



**emeren**<sup>®</sup>

Empowering Renewables

# ESG REPORT

20  
22

Unlocking the power of  
sustainable solar energy  
on a global scale.

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# About this report

At Emeren, we believe that a sustainable future is within reach, and as a renewable energy company, we are dedicated to playing a significant role in shaping it.

To maintain our commitment to transparency, accountability, and responsible business practices, we are excited to unveil our Environmental, Social, and Governance (ESG) Report for the year 2022. This report provides a summary of our progress and endeavors to incorporate ESG considerations into our business operations, as well as the positive impact we have made on the environment and society. The data and narratives contained within cover the fiscal year 2022 and highlight our operations globally. Where specified, we also provided historical context to show our progress over time. To ensure accuracy, comprehensiveness and comparability, we have prepared this report in alignment with the Global Reporting Initiative (GRI) Standards.

We acknowledge that the journey to sustainability is continuous. This report is not just a testament to our achievements but also a commitment to future improvements. At Emeren, we know that the world's energy needs will only continue to grow in the coming years. That's why we are committed to providing clean, renewable energy solutions that help meet this demand while protecting the planet for future generations.

Our ESG report for 2022 is just one example of how we are working to fulfill this mission. In it, we detail our efforts to reduce our carbon footprint, improve our supply chain sustainability, and promote diversity and inclusion within our organization. As we continue to grow and expand our operations around the world, we remain committed to finding new and innovative ways to promote sustainability and social responsibility in everything we do.

Discover more about our progress and future plans in our comprehensive ESG report. Together, we can foster a more sustainable and equitable world for everyone.





# Letter from our CEO

Emeren Group Ltd. - ESG Report 2022



## Sharing Our 2022 ESG Report: Moving Forward with Purpose

As a renewable energy company, we are passionate about environmental responsibility and our role in the fight against climate change. We are pleased to present our 2022 ESG Report, which highlights our progress and achievements in environmental, social and governance areas, marking a year of historic achievements and steadfast progress in our pursuit of a sustainable future.

2022 was a watershed year for solar energy. Solar PV generation soared to new heights, registering a record increase of 270 TWh—an uplifting 26% growth—reaching a remarkable total of nearly 1,300 TWh. For the first time, solar energy’s absolute generation growth eclipsed that of all other renewable technologies.

Driving this unprecedented advancement are several key catalysts. Enhanced economic viability, significant evolution in supply chain infrastructures, and fortified policy support have collectively fueled the acceleration of solar energy capacity growth. Noteworthy contributions from global regions such as China, the United States, and the European Union have been instrumental in propelling the industry forward, spotlighting a future of immense potential and continuous innovation.

In reflection of this pivotal progression, we are doing our part to be an active participant, not a bystander. We are strategically located in some of the most dynamic solar markets in the world. Our solar projects have displaced millions of tons of CO<sub>2</sub> emissions, and we have empowered communities by providing clean and reliable energy. In 2022 we achieved outstanding results:

- We monetized approximately 192 MWs of solar projects
- We grew our project pipeline to a record 3 GW
- We acquired a 50 MWp fully operational solar farm in Branston, U.K
- We acquired Emeren, an Italy-based utility scale solar power and battery storage project developer in Europe
- We commercialized our first inaugural IPP project in Hungary
- We accumulated over 1.5 GWh of storage pipeline

But our role does not stop at the project development execution. Social responsibility and sound governance are equally important pillars that underpin all our operations.

We could not have achieved this without the support of our employees, partners, clients and shareholders. Your belief in our vision is the force that drives us forward. We are grateful for your commitment to our mission and look forward to continuing to improve our ESG performance in the years ahead.

Together, we're not just envisioning a sustainable future; we're leading the march towards it.

Sincerely,

**Yumin Liu**  
Emeren Group CEO





# About Emeren Group

Emeren Group (NYSE:SOL) is a leading international developer, owner and manager of solar projects, firmly rooted in our commitment to sustainability and environmental protection. With an extensive portfolio of more than 3 GW of projects and IPP assets, complemented by more than 1.5 GWh of storage in Europe, North America and Asia, our reach is not only broad, but deeply integrated into building a greener future.

Specializing in the intricate aspects of solar development, construction supervision and dedicated project finance, our efforts are channeled through regional teams of experts spread across several countries. Each project is undertaken with a meticulous approach to environmental protection, ensuring minimal environmental impact while maximizing renewable energy output.

As a leading global green energy conglomerate, Emeren Group does not just participate in the renewable energy sector, we shape its future. By leveraging our extensive footprint and robust industry acumen, we are a key player in the realization of the UN Sustainable Development Goals.

Through relentless focus, we remain committed to advancing cleaner energy solutions, all while adhering unwaveringly to the overarching ESG principles.

## Our Values



### Creativity

We think big and creatively, solving the complex problems in solar to fund, develop and scale solutions that work.



### Collaboration

Quality communication across multifunctional channels with partners, customers, and regulators, makes us a pleasure to work with.



### Commitment

We see things through from start to finish, applying our experience to guide our process to execute on projects swiftly and efficiently.



### Integrity

Rooted in sustainability, we prioritize honesty and transparency. Our decisions are driven by desirable outcomes for all.



### JEDI

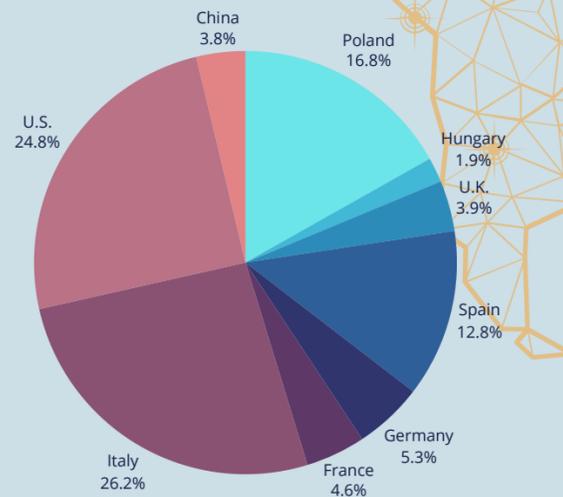
Justice, Equity, Diversity & Inclusion: the core to who we are as an organization, fostering community by amplifying diverse perspectives and breaking detrimental barriers.



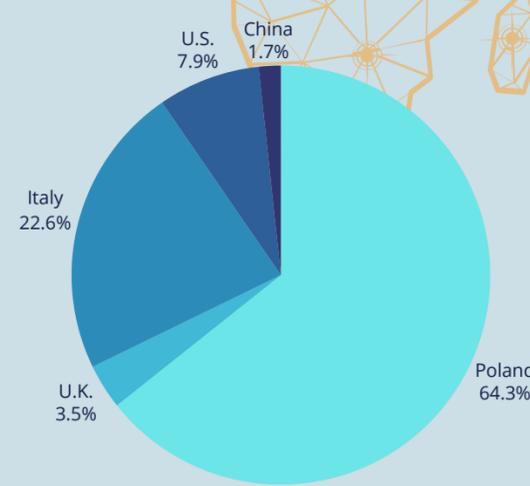
# Our Global Presence



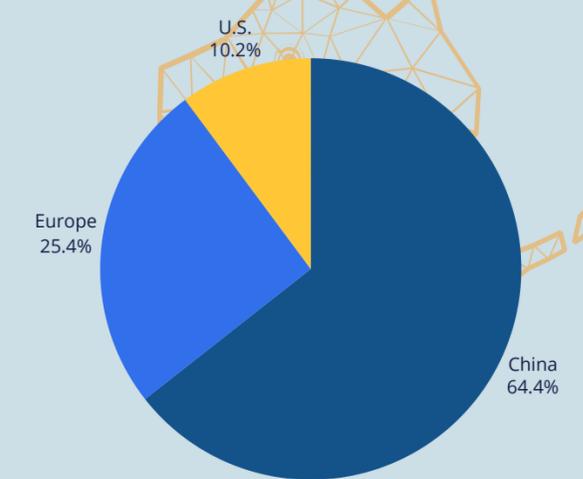
### Solar Advanced-Stage Pipeline



### Storage Advanced-Stage Pipeline



### IPP Assets (MW)



Note: As of June 30, 2023



# 2022 Highlights

Emeren Group Ltd. - ESG Report 2022

192 MW

Monetized projects in 2022

1.5 GWh

Storage Pipeline

18+ years

Founded in 2005

~252 MW

Operational assets under management

931.5

Total number of hours of staff training

3 continents

Regional offices in Europe, North America, and China

>3 GW

Mid-to-late stage project pipeline

\$81.4 million

Revenue 2022

0

Safety accidents fatalities

0

Work-related injuries



# The Role of Sustainable Development Goals

Emeren Group Ltd. - ESG Report 2022

To address global challenges, we have embraced the Sustainable Development Goals (SDGs) as a core component of our sustainability efforts. Our approach incorporates all 17 SDGs, whether directly through our actions or indirectly via their impact. By adopting this framework, we can more coherently contextualize our business, considering the social and environmental impacts of our activities, while recognizing their interconnectivity and interdependence.

**WE SUPPORT**



Emeren Group is committed to responsible business and adheres to the United Nations Global Compact's principles on human rights, labour, environment, and anti-corruption. By aligning its strategies and operations with societal goals and joining the initiative, Emeren aims to drive positive change towards sustainable development within and beyond the industry.

## Highly Relevant SDGs

## Our Impact



Our company is devoted to making a significant contribution to SDG 7 by pioneering solutions that make clean and affordable energy a practical and accessible choice for all. Through our concerted efforts, we envision a world where the transformative power of solar energy is harnessed to foster sustainable development and global well-being.



We commit to driving industrial innovation by enhancing our solar technology, ensuring it's at the pinnacle of sustainability and efficiency. Our endeavors aim to develop infrastructure that prioritizes renewable energy, promoting a more sustainable industrial future.



We aim to redefine urban energy consumption patterns by making solar energy a cornerstone of urban sustainability efforts, promoting cleaner cities and improved urban living conditions. We facilitate the transition of cities towards sustainability by reducing their carbon footprint and reliance on non-renewable energy sources.



We are committed to steering societies towards more sustainable energy consumption patterns by providing a clean, efficient, and renewable source of energy through our solar power plants.



Emeren is dedicated to being a part of the global solution against climate change by reducing greenhouse gas emissions through the proliferation of solar power plants.



# The Role of Sustainable Development Goals

Emeren Group Ltd. - ESG Report 2022

## Relevant SDGs

## Our Impact



We collaborate with local governments and other platforms to provide employment opportunities and electricity at a lower cost to less affluent regions. We utilize our own strength and value to eliminate absolute poverty and facilitate rural revitalization. Through strong collaborations, we believe we can effectively come together to address developmental roadblocks.



We have an extensive network of benefits for employee well-being, encompassing comprehensive health plans and flexible work arrangements.



We provide employees with an inclusive, safe, and positive work environment. We help them earn fair incomes, learn, grow, and lead promising career paths in a positive work environment. We also provide disadvantaged groups with employment opportunities.



Photovoltaic projects, together with energy storage, provide a cleaner, more reliable, and more resilient source of energy. They serve as alternative energy sources to fossil fuels, creating a positive environmental impact and enabling an environmentally-friendly, low-carbon business model that promotes sustainable development and responsible consumption. We also understand the importance of biodiversity and strive to maintain the integrity of habitats when developing solar projects.





# Paving the Path to a Greener Tomorrow

Emeren Group Ltd. - ESG Report 2022

**Our company is dedicated to sustaining the environment, and it's an integral part of our mission. We are committed to preserving the earth's natural resources and beauty. Every facet of our business is influenced by our values to ensure we coexist with the planet in harmony. Through the use of solar energy, we light up the world while upholding our responsibility to protect and preserve our environment.**

## Sustainable Supply Chain Management

Our commitment to sustainability extends to our supply chain. We diligently assess and monitor our suppliers' practices, ensuring adherence to environmental and social standards, thereby fostering a network of responsible and sustainable partnerships.

## Stakeholder Engagement

We believe in the power of collaboration and actively seek partnerships with governments, NGOs, and other corporations to drive sustainable development. Through open dialogue and knowledge sharing, we aim to co-create solutions that address the multifaceted challenges of sustainability.

## Climate Change Mitigation

Through our solar solutions, we are contributing significantly to the global transition towards renewable energy, mitigating climate change by reducing dependence on fossil fuels. We have set ambitious targets aligned with international climate goals to further reduce our carbon footprint.

## Transparent and Ethical Practices

We uphold the highest standards of corporate governance, transparency, and ethics. Our sustainability reports are publicly available, providing insights into our environmental, social, and governance (ESG) performance, thereby building trust among our stakeholders.



## Holistic Approach

Our ethos is rooted in a holistic approach to sustainability. This encompasses not only the ecological footprint of our products but also the socio-economic and environmental impact of our operations. Our aim is to foster resilient communities, protect biodiversity, and reduce greenhouse gas emissions.

## Resource-Efficient Technologies

Innovation is at the heart of our mission. We continuously invest in the selection of top-tier suppliers in order to deploy cutting-edge, resource-efficient solar technologies in every project. The photovoltaic modules we operate are designed for longevity, efficiency, and recyclability, minimizing waste and maximizing energy yield.

## Empowering Local Communities

Sustainability is a collective effort. We actively engage and collaborate with local communities, ensuring that our projects align with their needs and aspirations. By providing education and job opportunities, we are empowering individuals to be agents of change within their communities.

## Biodiversity Conservation

Every project is meticulously planned to minimize its impact on local ecosystems. We undertake comprehensive environmental assessments and implement measures to preserve the natural habitat, protect endangered species, and restore biodiversity.



# Policies & Procedures

We are steadfastly committed to implementing and upholding comprehensive Environment, Social, and Governance (ESG) policies that serve as the cornerstone of our corporate philosophy. Recognizing the imperative role businesses play in fostering sustainability, we proactively adopt environmentally-friendly practices, promote social equity, and maintain the highest standards of governance. Our environmental policies focus on minimizing our carbon footprint, reducing waste, and championing conservation efforts.

Socially, we are dedicated to fostering an inclusive, diverse, and equitable workplace, while also contributing to the welfare of the communities in which we operate. On the governance front, we are unwavering in our commitment to uphold integrity, transparency, and accountability in all facets of our operations. These policies collectively guide our strategic decisions, shaping a more sustainable, responsible, and ethical future for our stakeholders and society at large.

Scope	Policy	Description
Environment	Environmental Protection Management System	This policy outlines the company's approach to minimizing its environmental footprint and details procedures for sustainable resource use, waste management, and emission controls, ensuring compliance with environmental laws and regulations.
	Environmental, Social Responsibility and Governance Management System	This system focuses on the oversight and monitoring of environmental safety practices, ensuring that operations do not pose risks to the environment or public health, and that safety standards and regulations are adhered to.
Social	Supplier Management Policy (SQE)	The Supplier Quality and Evaluation (SQE) policy governs the selection, evaluation, and management of suppliers to ensure quality, compliance, and ethical business practices, fostering long-term and mutually beneficial relationships.
	Privacy Policy	This policy articulates how the company collects, stores, protects, and utilizes personal information of its customers, employees, and partners, ensuring compliance with data protection laws and regulations.
	Group Procurement Management Policy	This policy outlines the principles and guidelines for procuring goods and services within the group, ensuring fair competition, transparency, quality, and cost-effectiveness while adhering to relevant laws and standards.
	Acquisition and Development Management Policy	This policy governs the processes of acquiring and developing assets and businesses, providing a framework for due diligence, valuation, integration, and development to maximize value and ensure legal compliance.



# Policies & Procedures

## Governance

Code of Business Conduct and Ethics

This document outlines the expected standards of behavior and ethical conduct for all employees, fostering a culture of integrity, responsibility, and compliance with laws and regulations.

Whistleblower Policy

This policy establishes mechanisms for reporting unethical or illegal activities within the organization, protecting whistleblowers from retaliation and ensuring that reports are investigated and addressed appropriately.

Health and Safety Policy

This policy outlines the company's commitment to providing a safe and healthy working environment, detailing protocols, and procedures to identify, report, and mitigate workplace hazards.

Equal Employment Opportunity Policy

This policy ensures that all employees and job applicants are treated fairly and equally, regardless of their race, gender, religion, age, or disability, promoting diversity and inclusion in the workplace.

Policy on Prevention of Insider Trading

This policy outlines measures and controls to prevent and detect insider trading, ensuring that employees are aware of and comply with securities laws and regulations.

Anti-Fraud and Reporting Mechanism

This policy details the company's stance against fraud, outlining mechanisms for reporting and investigating fraudulent activities, and specifying measures for prevention, detection, and resolution.

Workplace Discrimination and Harassment Policy

This policy articulates the company's commitment to maintaining a workplace free of harassment of any kind, detailing reporting procedures, investigations, and consequences for violations.

Information Management and Confidentiality Policy

This policy outlines how information, especially confidential and sensitive data, should be handled, stored, and shared within the organization, ensuring data security and compliance with confidentiality laws.

Related-Party Transaction Management Procedure

This procedure outlines the steps for identifying, reviewing, approving, and reporting transactions between the company and its related parties, ensuring transparency, fairness, and compliance with laws.

Group FCPA Policy

This policy outlines the company's commitment to comply with the Foreign Corrupt Practices Act (FCPA), detailing measures to prevent and detect bribery and corruption in international business transactions.



# Policies & Procedures

## Governance

Internal Audit Policy

This policy establishes the scope, authority, and responsibilities of the internal audit function, ensuring that it operates independently and effectively to assess risks, controls, and compliance.

Employee Incentive System

This system outlines the company's approach to incentivizing employee performance through various rewards, recognition, and benefits, aiming to motivate, retain, and attract talent.

Operation and Maintenance Incentive System

This system specifies incentives for the operations and maintenance teams, rewarding efficiency, reliability, and cost-effectiveness in managing and maintaining the company's assets and infrastructure.

To view the complete list of policies, please visit Emeren's website at the following link: <https://ir.emeren.com/compliance-and-policy>





# OUR CORE

- Stakeholder Engagement
- Materiality Assessment & Process
- Materiality Assessment
- Situational Assessment
- Our Board of Directors
- Structure & Framework
- ESG Oversight
- Management Approach
- Operational Compliance
- Ethics
- Data Privacy & Cybersecurity



# Stakeholder Engagement

Our commitment to corporate responsibility is built upon a comprehensive materiality assessment and stakeholder analysis, incorporating a wide range of our impacts and integrating multiple stakeholder perspectives. This enables us to combine financial and non-financial considerations and to focus our actions on issues that are critical for achieving our goals, securing our business model, and managing our impact on society.

	Investors	Regulators & Governing agencies	Clients	Employees	Suppliers
Fundamental expectations	Profitability, clarity, credibility, transparency, effective dissemination of information, disclosures and updates.	Create a positive impact, jobs, and new technologies, drive progress, comply with legislation.	Resources, tools, and expertise to meet their needs. We commit to client satisfaction and investing in client trust.	Excellent working conditions, opportunities to learn and grow, recognition, initiatives for well-being, engagement.	A long-term contractual relationship based on trust, fairness, synergy, and shared values.
Platforms for engagement	Investor and analyst presentations, annual general meetings, quarterly reports, press releases.	Press releases, regular meetings and calls, regular emails, industry events.	On-site visits, installation and maintenance, website, regular meetings and calls, industry events.	Emails, regular meetings.	Questionnaires, emails, regular meetings, calls.
Stakeholders priorities	Energy and emissions, business integrity and ethics, fair labor and human rights, diversity and inclusion.	Energy and emissions, business integrity and ethics, occupational health and safety, fair labor and human rights, product quality, reliability and safety.	Energy and emissions, fair labor and human rights, diversity and inclusion, product quality, reliability and safety, customer engagement and satisfaction.	Energy and emissions, product quality, reliability and safety, occupational health and safety, fair labor and human rights, employee engagement, learning and development, community investment, business integrity and ethics	Occupational health and safety, fair labor and human rights, business integrity and ethics.



# Materiality Assessment & Process

Emeren Group Ltd. - ESG Report 2022

A materiality assessment represents the process of identifying, refining, and assessing potential environmental, social, and governance issues that could affect our company and stakeholders. As a leading solar project developer and operator, we take our social responsibility seriously. Below, we outline the materiality assessment that we conducted last year, starting from preliminary activities which led to it and closing with forward-looking steps.

## STEP 1 | Activities preceding materiality assessment

The ESG working group established a new working group to discuss topics relevant to the materiality assessment. We applied independent standards, such as the GRI standards, to help prioritize our activities and benchmark against our peers. We also identified best practices to improve our strategies, activities, and reporting. Building upon previous initiatives, this report presents our first complete materiality assessment, aimed to determine, rank, and prioritize our material topics in a structured and holistic manner.

## STEP 2 | Material topics identification and survey design

Based on previous knowledge, analysis of sustainability risks and opportunities, industry landscape, and broader social, ecological, and economic trends, we brainstormed prospective topics. The process identified 25 material topics across three broad areas—Environment, Social, and Governance.

## STEP 3 | Data collection

We conducted an online survey to collect stakeholder inputs. The survey was sent to a comprehensive group of stakeholders including the company governance group, consisting of Directors and CEOs of the various entities within Emeren, and general stakeholders, represented by employees, investors, shareholders, clients, government, suppliers, partners, media, and community representatives.

## STEP 4 | Prioritizing material topics

Based on the data analysis, we prioritized the topics from low to high importance to create a materiality matrix, from the joint perspective of the company governance group and general stakeholders. This materiality matrix summarizes Emeren's material topics across the three pillars of sustainability—environment, social, and governance. The X-axis represents the company governance group results, and the Y-axis represents the general stakeholder group results (see materiality matrix on next page).

## STEP 5 | From material topic to strategic priorities

Identifying priority material topics allowed us to redirect our efforts to issues that matter most to our stakeholders. This process helped guide our strategic choices and decisions about specific trajectories of work, projects, and programs. It also served as a foundation for defining priorities and areas of focus for our sustainability strategy.

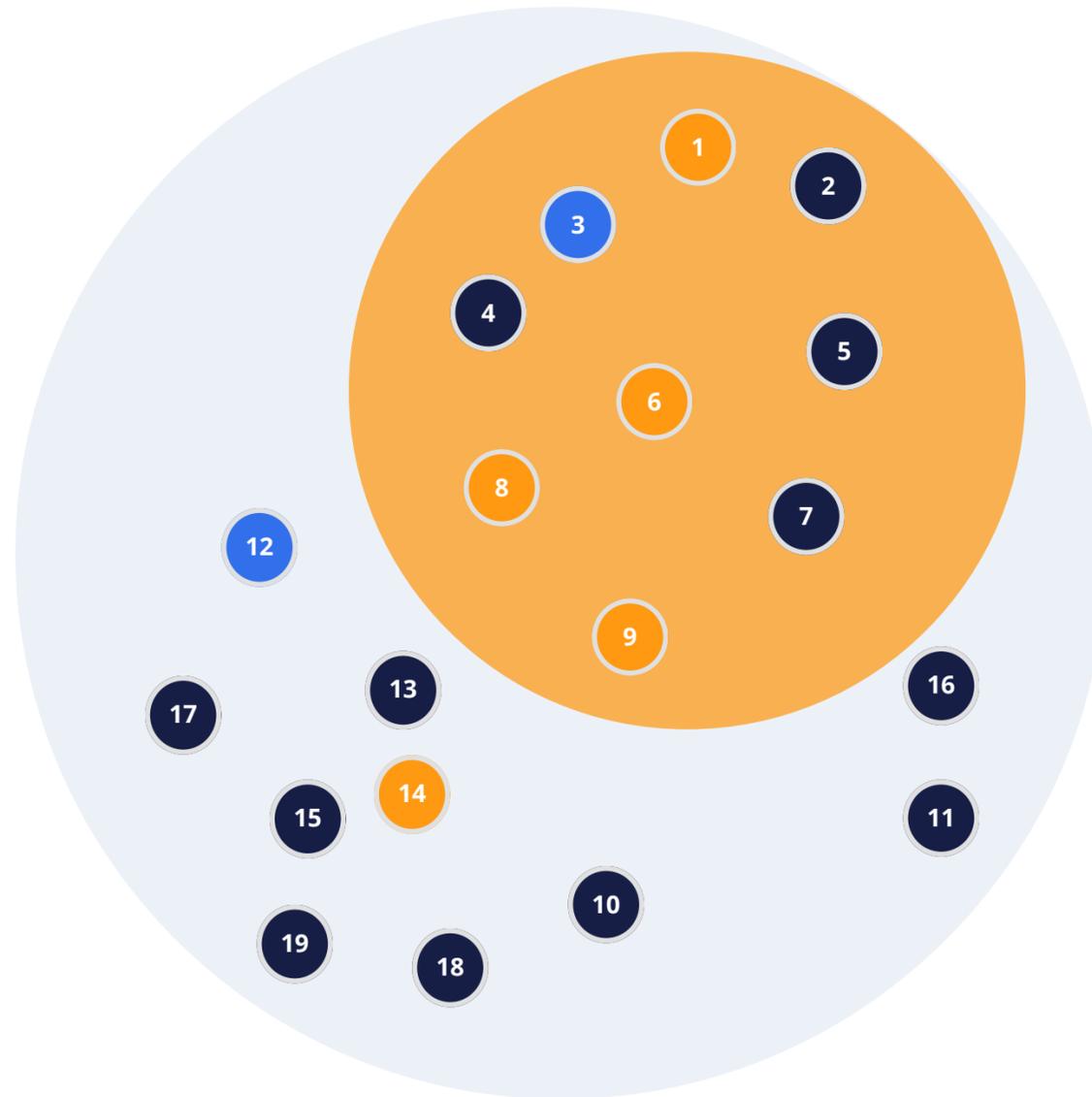
## STEP 6 | Setting up regular materiality assessment

Identifying priority material topics allowed us to redirect our efforts to issues that matter most to our stakeholders. This process helped guide our strategic choices and decisions about specific trajectories of work, projects, and programs. It also served as a foundation for defining priorities and areas of focus for our sustainability strategy.



# Materiality Assessment

Emeren Group Ltd. - ESG Report 2022



## Highly Relevant

- 1. Provide and Develop Clean Energy
- 2. Compliance
- 3. Occupational Health and Safety
- 4. Business Ethics
- 5. Corporate Governance
- 6. Tackling climate change
- 7. Supplier assessment and management
- 8. Greenhouse gas emissions
- 9. Biodiversity protection

## Relevant

- 10. Greenhouse Gas Emissions
- 11. Energy Conservation
- 12. Product Quality and Safety
- 13. Community Engagement
- 14. Talent Development and Training
- 15. Business growth and sustainable profitability
- 16. Optimize customer service
- 17. Prevent the use of child labor and forced labor
- 18. Social license to operate
- 19. Economic performance

- Environment
- Social
- Governance



# Situational Assessment

## Strengths

- Strong brand name and excellent execution track record in the solar industry.
- A long-term trusted customer base.
- A leading global solar developer operating in the largest three solar markets in the world: Europe, USA, and China.
- Diversified portfolios and local experienced teams with market-leading positions in Poland, Hungary, and Spain, and the USA community market in Minnesota, Maine and New York.

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## Weaknesses

- Fluctuating revenue and profit quarter-over-quarter due to the long development cycle of solar projects.

W

## Threats

- Focus on small- and mid-utility sized projects that have limited competition.
- Interest rate increases and labor shortages for solar professionals.
- Broken or high-cost supply chains caused by the pandemic and political issues.
- Entry of traditional energy companies into the renewable energy space.

T

## Opportunities

- Solar is a more affordable and cleaner source of energy than fossil fuels.
- Levelized Cost of Electricity (LOCE) of solar reach parity is even lower than traditional gas and coal.
- Global climate issues driving the demand for solar energy.
- In 2021, the UNFCCC COP 26 asked the world to preserve a livable climate, for which greenhouse-gas emissions must be reduced to "Net Zero" by 2050. Europe, USA, and China are the leading markets to drive these goals with clean energy, including solar.

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# Our Board of Directors

Emeren Group Ltd. - ESG Report 2022

	Audit Committee	Compensation Committee	Nominating Committee	ESG Committee	Independent/ Non-Independent
 Himanshu H. Shah <i>Chairman of the Board</i>			<b>Chair</b>		
 Martin Bloom	<b>Chair</b>	Member	Member	Member	Independent
 Julia Xu	Member		Member	Member	Independent
 Ramnath N. Iyer	Member	<b>Chair</b>		<b>Chair</b>	Independent
 Yumin Liu				Member	





# Structure & Framework

**In every region and country where we operate or own projects, we ensure due diligence for managing risks, and disclosing related information. Our Board of Directors and management team, business units, and departments have built their knowledge and capacity to improve our ESG performance, from decision-making and implementation to monitoring.**

We ensure that our long-term development occurs in line with our evolving corporate governance framework. Our systems of Environmental Health and Safety (EHS) management, internal controls, and compliance management enable us to achieve our stakeholder goals and objectives in an ethical manner. We act to demonstrate our responsibilities, reduce the environmental impact of our operations, and ensure the health and safety of our staff. Our EHS system has been developed in accordance with GB/T 24001-2004 Environmental Management Systems, OHSAS 28001: 2007 Occupational Health and Safety Management System, and GB/T 24252-2009 Risk Management.

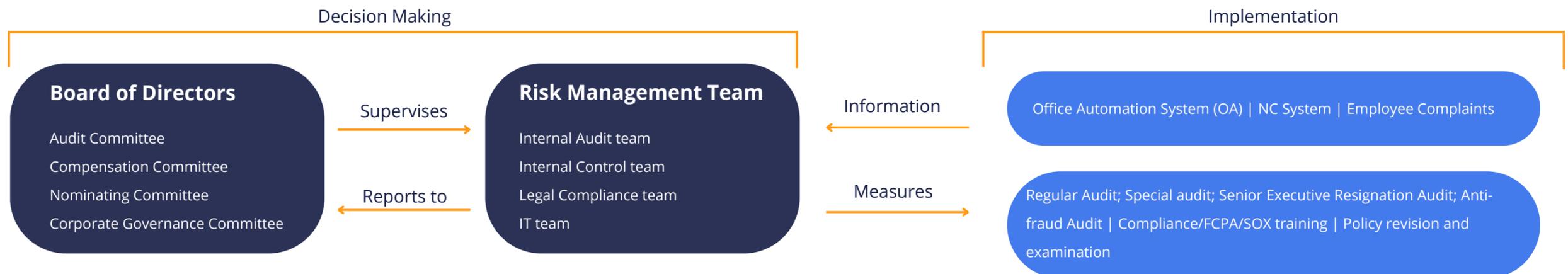
Aligning with our commitment to transparency, we have built a culture of integrity and due process that is driven by data-directed compliance management and a forward-looking, flexible, and efficient compliance system.

Our employees, risk management teams, and independent audit and legal compliance teams constitute the three defensive lines for our system.

We prioritize operational compliance. Maintaining and enhancing our compliance allows us to boost confidence of our investors and strategic partners, improve profitability, increase competitiveness, and provide better development opportunities for each employee. Our operations are conducted in accordance with the USA Foreign Corrupt Practices Act (FCPA), Civil Code of the People's Republic of China, Company Law of the People's Republic of China, Sarbanes-Oxley Act (SOX), and any other national, regional, and local laws and regulations, as well as certain international norms.

To ensure our EHS system remains updated, we follow three approaches:

- Policy framework,
- Performance measurement and evaluation, and
- Awareness building.





# ESG Oversight

Sustainability and ESG-related company strategies have been discussed by the Board on a quarterly basis. In our 2020 Annual Report, we disclosed ESG-related data, including risk management, governance, and carbon emission reduction targets by project. To effectively manage, supervise, and execute our ESG performances, we created a 3-tier system of ESG Oversight, governed by an ESG Committee Charter, in August 2021.

## LEVEL 1 | Decision-making

**The Board** is responsible for ensuring ESG regulations are met, and a forward-looking development strategy is in place. The content of this report also falls under the supervision and authorization of the Board with input and coordination from other departments.

**The ESG Committee** is dedicated to ESG strategy implementation, formulating plans and policies, risk assessment and management, and reporting progress made in ESG ventures. An integrated approach ensures that the ESG Committee works together with other committees to implement ESG goals into our existing business strategies. It is composed of five members and is chaired by Mr. Ramnath Iyer, an independent director of the company.

## LEVEL 2 | Executive

Our **CEO** has the top responsibility for enterprise risk, the highest level of direct responsibility for Emeren's overall strategy.

## LEVEL 3 | Implementation

**The ESG Working Group** was created to implement ESG practices and policies. Members are chosen from various departments including finance, HR, legal, and investor relations. The ESG Working Group falls under the jurisdiction of the ESG Committee and updates on progress made regarding ESG practices are shared with the executive department.

The ESG Committee Charter dictates the principles and purposes of the ESG Committee, as well as the roles, duties, and responsibilities of committee members to create guidelines on process, decision-making, and implementation. Led by the chairman of the ESG Committee, the group works together with the Internal Audit and Internal Control Departments in an integrated and meaningful collaboration.

**Our Internal Control Officer** is responsible for overseeing the company's global EHS program and other ESG programs and reports directly to the CEO. Other duties include updating the Board, promoting the implementation of cross-functional sustainability strategies, and driving the company's sustainability goals, initiatives, and programs. They focus on resource efficiency, supply chain management, risk management, and transparency while utilizing sustainability as a lever to drive growth.



# Management Approach

In compliance with laws and regulations, Emeren implements a culture of integrity and anti-corruption, maintains process and data-driven compliance management, and establishes a forward-looking, flexible, and efficient compliance system. All employees, risk management teams, and independent audit and legal compliance teams constitute the "defensive lines" of this system.

We adhere to the integrated management systems approach where each function is aligned to improve the performance of the entire organization. We work toward coordinated efforts that are greater than the sum of its parts. An integrated system provides a clear, uniform perspective of our entire organization. The integrated nature of our approach and dedicated compliance to relevant standards make it easier to adopt new systems in the future.

### Our management, at all levels, align with the following objectives:



Surveillance, evaluation, & improvement



Reputation, transparency, & trust



Commitments, standards, & requirements

1

## FIRST LINE OF DEFENSE

### All Employees

#### Ethical Business Conduct

- All employees have a duty to report any known or suspected violation of the Code, including any violation of laws, rules or Company policies. If they know of or suspect a violation of the Code, they immediately report the conduct to their supervisor and IC Dept.

2

## SECOND LINE OF DEFENSE

### Risk Management Teams

#### Internal control and compliance

- Laws and regulations compliance
- Anti-Corruption compliance
- Information security compliance
- Auditing compliance
- Internal control
- Transaction risk control

3

## THIRD LINE OF DEFENSE

### Independent audit and legal compliance teams

#### Internal control and compliance

- Grant Thornton provides independent audit for consolidated financial statements.
- The company established a Legal Compliance Procedure for international business, and gradually improves the system with the development of international business.



# Operational Compliance

We believe that by maintaining and enhancing operational compliance, we can strengthen the confidence of our investors and strategic partners, improve profitability, and increase competitiveness. In every region and country where we operate or own projects, we engage with qualified law firms to pursue compliance of risk management, sound information disclosure, efficient governance, and we require that all levels of employees adhere to corporate policies.

## Policies & Procedures

Our policies and procedures cover all commitments important to Emeren, and ensure compliance throughout the organization. All compliance reviews are performed according to our quality standards. Guiding our commitments and ensuring alignment with best global practices, we have the following certifications and systems in place:

- Environmental Management System
- OHSAS
- Risk Management System

Our operations comply with the Sarbanes-Oxley Act, the USA Foreign Corrupt Practices Act (FCPA), Civil Code of the People's Republic of China, Company Law of the People's Republic of China, and any other applicable international, national, regional, and local laws and regulations.

## Risk Management

We conduct business globally with offices in 11 different countries, operate solar power projects, and sell electricity to the local or national grid. As such, an effective risk management strategy is imperative to our operations. Our risk management strategy is authorized and supervised by the Audit Committee and is conducted by the Internal Audit and Internal Control Department. To safeguard against conflict of interest, the Audit Committee of the Board of Directors is led by an independent director.

## Internal Audit and Internal Control Department

We use the Internal Audit and Internal Control Department to conduct risk assessment reports as well as submit risk management strategies to the Audit Committee and management. Emeren's Audit Committee is led by one of our independent directors. The role of the Audit Committee (the "Committee") is to assist the Board with its oversight over risk management for the company.

The Committee reviews the effectiveness of the company's internal controls and risk management system and approves the statements to be included in the Annual Report.

The Internal Audit and Internal Control Department is responsible for conducting a risk assessment report that includes risk management strategies, which are submitted to the Audit Committee and management. Risks and opportunities covering the scope of the environment, climate change, and social aspects pertaining to the business and operations of the company have been included in our annual reports.

The application of these policies has been effectively executed by corresponding departments and regularly monitored by the Board and Internal Audit Control Department.



Conflicts of Interest



Confidential Information



Protection & Use of Corporate Property



Gifts & Entertainment



Insider Trading



Reporting of Violations



# Operational Compliance

## Legal Compliance

The identification and control of legal risks are extremely important to our business development and operations. We have a long-standing commitment to conduct our business in compliance with applicable laws and regulations. This commitment enables us to advance our mission while operating efficiently and profitably with a strong focus on eco-friendly practices. To ensure legal compliance in all businesses of the company, we introduced a specialized training including internal online exercises and external lectures on improving compliance.

In our weekly meetings, we added communication and analysis sessions to learn about newly promulgated regulations. In addition, to familiarize employees with legal and finance-related regulations, the company invites external technicians to provide special training to related departments regularly.

## Internal Controls

To reasonably ensure the efficiency of operations, compliance with laws and regulations, and the reliability of financial reporting, we established an internal control system according to the FCPA and SOX standards, which must be adhered to by the Board, the management team, all employees, and all subsidiaries of the company.

This system of control procedures, known as the Internal Control Policies and Standards, seeks to define the ownership, working procedures, and the authorization of creating, reviewing, signing-off, publishing, implementing, controlling, and auditing relevant official documents/files.

## Some key ESG policies for Emeren Group

### Overall

ESG Committee Charter

### Environmental

- Environment Protection Management System
- Environmental Safety Supervisory Management System

### Social

- Supplier Management Policy (SQE)
- Privacy Policy
- Group Procurement Management Policy
- Acquisition and Development Management Policy

### Governance

- Code of Business Conduct and Ethics
- Whistleblower Policy
- Health & Safety Policy
- Equal Employment Opportunity Policy
- Policy on Prevention of Insider Trading
- Anti-Fraud and Reporting Mechanism
- Workplace Discrimination and Harassment Policy
- Information Management and Confidentiality Policy
- Related-Party Transaction Management Procedure
- Emeren FCPA Policy
- Internal Audit Policy
- Employee Incentive System
- Operation and Maintenance Incentive System





# Ethics

**At Emeren, we have adopted a Code of Business Conduct and Ethics that each member of our organization abides by. The procedures established protect the interests of employees and stakeholders, ensure proper and ethical behavior, and compliance with the laws in addition to internal policies and procedures.**

We recognize that corrupt business practices represent a significant investment risk and create negative externalities for the broader economy and society. We have established effective procedures to protect the equality of all employees, comply with the principles of honesty and integrity, prohibit corruption and bribery, prevent insider trading, avoid conflicts between business and employees' personal interests, human rights, responsibility for the health and safety of all employees, and environmental protection.

Everyone has an obligation to safeguard the company's confidential information and intellectual property as well as to ensure that the company's practices pursuant to financial reporting, international trade, and competition are legal and compliant. The company has maintained a clean record and has not been sanctioned by relevant authorities for unfair competition in its operations or violation of antitrust and anti-monopoly laws.



The **Internal Control Department** is an anti-bribery compliance function responsible for establishing, evaluating, and improving the anti-bribery management system.

Additionally, substantial policies and implementation measures have been established to require all employees to act lawfully, ethically, and responsibly. Regarding regulation, Emeren Group complies with the U.S. Foreign Corrupt Practices Act. Additionally, a Whistle Blower Policy along with Anti-Fraud and Reporting Mechanisms have been enacted to further ensure ethical practices.

As a NYSE-listed company, we follow the Sarbanes-Oxley Act to maintain the integrity of our financial recordkeeping. We conduct anti-fraud investigations, OA real-time monitoring, payment reviews, and executive internal audits to prevent corruption.

Our **Employee Handbook** clearly outlines our core business ethics and values. All our employees receive mandatory training and development to align with our goals and objectives. We ensure our employees understand and comply with our Code of Business Conduct and Ethics, Emeren FCPA Policy, Policy on Prevention of Insider Trading, and Information Disclosure Control and Procedures.

The application of these policies has been effectively executed by corresponding departments and regularly monitored by the Board and Internal Audit Control Department.



# Data Privacy & Cybersecurity

Cybersecurity is an aspect of management and governance that has grown in importance in recent years, and at Emeren we are cognizant of the growing risks and committed to taking measures to contain and protect against such risks. To this effect, we periodically conduct dedicated sessions for all employees on protective measures, warning signs of attacks, and system recovery. In addition, we have internal systems and structures led by designated personnel.

The Board of Directors and company management regularly discuss the company's preparedness on cybersecurity issues, the security of external facing and internal systems, and steps being contemplated to maintain/enhance cybersecurity going forward.

## Data Management Systems

We have multiple data systems in place, formulated for specific tasks to regulate and safeguard company data designed to:

- Ensure the security and availability of the company's end-user computing,
- Ensure the integrity and accuracy of the processed data; and
- Manage data processing developed by the user (such as report development) and application software of the reporting system (such as programs developed using Microsoft Excel, Microsoft Access and other spreadsheet tools).
- Sensitive information is also regulated by access control of computers that strictly abide by the information security management system.

The additional specific measures undertaken in the areas of cybersecurity and data protection are as below:

### 1. Payment alteration processes (in MSD and OA)

We have strengthened our payments processes to confirm with the organizations when they request their bank details are changed. This also involves minimizing email/electronic usage and confirmations via phone calls and other authorizations for confirmations of changes.

### 2. User training

Implemented or reviewed formal training and awareness for employees covering cyber security and email phishing. The training includes specific material on how to identify and report malicious and fraudulent websites. A formal process is also being implemented for reporting suspicious emails to the IT team. Our IT department is also working to constantly improve anti-phishing controls by informing domain blacklisting, file type blocking and other in-house measures.

### 3. Mail filtering

Updating the existing mail filtering technology to improve rates of spam and malicious email detection and blocking. Strengthen gateways with additional measures in a layered approach to filtering.

### 4. MFA (Multi-Factor Authentication)

The company is working to enable MFA and have it enforced on accounts and all other applicable services, such as third-party hosting providers and remote access methods, and as a priority, ensure privileged accounts are protected with MFA.



# Data Privacy & Cybersecurity

## 5. Access control and credential use

Rules governing passwords, with requirements for complexity and changes, to back up the MFA requirements.

## 6. Enable number-matching and additional context in MFA applications

Do not allow user consent for applications accessing Microsoft 365 and Azure (this may require users to receive admin approval when using new applications). Consider if conditional access policies can be put in place and are appropriate, e.g. sign-ins can only be received from set IP address if static or device. Consider using FIDO2 hardware-based MFA for key users.

## 7. Technical controls

We conducted a security review with its IT provider to ensure that relevant security logging is enabled to a suitable standard. This is to enable post-incident investigations and increase the likelihood that future incidents can be investigated fully if they occur.

## 8. Legacy protocols such as IMAP should be disabled unless they are required for business operations

We updated existing mail filtering technology to improve rates of spam and malicious email detection and blocking. Strengthen gateways with additional measures in a layered approach to filtering.

## 9. Microsoft's default protection has been enabled

Centrally managed antivirus or endpoint protection is enforced on all corporate devices to detect and block malicious infections resulting from email attachments.

## 10. All corporate devices and systems will be regularly patched and kept up to date.





# OUR PEOPLE

- Our Culture
- Health, Safety & Wellness
- Diversity, Equity & Inclusion
- Human Capital Development





# Our Culture

At Emeren, we believe that fostering a strong culture is vital to our success in driving sustainable development and positive impact in the renewable energy sector. Our company culture is rooted in our commitment to environmental, social, and governance (ESG) principles, which guide our decision-making processes, operations, and interactions with stakeholders. We aim to create a working environment that is inclusive, collaborative, and aligned with our core values.



## **Creativity**

We think big and creatively, solving the complex problems in solar to fund, develop and scale solutions that work.

## **Collaboration**

Quality communication across multifunctional channels with partners, customers, and regulators, makes us a pleasure to work with.

## **Commitment**

We see things through from start to finish, applying our experience to guide our process to execute on projects swiftly and efficiently.

## **Integrity**

Rooted in sustainability, we prioritize honesty and transparency. Our decisions are driven by desirable outcomes for all.

## **Justice, Equity, Diversity & Inclusion (JEDI)**

Justice, Equity, Diversity & Inclusion: the core to who we are as an organization, fostering community by amplifying diverse perspectives and breaking detrimental barriers.





# Health, Safety & Wellness

**In the pursuit of advancing a sustainable future, our commitment to ensuring the health, safety, and wellbeing of our team, contractors, and the communities in which we operate is steadfast. At Emeren, we uphold a culture where safety and wellness are ingrained in every aspect of our work, contributing to our unwavering dedication to delivering solar solutions that empower a cleaner, more resilient world.**

Emeren considers safeguarding our staff's health and safety the foundation of its business operations. As a solar power developer and operator dedicated to powering the world with green and clean energy, we are also devoted to empowering our staff by creating a safe and healthy working environment. Employees always have the right to decline tasks they believe are unsafe, and our primary objective is to uphold a policy of zero harm in relation to health and safety efforts. In the reporting period, our robust health and safety protocols have facilitated a resilient operational framework, reflecting a significant reduction in the number of incidents and accidents. Our continuous improvement strategy, fortified by rigorous risk assessments and regular safety audits, has driven enhanced performance and assurance in our health and safety practices.

### Key achievements:

We established our Occupational Health and Safety framework in accordance with OHSAS 18001. All our Business Units are responsible for employee safety and health, from the project level to the operational level.

We issued policies for the emergency response plan to identify potential threats to employees' health and safety and prevent and reduce the risks.

From a human resource distribution standpoint, most of our employees are working in our offices, while a limited number of our employees are working on-site at one of our project locations.

Our contingency plans and emergency-response policies are designed for different occupations and situations, including:

- Emergency Response Plan for Personal Injuries and Deaths
- Photovoltaic Power Plant Operation Regulations
- Compilation of Emergency Disposal of Photovoltaic Power Station
- Emergency Response Plan for Flood and Flood Control Disaster
- Zhejiang Ruineng New Energy Power Plant Emergency Plan
- Occupational Health & Safety Policy

### Key data:

	Work-related injuries	0
	Total employee daily working hours	8
	Safety accidents fatalities	0
	Security management system revision	1
	Following the completion of each photovoltaic project, safety briefing inspections are conducted, alongside seasonal safety inspections for the finished power plants.	



# Diversity, Equity & Inclusion

As a global entity with offices in 11 countries, we are committed to being an equal-opportunity employer in every tier of our organization. We recognize that our strength lies in the diversity of our workforce. We are committed to creating an inclusive environment that respects and values individuals from all backgrounds, regardless of their race, gender, age, sexual orientation, disability, or any other characteristics.

We strive to foster a workplace where everyone feels safe, respected, and empowered to contribute their unique perspectives and talents. We actively promote diversity and inclusivity through our recruitment practices, employee training, and ongoing diversity initiatives.

Talent acquisition, internal pay scales, and promotions are based on the qualifications, capabilities, skills, and potential of candidates. We aim to provide an inclusive, equal, active, and discrimination-free working environment for all our employees. We unequivocally prohibit any forms of discrimination and harassment in the workplace based on race, gender, color, social status, ancestry, disability, sexual orientation, age, religious beliefs, or any other characteristic protected by local laws and regulations.

### Equitable Opportunities

Equal opportunity is the bedrock of our hiring and promotion practices. We ensure that all our processes, from recruitment to appraisals, are devoid of biases.

### Inclusive Culture

We aim to create a workplace where all our employees feel valued, respected, and encouraged to share their unique perspectives.

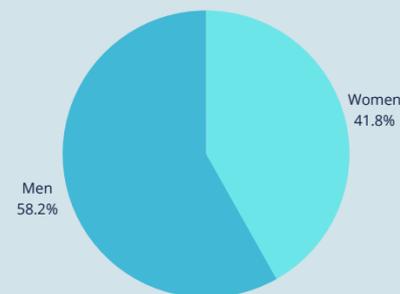
### Continuous Learning

We believe that the journey towards a fully inclusive and equitable workspace is continuous. We are committed to learning, growing, and adapting our DE&I initiatives based on feedback and the evolving needs of our workforce and community.

### Workforce Diversity

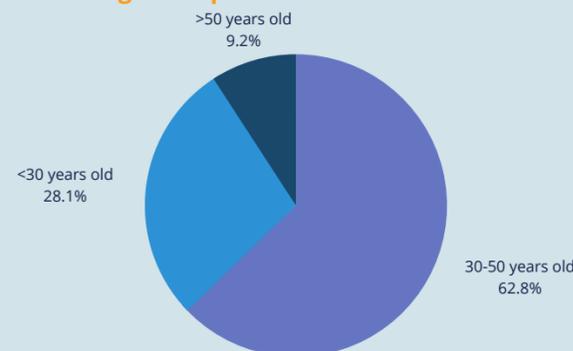
We are proud of the diverse workforce we have built and continue to nurture. Our team spans various ethnicities, genders, ages, and backgrounds. This diversity ensures that we approach problems with a myriad of perspectives, fostering innovation and excellence. We are continually working to enhance representation at all levels of our organization, especially in leadership roles.

#### Gender Balance

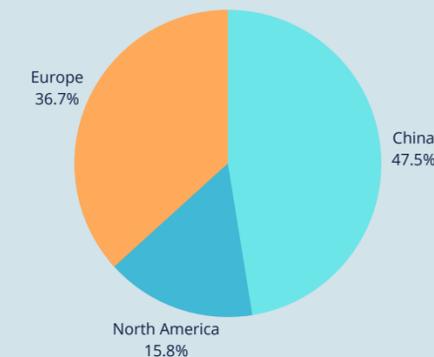


Note: As of December 2022

#### Age Group



#### Geography



#### Turnover Rate



21.97%



# Human Capital Development

We recognize that our success is driven by the collective expertise, dedication, and passion of our employees. We are committed to fostering a culture of inclusivity, continuous learning, and professional growth, while also ensuring the health, safety, and well-being of our workforce. Our Human Capital Management and Development practices are designed to attract, retain, and develop top talent, while aligning with our sustainability goals and principles.

## Talent Management and Succession Planning

Identifying, nurturing, and retaining talent are essential to our long-term success. We have a comprehensive talent management and succession planning framework in place to ensure the continuity of key roles and maintain organizational resilience. This framework includes regular performance assessments, individual development plans, leadership development initiatives, and career progression opportunities. By providing clear pathways for growth and advancement, we foster a culture of internal promotion and talent retention.

## Employee Well-being

We prioritize the well-being of our employees, recognizing that a healthy and engaged workforce drives innovation and productivity. Our wellness programs encompass physical, mental, and emotional well-being, offering initiatives such as flexible work arrangements. We encourage work-life balance, stress management, and open communication channels to support our employees' overall well-being.

## Remuneration and Benefits

Our remuneration structure incentivizes employees to deliver on our strategy while aligning with the interests of our stakeholders.

Our remuneration policy is consistent with effective risk management, and compensation is aligned with all local labor laws and regulations. Considerations are given to ensure competitive salaries in comparison to other companies in the industry.

In 2020, we adopted flexible working hours, which includes working from home and developing schedules for in-office employees for social distancing purposes. Our standard working hours of full-time employees are 40 hours per week; however, we have been applying it with reasonable flexibility. In addition to Employers Liability Insurance, we provide the following supplemental commercial insurances:

- USA/Canada - Health Insurance, Dental, Ophthalmology, Flexible Spending Accounts
- USA - Worker's Compensation Coverage, 401K plan, Life Insurance, Vision Plan
- Canada - RRSP Plan
- China: Pension insurance, medical insurance, maternity insurance, work-related injury insurance, unemployment insurance
- Europe - As per local laws and regulations
- Directors and Officers (D&O) Liability Insurance



# Human Capital Development

## Learning & Development

Emeren provides adequate support for our employees' skills and personal development. We encourage and incentivize our employees to fulfill their career goals at all levels, regardless of working experiences, level of positions, and skill sets. We promote internally before searching outside the organization, first identifying which current staff members have the required skills and qualifications for any newly opened roles.

## Talent Incentives

We have instituted an annual performance review system that incorporates KPIs/Goals, constructive feedback, and training and development opportunities. Incentives are provided to the top performers in each region, including salary adjustments, cost of living adjustments, and performance bonuses. In 2022, we evaluated our bonus and incentive programs to better recruit talent in an increasingly competitive market. We raised fixed salaries and introduced new spot bonus and performance bonus programs, as well as an employee referral incentive program. Additionally, we introduced country-specific incentive programs that cater to business development milestones. For new hires, we offer training and orientation to ensure they are equipped with the necessary knowledge and skills to succeed in their roles and adapt to our company culture. During performance review periods, our HR team also discusses career prospects, personal development, and interests with employees.

## Autonomy & Decision Making

We believe in empowering our employees by giving them a significant level of autonomy in their work. Recognizing the potential in each team member, we allow them to have decision-making power within defined boundaries, aligning with our Delegation of Authority (DOA) policies. This not only fosters a sense of ownership and responsibility but also nurtures an environment where innovative ideas can flourish.

We value the ideas and input from all employees, encouraging them to share their thoughts and suggestions for improvement openly. We appreciate the diversity of thoughts, and every contribution is acknowledged as a step towards our collective success.

Recognition plays a crucial role in our culture. To honor the hard work and achievements of our team members, we have incorporated regular spot bonus programs. These programs aim to appreciate and reward the outstanding efforts of our employees, ensuring that their dedication and contributions do not go unnoticed.

## Prioritizing Employee Engagement

Our employees are integral to our success at Emeren, and we strive to maintain open channels of communication with them. Here are two ways that we achieve this:

- **Employee Opinion Surveys:** To provide our employees with an accessible platform to voice their feedback, we conduct annual opinion surveys. Using the data, we can gain insights into our strengths and weaknesses as an employer, and guide our efforts toward policy enhancements and employee retention.
- **Staff Outings:** To foster team building and camaraderie, we organize 1-2 staff outings per region where we have operations on an annual basis.



# Human Capital Development

Emeren Group Ltd. - ESG Report 2022

## Staff Training Program 2022

Total number of hours of staff training

931.5

Topics covered in training sessions:

- Network security and phishing email prevention
- Authorized approval management system (DOA) and process
- Acquisition and development training include examination
- Whistleblower Policy Reminder
- Business Ethics and Employee Code of Conduct
- OA System training to Employee
- FCPA and Anti Fraud
- Company information Confidentiality Reminder to all employees
- Strengthen seal use risk control
- Business hospitality system training
- Compliance and technical training for new employee entry
- Release and training of the company's new system
- Stock option open window/ black out period announcement and insider trading

Total number of employees trained

177



# OUR PLANET

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- Leading the Way
- Our Impact
- Risks & Opportunities
- Emissions
- Responsible Procurement and Supply Chain
- Biodiversity Protection





# Leading the Way

**We strive to develop and operate solar photovoltaic plants in an environmentally-friendly and sustainable manner to provide steady renewable energy across the world. Emeren brings clean, steady, and affordable energy solutions globally to national grids, local industries, and communities—thereby benefiting local stakeholders.**

In an era where the equilibrium of our Planet is dangling on a delicate balance, the commitment to environmental stewardship is a cornerstone of our identity at Emeren. This section of the report underscores our initiatives, progresses and aspirations in fortifying our environmental commitments.

Our holistic approach to environmental management is manifested through a myriad of initiatives - from optimizing energy efficiency of our operations and minimizing waste, to investing in cutting-edge technologies.

The insights provided herein offer a transparent window into our environmental practices and impacts, painting a comprehensive picture of how we integrate sustainability into every facet of our business. By driving forward our agenda toward a more sustainable future, we aim at contributing to the conservation and restoration of our natural environment, as well as generating long-term value for our shareholders and fostering a resilient, sustainable business model.



## Centralized Control Center

To guarantee the safe, efficient, and continuous operation of distributed PV power plants and power supply to the grid, we launched the distributed PV power plant centralized control center monitoring system.

This system aims to achieve remote monitoring and efficient management of PV plants. We have established a unified real-time historical database platform and a centralized monitoring system for our existing PV plants.

The monitoring platform takes distributed PV power plants as core assets and uses the cloud to centrally monitor, store, display, and analyze the status of distributed rooftop power plants to master the management and experience of PV power plants operations. Also, the system analyzes equipment status through fault-event records and examines the power-generation capacity of power plants through a comprehensive analysis.

The system can effectively guide the production process management and gradually promote the automation, centralization, and intelligence of monitoring. It tackles the challenges caused by our wide geographical distribution of our power stations, few operation management personnel, and large operation management workloads. The system applies the unified supervision and multi-layer monitoring of photovoltaic power stations in different regions.



# Our Impact

In 2022 the energy produced by our solar PV power plants has reached record levels. With the increasing demand for clean energy sources, solar power has emerged as a key player in the transition towards a sustainable future. The efficiency of solar PV technology has vastly improved in recent years, making it a more viable option for large-scale energy production.

21,217 cars removed<sup>1</sup>  
from the road



22,913 households powered<sup>2</sup>



In 2022 our IPP assets  
produced approximately:

**244** GWh

equivalent to:



52,948 metric tons of<sup>3</sup>  
CO<sub>2</sub> reduced



81,333 Electric Vehicles powered<sup>4</sup>

1 Assuming that an average car emits about 4.6 metric tons of CO<sub>2</sub> per year.

2 Average American homes for one year. Assuming the average annual electricity consumption of a U.S. residential utility customer is approximately 10,649 kWh (EIA).

3 Assuming 1 GWh of solar power generation can offset around 217 metric tons of CO<sub>2</sub> emissions according to the U.S. Environmental Protection Agency.

4 Assuming an electric vehicle (EV) like a Tesla Model 3 uses around 15 kWh per 100 km. Assuming an average driving distance of 20,000 km per year.



# Risks & Opportunities

Bridging the gap between climate risks and corporate opportunities is essential to succeed in the long term. Emeren takes an integrated approach to climate risk by explicitly incorporating it into the considerations for development of its projects. This also forms part of the overall risk appraisal process for all divisions.

The physical risks at all the areas of IPP operations, and where the solar projects are being considered, forms an integral part of the business case analysis of the company. Where such risks are identified, action plans and operations are implemented to deal with the eventuality of the risk materializing.

Our operations/locations in Europe and the USA have largely been free in past years of any notable climate related events. The company nevertheless remains vigilant for developments from changes to weather patterns brought about by climate change. In China, the company operates in some areas with moderate risk of seasonal flooding. The company has a detailed operational plan for both protection and safety of employees and assets, as well as for business continuity, in such cases.

Being in the renewable power generation and renewable power project execution sectors, the company faces a low level of transition risk from legislative changes related to the climate. This is likely to be confined to potential requirements to completely move away from any fossil sourced electricity, that we may currently be using as a result of the location of our offices.

The company's operations are geared to facilitating a switch away from fossil fuels to a greener method of generating power. In this regard, the growing focus on climate related risks also presents enormous opportunities for the company, as demand for its specialized knowledge in setting up large and medium scale solar projects is likely to remain healthy as a result of growing awareness of the negative effects of GHG emissions and the drive to mitigate this.





# Risks & Opportunities

Emeren Group Ltd. - ESG Report 2022

Risk	Time Horizon	Potential Impact	Mitigation
Natural disaster (e.g., floods, earthquakes, landslides, mudslides, sandstorms, drought)	Immediate to long-term	Delay in project development, damage to projects, loss of connectivity to power grid, disruption in O&M services, potential personal injuries or fatalities	Implementation of disaster risk reduction strategies; site selection considering geographical risks
Seasonal variations	Short-term	Volatility in revenue due to changes in electricity generation	Investment in energy storage, demand forecasting
Economic impact due to natural disasters	Medium- to long-term	Adverse effect on economy, infrastructure, and communities, potentially affecting business operations	Diversification of project locations; community engagement and support; diversification of business operations
Reduced solar radiation	Short- to long-term	Decrease in electricity generation and revenue	Diversification of project locations, implementation of energy storage solutions





# Risks & Opportunities

Emeren Group Ltd. - ESG Report 2022

### Opportunity

### Time Horizon

### Potential Impact

### Action

Emerging markets expansion

Short-term

Access to new clients and revenue streams

Research emerging markets, establish local partnerships, adapt project development offerings to local needs.

Technological innovation

Short- to medium-term

Enhanced product offerings and higher efficiency

Continue to improve the supplier selection process, stay updated on industry advancements.

Government incentives

Immediate to long-term

Financial support and regulatory environment

Continue to work closely with local governments, engage in advocacy for solar development.

Increase in battery energy storage solutions

Immediate to short-term

Diversified business lines and access to new markets

Expand network and continue to invest in trainings and research on the latest technologies.





# Emissions

In our ongoing journey towards sustainability, we present the emissions analysis focused mainly on our offices. It is important to note that we do not use any fossil fuels to generate power at our power plants, which are all based on solar power generation.

Likewise, our core business involves planning solar power plants, and developing and running some of them. In the future, we plan to calculate the carbon footprint payback time of our plants to provide a more comprehensive view of their sustainability.

## Scope 1, 2 and 3 Emissions

### Scope 1 - 28 tCO<sub>2</sub>e

Direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization. Our Scope 1 emissions comprise emissions related to travel by company owned vehicles, and to the emissions from use of gas for office heating purposes, primarily from our Italy and Hungary offices.

### Scope 2 - 42 tCO<sub>2</sub>e

Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Scope 2 emissions are primarily the bought-out electricity at all our units.

### Scope 3 - 174 tCO<sub>2</sub>e

The result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly affects in its value chain. Scope 3 emissions included in this report are emissions related to employees' business travel (Category 6 as per GHG Protocol) and employee commuting (Category 7).

#### Note

The reference for description of the Scopes is the US Environmental Protection Agency (US EPA).

## Categories of Emissions

### Methane for Heating Offices

Accounting for 3% of our total emissions, this category includes methane used for heating our office spaces. Despite being a small fraction of our overall emissions, we are exploring alternatives to reduce this further.

### Electricity

This makes up 17% of our emissions. While we utilize electricity for office operations, we are continually striving to improve energy efficiency and integrate more renewable energy sources.

### Commuting of Employees

Representing 29% of our emissions, employee commuting is a significant contributor. We are actively encouraging more sustainable commuting methods and considering remote working options where feasible.

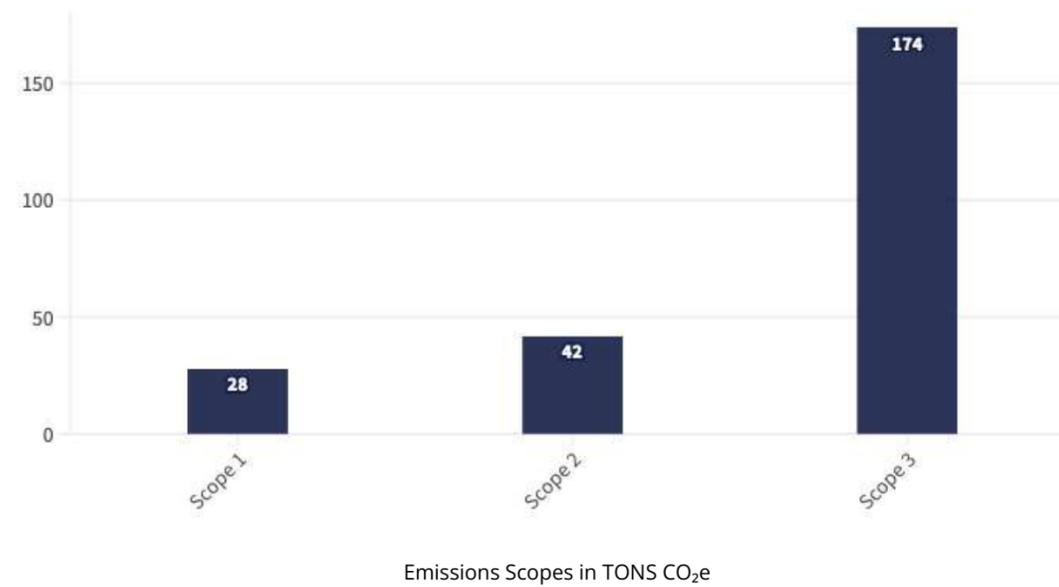
### Business Trips

The largest contributor at 51%, business trips remain a challenging yet crucial aspect of our operations. We are committed to reducing these emissions through virtual meetings and prioritizing essential travel only.

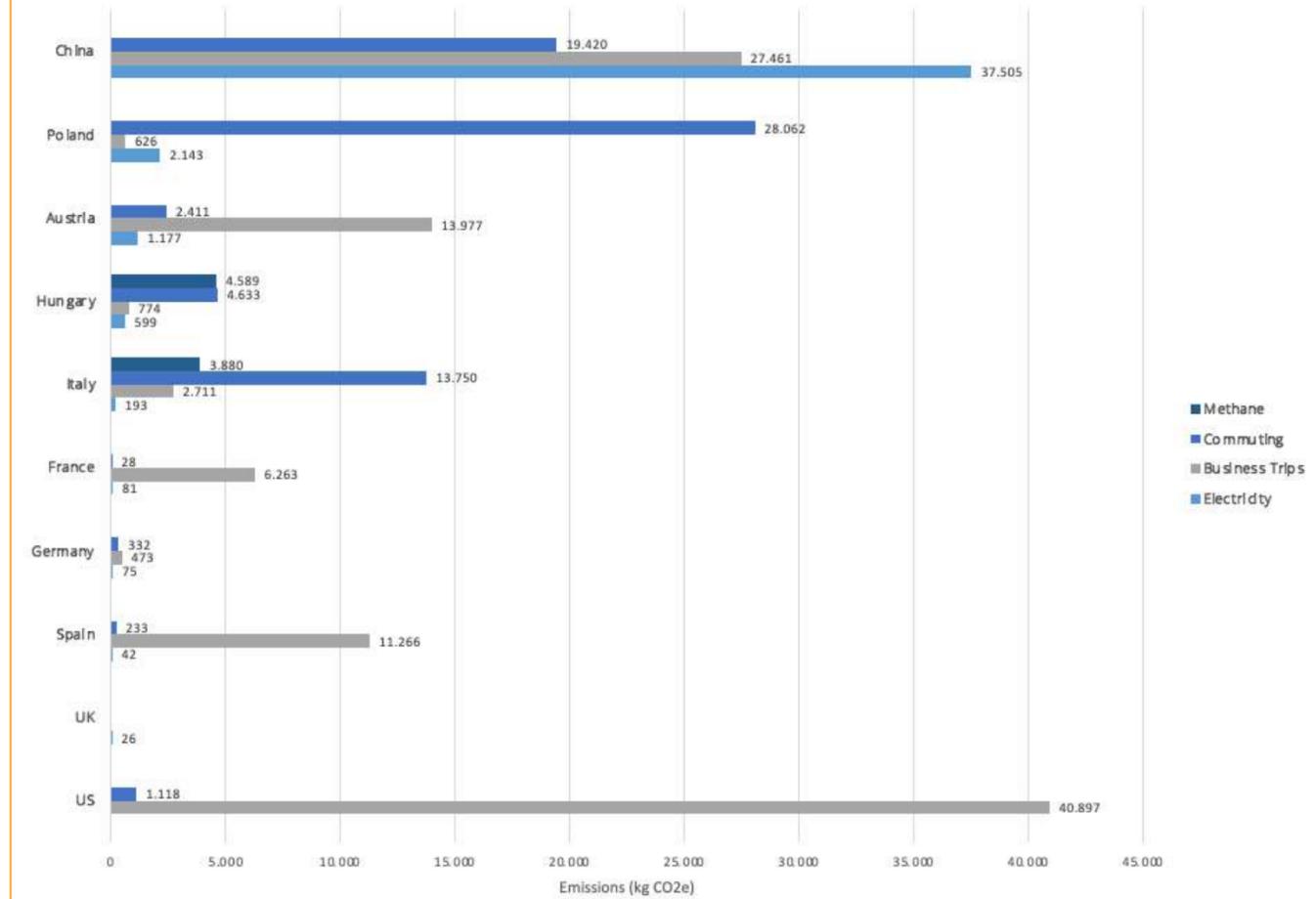


# Emissions

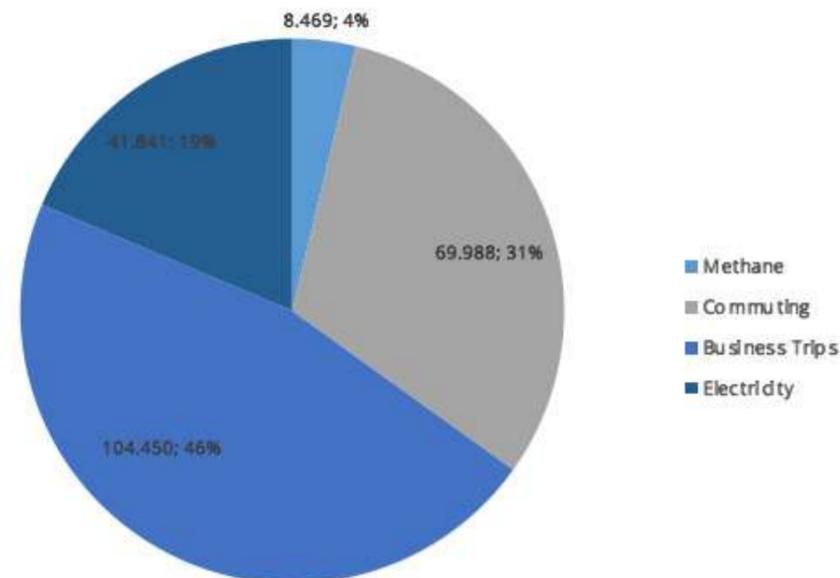
## Total Emissions (tons CO<sub>2</sub>e)



## Emissions by Country (kg CO<sub>2</sub>e)



## Emissions by Electricity, Commuting and Business Trips (kg CO<sub>2</sub>e)



### Note

Emissions in CO<sub>2</sub> equivalent have been estimated using the emission conversion factors as per DEFRA's "GHG Conversion Factors 2022" and have been calculated by the third-party Turnkey Group based on data provided by us.



# Responsible Procurement and Supply Chain

Emeren Group Ltd. - ESG Report 2022

**Emeren takes proactive management measures to control our direct impact on the environment, society, and community, and from our supply chain. We acknowledge that supply-chain risks include a wide range of ESG topics, including labor, occupational health and safety, biodiversity, climate change, pollution prevention, and stakeholder relations. In 2022, we worked with approximately 50 suppliers, 90% of which hold an ISO certificate.**

We are committed to working with suppliers who share our values and adhere to high environmental, social, and governance standards. In this section, we provide an overview of our efforts to ensure responsible procurement and supply chain practices.

## Supplier Management Policy

Emeren's approach to supply chain management is consistent with the broader approach to ESG risk management—a parallel process of ongoing ESG due diligence and intensive stakeholder engagement. By incorporating due diligence at every step in our value chain, we hold our suppliers accountable in terms of their environmental and social impacts, product and/or service quality, and business ethics.

Additionally, manufacturers are expected to abide by our Supply Chain Management Handbook, which includes provisions related to human and labor rights, environment, business integrity, anti-corruption, and conflicts of interest.

## Supplier Evaluation and Audits

We conduct rigorous evaluations and audits of our suppliers to assess their compliance with our Supply Chain Management Handbook. These evaluations include site visits, document reviews, and interviews to ensure that our suppliers meet our stringent requirements. We also collaborate with third-party auditors to conduct independent assessments when necessary.

## Sustainable Sourcing

We strive to source materials and components that have minimal environmental impact and meet recognized sustainability criteria. Whenever possible, we prioritize suppliers who offer products and services with high energy efficiency, low carbon footprint, and reduced use of hazardous substances. This approach enables us to reduce our environmental footprint and contribute to a more sustainable renewable energy sector.

## Local Community Engagement

We actively engage with local communities where our suppliers operate to understand their social and economic needs. We encourage our suppliers to engage in community development initiatives, support local employment opportunities, and respect the rights and cultural heritage of the communities. Through these efforts, we aim to create positive social impacts and foster sustainable relationships within the supply chain.



# Biodiversity Protection

Emeren is committed to responsible investing and will abstain from engaging in or funding businesses and projects that, as much as possible, lead to the involuntary displacement of communities or are in violation of national or international biodiversity and cultural resource conservation laws, such as the World Heritage Convention and Convention on Biological Diversity.

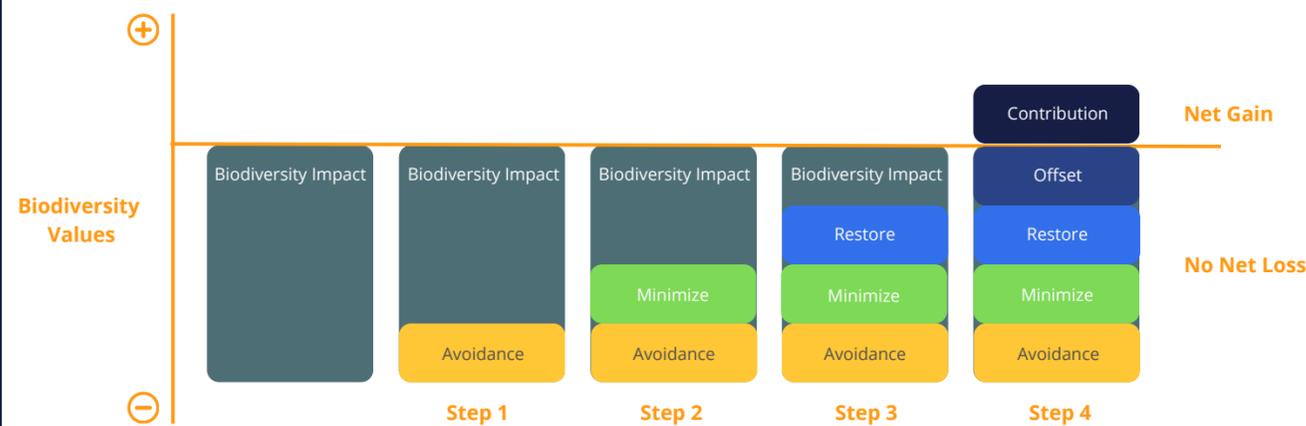
## Mitigation hierarchy

For every development project under consideration, Emeren will conduct a thorough assessment based on the nature and scale of the investment to identify, minimize, or manage potential adverse risks and impacts. These impacts could be related to previous land use, land acquisition, land contamination, water stress, extreme weather events, and other natural hazards amplified by climate change. Moreover, the evaluation will consider risks to surrounding communities, their livelihood, health, safety, biodiversity, and cultural resources.

The mitigation hierarchy is a structured approach used in environmental management to avoid, minimize, restore/rehabilitate, and offset adverse impacts to biodiversity as a result of development projects. The hierarchy prioritizes avoiding negative impacts first. If avoidance is not possible, efforts should be made to minimize the impact, followed by restoration or rehabilitation of the affected environment. As a last resort, if impacts are still unavoidable and irreparable, offsetting measures, such as compensatory conservation actions, are implemented to balance the loss in biodiversity or environmental value.

In 2022, we successfully acquired a 50GW solar power plant in UK that is currently embracing the integration of a biodiversity initiative. This significant program is meticulously designed to foster the creation of novel habitats, primarily through the strategic planting of suitable species. The initiative aims to curate a diverse environment that provides essential shelter and foraging possibilities, benefiting a variety of species such as reptiles, amphibians, invertebrates, and small mammals, thereby enhancing the ecological richness of the area.

Moreover, this year the company made a strategic acquisition of a solar project developer based in Italy, which holds a profound commitment to biodiversity protection, ensuring that it is an integral component of every project undertaken.





# APPENDIX

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- GRI Content Index



# GRI Content Index

**Statement of use** Emeren Group Ltd has reported the information cited in this GRI content index for the period January-December 2022 with reference to the GRI Standards.

**GRI 1 used** GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION (Page Number)
GRI 2: General Disclosures 2021	2-1 Organizational details	1-51
	2-2 Entities included in the organization’s sustainability reporting	6
	2-3 Reporting period, frequency and contact point	6
	2-6 Activities, value chain and other business relationships	9
	2-7 Employees	34
	2-9 Governance structure and composition	22
	2-10 Nomination and selection of the highest governance body	23
	2-11 Chair of the highest governance body	22
	2-12 Role of the highest governance body in overseeing the management of impacts	22
	2-13 Delegation of responsibility for managing impacts	23
	2-14 Role of the highest governance body in sustainability reporting	22
	2-15 Conflicts of interest	25-26-27
	2-16 Communication of critical concerns	25-26-27
	2-18 Evaluation of the performance of the highest governance body	23-25
	2-19 Remuneration policies	35
	2-22 Statement on sustainable development strategy	6-13
	2-23 Policy commitments	14-15-16
	2-24 Embedding policy commitments	24-25-26
	2-25 Processes to remediate negative impacts	26
	2-26 Mechanisms for seeking advice and raising concerns	27-28
2-27 Compliance with laws and regulations	14-15-16-23-25-26-27-28-47	
2-29 Approach to stakeholder engagement	18	



# GRI Content Index

GRI 3: Material Topics 2021	3-1 Process to determine material topics	19
	3-2 List of material topics	20
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	10
	201-2 Financial implications and other risks and opportunities due to climate change	41-42-43
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	26
	205-2 Communication and training about anti-corruption policies and procedures	37
GRI 302: Energy 2016	302-1 Energy consumption within the organization	44-45
	302-4 Reduction of energy consumption	44-45
	302-5 Reductions in energy requirements of products and services	44-45
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	47
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	44-45
	305-2 Energy indirect (Scope 2) GHG emissions	44-45
	305-3 Other indirect (Scope 3) GHG emissions	44-45
	305-4 GHG emissions intensity	44-45
	305-5 Reduction of GHG emissions	44-45
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	46
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	34
	401-3 Parental leave	35
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	34
	403-2 Hazard identification, risk assessment, and incident investigation	34
	403-3 Occupational health services	35
	403-5 Worker training on occupational health and safety	37
	403-6 Promotion of worker health	33-35
	403-8 Workers covered by an occupational health and safety management system	35
	403-9 Work-related injuries	33
	403-10 Work-related ill health	33
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	37
	404-2 Programs for upgrading employee skills and transition assistance programs	35
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	34
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	None
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	None
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	None
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	None
	417-3 Incidents of non-compliance concerning marketing communications	None
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	None



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