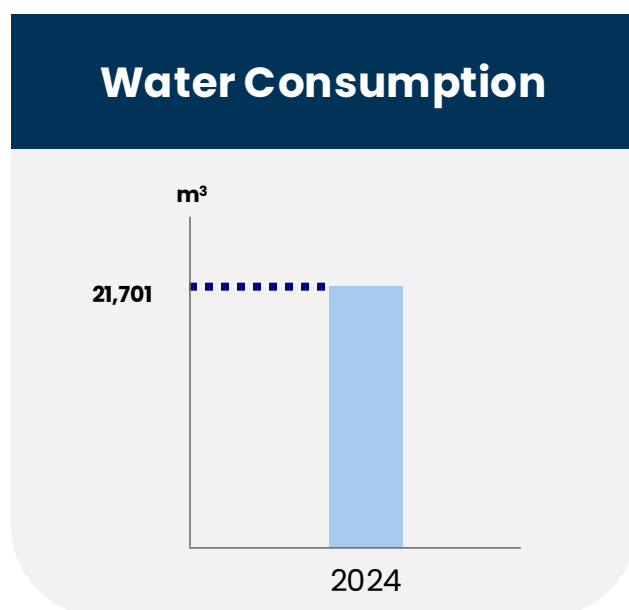
Electricity Consumption

Electricity is primarily drawn from local substations to support site operations, site offices, and temporary facilities. To enhance energy efficiency, Chang Hua Construction continues to adopt responsible power management practices, including the installation of energy-saving lighting, motion sensors, and more efficient electrical systems.

Environmental Metrics

Climate-related Data (GRI 303-5, 306-3 IFRS S2 29 (a) (iii) (1))

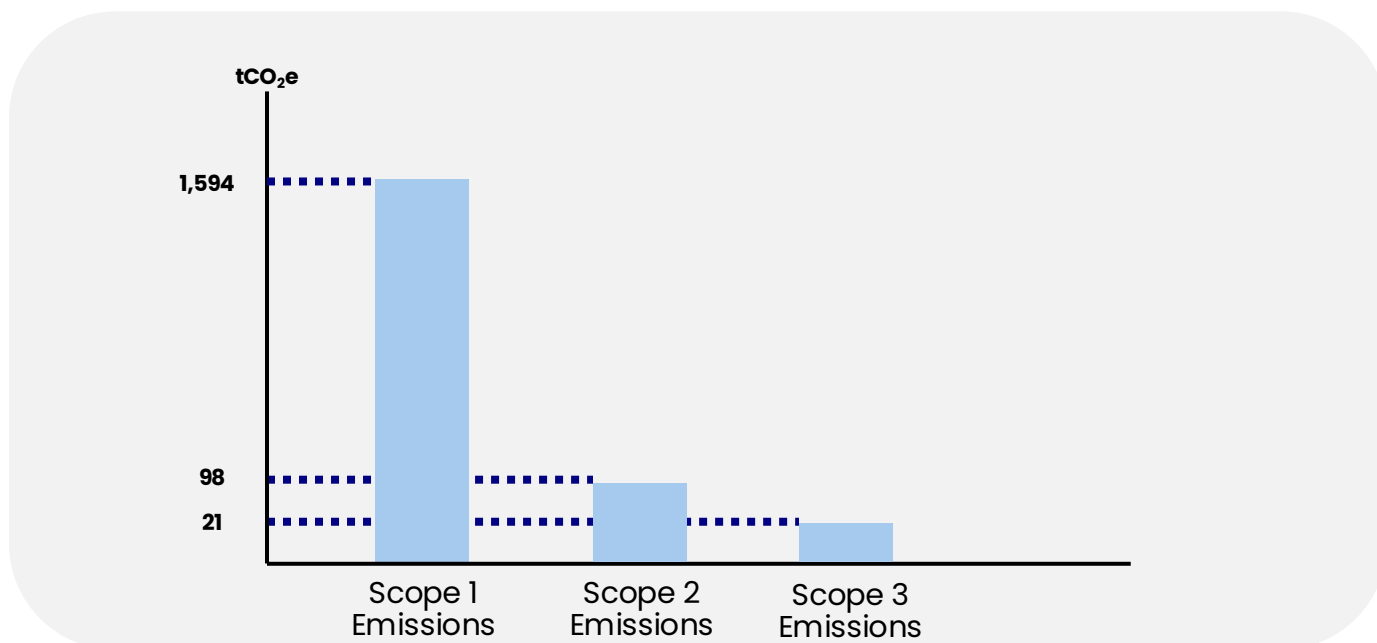
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S/N	Item	Datapoint	Units	Alignment to standards
1	Water Consumption	21,701	m³	GRI 303-5, IFRS S2 29 (a) (i) (3)
2	Concrete Waste	793	tonnes	GRI 306-3, IFRS S2 29 (a) (i) (3)
3	Rebar Waste	27	tonnes	GRI 306-3, IFRS S2 29 (a) (i) (3)
3	General Construction Waste Disposed	575	tonnes	GRI 306-3, IFRS S2 29 (a) (i) (3)

Environmental Metrics

GHG Emissions



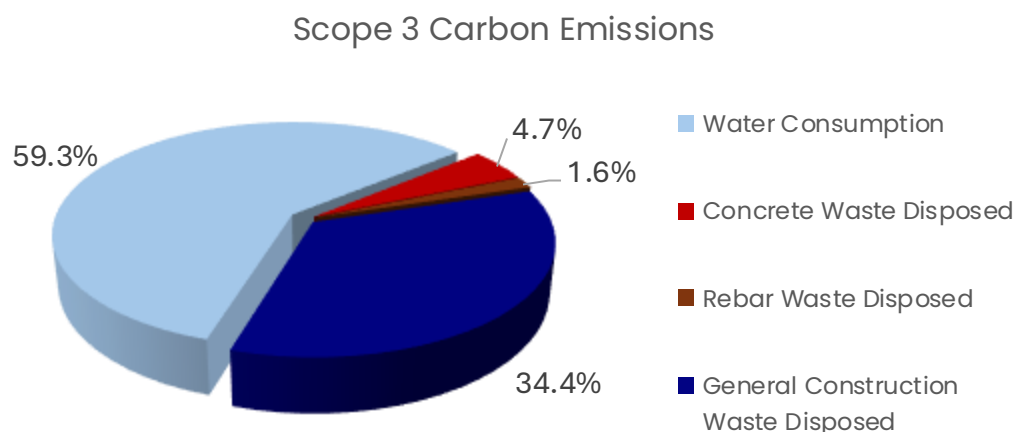
S/N	Item	Datapoint	Units	Alignment to standards
1	Scope 1 Emissions	1,594	tCO ₂ e	GRI 305-1, IFRS S2 29 (a) (i) (1)
2	Scope 2 Emissions	98	tCO ₂ e	GRI 305-2, IFRS S2 29 (a) (i) (2)
3	Scope 3 Emissions	21	tCO ₂ e	GRI 305-3, IFRS S2 29 (a) (i) (3)

Our emissions are calculated using the emission factors from Singapore Emission Factors Registry (SEFR) launched by the Singapore Business Federation.¹

¹ <https://sefr.netzerohub.sg/>

Environmental Metrics

GHG Emissions (Breakdown of Scope 3 Emissions)



S/N	Item	Datapoint	Units	Alignment to standards
1	Water Consumption (under Purchased Goods and Services)	12.369	tCO ₂ e	GRI 305-3, IFRS S2 29 (a) (i) (3)
2	Concrete Waste Disposed	0.979	tCO ₂ e	
3	Rebar Waste Disposed	0.335	tCO ₂ e	
4	General Construction Waste Disposed	7.184	tCO ₂ e	
Total Scope 3 Emissions		20.867	tCO ₂ e	

In 2024, we initiated the tracking of our Scope 3 carbon emissions, focusing on the following categories:

- Water consumption (under Category 1: Purchased Goods and Services)
- Concrete, Rebar, General Construction Waste generated (under Category 5: Waste Generated in Operations)

In future reporting years, we aim to expand our tracking efforts to include additional data points within our Scope 3 carbon emissions.

Social Metrics

Diversity and Equal Opportunity

S/N	Item	Datapoint	Alignment to standards
1	Current Employees by Age Group – Below 30 years old	12	GRI 405-1
	Current Employees by Age Group – Between 30 to 50	96	GRI 405-1
	Current Employees by Age Group – Above 50 years old	24	GRI 405-1
2	Current Employees by Gender – Male	93	GRI 405-1
	Current Employees by Gender – Female	39	GRI 405-1
3	Total Number of Current Employees*	132	GRI 2-7

*As at 31 December 2024

At Chang Hua Construction, we believe that a diverse and inclusive workforce strengthens our ability to deliver quality outcomes across all projects. In this report, we present consolidated workforce data to provide a clear and accurate reflection of our human capital across all regions of operation.

By capturing the scale and composition of our total workforce, this approach highlights not only the depth of our labour resources but also our commitment to fair employment practices, equal opportunity, and workforce diversity. It allows us to assess and improve how we support a productive, inclusive, and respectful working environment for all employees regardless of background, nationality, or role.

Social Metrics

Employment

S/N	Item	Datapoint	Alignment to standards
1	Number of New Employee hires by age group		GRI 401-1
	Under 30 years old	6	
	30 – 50 years old	32	
	Over 50 years old	13	
2	Number of New Employee hires by gender group		
	Male	37	
	Female	14	

At Chang Hua Construction, our people are the foundation of our success. As we expand our footprint across Singapore, the Maldives, and Myanmar, we remain committed to attracting, developing, and retaining skilled professionals who embody our core values of integrity, craftsmanship, and teamwork.

To support the growth and resilience of our workforce, we have implemented a structured talent development framework that emphasizes continuous learning, safety, and career progression.

Key initiatives include:

- **Structured Onboarding:** New team members are introduced to our corporate values, safety-first culture, and project workflows to ensure a strong and seamless integration into the organisation.
- **Technical and Leadership Development:** Through hands-on training and role-specific upskilling, employees are equipped with the technical and leadership competencies needed to excel in a dynamic construction environment.
- **Career Progression Pathways:** We foster internal mobility and advancement, empowering our people to grow their careers and take on expanded responsibilities within the company.
- **Employee Engagement and Well-Being:** A safe, supportive, and cohesive work culture is central to our operations. We actively promote work-life balance, team camaraderie, and professional fulfilment across all levels of the workforce.

As we move forward, we will continue to invest in building a capable, future-ready team, one that is aligned with our vision of delivering excellence in every project we undertake.

Social Metrics

Employment

S/N	Item	Datapoint	Alignment to standards
1	Number of employee turnover by age group		GRI 401-1
	Under 30 years old	1	
	30 – 50 years old	15	
	Over 50 years old	6	
2	Number of employee turnover by gender group		
	Male	11	
	Female	11	

In an industry shaped by rapid change and complex demands, we recognise the importance of building a resilient, future-ready team. Rather than relying on short-term solutions, we focus on long-term investment in our people. Our approach blends skill-building with purposeful career development to create an environment where individuals can grow, lead, and thrive. We strive to retain talent by offering:

1. Stability with Purpose

We provide meaningful work across a diverse portfolio of regional projects, ensuring employees can see the long-term impact of their efforts.

2. Growth-Oriented Development

From apprentices to experienced professionals, we offer tailored training that supports both technical mastery and personal advancement.

3. Respect for Individuals

We cultivate a workplace where respect, safety, and fairness are non-negotiable, and everyone has a voice in shaping our success.

4. Human-Centred Culture

Beyond work, we value the well-being of our employees and promote a culture of support, mutual accountability, and team spirit.

By embedding these principles into our operations, Chang Hua Construction continues to build not just strong structures — but also strong careers and communities.

Social Metrics

Occupational Health and Safety

S/N	Item	Datapoint	Alignment to standards
1	Number of fatalities as a result of work-related injury	0	GRI 403-9
2	Number of high-consequence work-related injuries	0	GRI 403-9
3	Number of recordable work-related injuries	3	GRI 403-9
4	Number of recordable work-related ill health cases	0	GRI 403-10

At Chang Hua Construction, safety is not a standalone protocol, it is a deeply ingrained principle that underpins every aspect of our operations. With construction activities spanning multiple countries and involving a workforce of over a thousand, safeguarding the well-being of every individual on-site is both a moral responsibility and a business priority.

Our commitment to health and safety begins long before work starts on the ground. From project planning to completion, we embed safety into our operational processes, risk assessments, and daily workflows. This includes regular site audits, safety briefings, and the integration of hazard controls tailored to the specific conditions of each project.

We believe that a safe work environment is one where everyone is actively engaged. Our workers are encouraged to voice concerns, report near misses, and contribute to maintaining a culture where safety is everyone's responsibility. By fostering this open environment, we ensure that risks are identified early and managed effectively.

Our management team plays a critical role in reinforcing these standards. With direct oversight of project sites, supervisors and team leads provide strong, visible leadership to uphold safe practices and ensure that all safety protocols are not only met but exceeded. In cases where incidents occur, we take a transparent and investigative approach, not to assign blame, but to learn and improve.

Social Metrics

Training and Education

S/N	Item	Datapoint	Alignment to standards
1	Average training hours per employee	5	GRI 404-1
2	Average training hours per Male Employee	5	GRI 404-1
3	Average training hours per Female Employee	5	GRI 404-1

At Chang Hua Construction, our workforce is shaped not only by experience, but by the opportunities we create for people to grow. In a sector where precision, adaptability, and technical know-how are critical, we view learning as an ongoing journey, one that evolves with every new project, challenge, and innovation.

Training at Chang Hua goes far beyond the classroom. Our approach is grounded in practical exposure, on-site mentoring, and real-time learning that sharpens both technical and soft skills. New joiners are immersed in live environments where they gain hands-on experience, while seasoned professionals are continually upskilled to meet rising industry standards and emerging technologies.

We invest in our people with the understanding that their growth fuels the company's progress. Whether it's reinforcing safety practices, honing structural engineering skills, or preparing future site leaders, our focus remains on building capability from within. The result is a workforce that is not only competent and confident but ready to lead the future of construction across the region.

Governance Metrics

Anti-Corruption (GRI 205)

As a company operating across multiple regions, we understand that ethical business conduct is essential to sustaining trust with our clients, stakeholders, and workforce.

We take a firm stance against corruption and unethical behaviour, recognising that such practices erode confidence, distort fair competition, and threaten long-term development. To guard against these risks, we have adopted a clear governance framework that promotes accountability, transparency, and compliance across all levels of the organisation.

Our internal practices are reinforced by regular risk evaluations and ongoing training, ensuring that both leadership and employees are aligned with our code of conduct. All staff are made aware of their responsibilities and empowered to make decisions guided by ethics and fairness from procurement and tendering to project execution and supplier engagement.

Equally, we expect the same high standards from our external partners. All subcontractors and vendors engaged by Chang Hua are required to comply with our anti-bribery and fair practice policies. Open channels, including a confidential whistleblowing mechanism, allow for the reporting of any concerns without fear of retaliation, fostering a culture of transparency and mutual accountability.

In 2024, we are proud to report **zero** cases of corruption across our operations, a reflection of our rigorous controls, strong ethical culture, and commitment to doing the right thing at every level.

At Chang Hua, we believe that doing the right thing is not optional, it is foundational to how we operate. As we grow our presence across borders, we remain committed to ethical leadership, fair business practices, and creating value that is built on trust.

GRI Content Index

Statement of Use Chang Hua Construction Pte Ltd has reported the information cited in this GRI content index for the period of 1 January 2024 to 31 December 2024 with reference to the GRI Standards.

GRI 1 Used GRI 1: Foundation 2021

GRI Standard	Disclosure Requirements	Reference
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GRI 2: General Disclosures 2021

2-1	Organization details	Pg. 6
2-2	Entities included in the organization's sustainability reporting	Pg. 6
2-3	Reporting period, frequency and contact point	Pg. 5
2-5	External assurance	Pg. 5
2-7	Employees	Pg. 20
2-28	Membership Associations	Pg. 13
2-29	Stakeholder engagement	Pg. 12

GRI 3: Material Topics 2021

3-1	Process to determine material topics	Pg. 14
3-2	List of material topics	Pg. 14
3-3	Management of material topics	Pg. 14

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GRI Standard	Disclosure Requirements	Reference
GRI 205: Anti-Corruption 2016		
205-1	Operations assessed for risks related to corruption	Pg. 25
205-2	Communication and training about anti-corruption policies and procedures	Pg. 25
205-3	Confirmed incidents of corruption and actions taken	Pg. 25
GRI 302: Energy 2016		
302-1	Energy Consumption within the organization	Pg. 16
GRI 303: Water and Effluents		
303-5	Water consumption	Pg. 17
GRI 305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	Pg. 18
305-2	Energy indirect (Scope 2) GHG emissions	Pg. 18
305-3	Other indirect (Scope 3) GHG emissions	Pg. 18, 19
GRI 306: Waste 2010		
306-3	Waste Generated	Pg. 17

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GRI Standard	Disclosure Requirements	Reference
GRI 401: Employment 2016		
401-1	New employee hires and employee turnover	Pg. 21, 22
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Pg. 21, 22
GRI 403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	Pg. 23
403-2	Hazard identification, risk assessment, and incident investigation	Pg. 23
403-9	Work-related injuries	Pg. 23
403-10	Work-related ill health	Pg. 23
GRI 404: Training and Education 2016		
404-1	Average hours of training per year per employee	Pg. 24
404-2	Programs for upgrading employee skills and transition assistance programs	Pg. 24
GRI 405: Diversity and Equal Opportunity 2016		
405-1	Diversity of governance bodies and employees	Pg. 20

Contact



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