

# Rush to renewables

**TOWARD MIGRANT WORKER RIGHTS AND  
A JUST ENERGY TRANSITION IN THE GULF**

NOVEMBER 2024

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# Foreword

by **Giulia Laganà**, Co-director, Just Transition Centre – International Trade Union Confederation

The energy transition is unfolding across the world at speeds that would have been unimaginable only a few years ago: essential, if we are to avert climate catastrophe. The Gulf states, still a bastion of fossil fuel production, are no exception. Massive investments in wind and solar energy there are also creating jobs – another essential component of a swift and sustainable transition, at least where jobs are secure, safe and decent. But corporations and other investors perpetuating the exploitative labour model which has long dogged the region, based on low wages, subcontracted and outsourced migrant workers, and the Kafala (“sponsorship”) system, which ties workers’ visas to their employers, threaten to undermine the just transition the world so desperately needs.

This timely analysis by the Business & Human Rights Resource Centre (the Resource Centre) and Equidem highlights critical challenges – as well as opportunities – associated with the growth of renewables in the Gulf. These are challenges not just for unions and human rights advocates, but also businesses seeking to adhere to international standards and establish a level playing field in the global renewables rush. Trade unions and organisations (including the Resource Centre and Equidem) have painstakingly documented the abuses which migrant workers in the Gulf have endured for decades across all sectors of the economy, from fossil fuel extraction to construction, care work and hospitality. Gains have been made, with legislation in most of these states now allowing for some mobility of migrant workers under the Kafala system, but – as this report documents – much more remains to be done, and particularly if we are serious about ensuring a global just energy transition.

The union movement has long called for a just transition, one that places workers at the centre of efforts to transform polluting industries or create new, cleaner ones. **It is indeed crucial that green jobs be created, but they should be good green jobs** – guaranteeing secure employment, social security, adequate remuneration and, crucially for a region that is breaking global heat records, safe and healthy working conditions. For this to happen, migrants’ and workers’ representatives need to have a seat at the table when governments and businesses devise

and implement investment plans. The Resource Centre’s analysis shows that, on almost all of these counts, most of the practices and policies of the companies analysed fall short of international standards. Findings by Equidem’s team of worker-investigators highlight difficulties encountered in merely accessing and interviewing fellow workers on renewables projects in the Gulf. Moreover, the ability of these workers to organise and unionise in the region is almost inexistent, and avenues for redress and accountability are severely limited.

At a global level, multinational corporations – including just three of the ones profiled by the Resource Centre – have entered into global framework agreements with international sectoral union federations, which should guarantee equal labour standards across all company operations and value chains. A number have published information on just transition planning, but – as this analysis shows – the disconnect between businesses’ stated environmental and climate goals and their commitment to respect labour rights is often stark, given that unions and the migrant workers themselves are largely excluded from just transition planning.

For an energy transition to take place that is both fast and fair, the renewables sector must chart a different path to the one taken by the polluters – a path which respects planetary limits, but also upholds the rights of all workers, including the most vulnerable. This includes the Gulf. The recommendations set out by the Resource Centre and Equidem offer a way for business and investors to ensure fundamental respect for migrant workers’ rights in a region traditionally hostile to them – through sensitised and appropriate risk assessment and mitigation, heightened human rights due diligence and swift, comprehensive remedy for migrant workers for harms incurred in pursuit of the energy transition.

We stand at a unique moment in the evolution of the global energy system: as this report outlines, the opportunity to deliver on the promise of a just transition for some of the most vulnerable workers, is both possible and imperative.

A photograph showing several construction workers in orange safety vests and blue hard hats working on a large-scale steel rebar structure. The workers are positioned on a grid of rebar, with some holding long rods. In the background, there are tall, cylindrical structures, possibly part of a power plant or industrial facility, under a clear blue sky with some clouds. The overall scene is an active construction site.

# Executive summary

No region is immune to the reality of the climate crisis: extreme weather events, mass climate-induced migration, and direct consequences for the cultures, livelihoods, and lives of workers and communities. In response, even the world's most notorious petrostates have rightly joined the global effort to avert climate catastrophe. Between 2013 and 2022, the Gulf Cooperation Council (GCC) countries – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE) – grew renewable energy production from “close to zero” to 5.6GW; 10% of all renewable energy production in the Middle East and North Africa (MENA) region. By 2030, every GCC member is committed to at least partial reliance on renewables, requiring a rapid rise in private sector investment and installation.

But in a region ranking among the lowest on all human rights indices and depending heavily on a vulnerable migrant workforce, business focus on the rights of the workers who will enable this critical renewables expansion – and related corporate profit – must rise in commensurate measure.

As this analysis by the **Business & Human Rights Resource Centre** and **Equidem** establishes, however, the sector risks falling woefully short in identifying and mitigating worker rights risks, even as it expands at pace. If the opportunity of a just transition is to be realised – through commitment to human rights due diligence, respect for worker rights and fair negotiations, and shared prosperity – embedding migrant worker rights in business operations is non-negotiable.

## Grounded in migrant workers' experience, the report includes:

- ➔ A mapping of the renewable energy industry landscape across the six GCC countries, identifying the companies awarded work to develop, construct and maintain solar, wind and green hydrogen facilities, highlighting the many global renewable energy companies operating or planning to operate in the Gulf;
- ➔ An illustrative country case study, based on migrant worker testimony exposing abusive working conditions in the renewable energy sector, including on solar and wind farms, energy retail and parts distribution in the UAE;
- ➔ An analysis of how top renewables companies' policy commitments measure up against the **human rights standards** most relevant to migrant workers and a just transition, highlighting better performers as well as key policy gaps in the sector as it capitalises on the opportunity of GCC renewables expansion.

The Gulf’s new appetite for renewable energy expansion comes not a moment too soon: its acute climate vulnerability, vast petrowealth, and status as one the [biggest producers of CO2 emissions per capita](#) demand continued strengthening of its climate policies and targets. Home to [approximately 14%](#) of the world’s migrant workforce, however, the region is notorious for severe risks to these workers in the construction, engineering, security and facilities management sectors crucial to renewable energy expansion.

Rampant rights abuses inflicted on migrant workers ahead of international mega-events, including the [Qatar 2022 World Cup](#) and [Dubai Expo](#), revealed the true cost of international investment in the Gulf without adequate human rights due diligence. Urgent business attention to these persistent, wide-ranging labour rights abuses against migrant workers, despite working in service of ‘green’ and ‘clean’ industry, is essential.

Testimony collected by Equidem from migrant workers subcontracted and deployed to UAE solar and wind farms throws this issue into sharp relief. This research revealed:

- ➔ Egregious recruitment, working and living conditions reported by construction workers, security guards, technicians, office staff and delivery drivers.
- ➔ Evidence of the worst forms of forced labour and violations of UAE labour law, including withholding of worker identity documents and prohibition on changing employers: signs of the region’s notorious Kafala system.
- ➔ Systemic barriers to remedy, including inadequate grievance mechanisms and retaliation for speaking up.

“*The risk is high while working on a ply sheet, and it harms the body. Mostly there is a possibility of getting burnt, and new workers get hurt most often because they are not given training before work. I was burnt by fire many times and had blisters on my hands.*

*During that time, I was not even given money for treatment, and I was not even given leave to rest. I complained about this to the company official but instead of solving my problem the official started shouting at me and said that I got hurt due to my carelessness. After that, no other worker can complain because we are afraid.”*

**Suaid**, an Indian worker subcontracted for a solar equipment packing company

Further, challenges experienced by Equidem in reaching and interviewing workers underscore the opacity of the industry and the inaccessibility of many of its operations, increasing risk of abuse. Workers often live and work in remote, desert locations, behind project gates only accessible with security cards. Multiple layers of subcontracting obfuscate business relationships, diluting and obscuring responsibility for workers’ rights.

Given the prevalence of these risks for migrant workers, companies operating in the region have well-established protocol to follow. International standards demand, at a minimum, human rights and environmental due diligence, adequate and sensitised risk assessment, labour rights monitoring and enforcement, and robust remedy mechanisms to respond to rights risks.

“*One of us was dismissed by the company when they went to social media and complained about the solar company overworking them and paying them less salary. He was accused of inciting his fellow colleagues, so they decided to let him go.”*

**Alex**, a Ugandan solar panel installer for a UAE facilities management company

Nevertheless, an assessment of developers' and contractors' commitments to human rights, relevant processes, and just transition planning in the region reveals gaps regarding respect for migrant workers. Only just over half of the 27 sampled companies has published a human rights policy aligning with international standards and under half explicitly recognised migrant workers' vulnerabilities. While almost every company has published a supplier code of conduct, only half covered respect for fundamental rights at work.

Alarming, no company publicly aligned with the international standard on fair recruitment – the [Employer Pays Principle](#) – and only one quarter expressly prohibited recruitment fee-charging, reflecting a damning lack of attention to one of the largest risks facing migrant workers in the Gulf today. Three companies – **EDF**, **Engie** and **TotalEnergies** – had entered into a Global Framework Agreement with an international trade union federation, but did not outline how they supported worker representation in the Gulf. Most alarmingly, given the industry's vital role in the region's belated but welcome transition from fossil fuels, few companies committed to engage unions in social dialogue as part of their global just transition planning; none recognised the importance of engaging with migrant workers.

“ Most of the contract promises have been broken. I no longer have trust in my employer. They promised to pay 10 dollars for every hour of overtime, but they only pay five dollars an hour. They also promised to adjust our food allowance every year and they have not even though life has become very expensive in the UAE.”

Chinyere, a Nigerian security guard for a European energy developer

The push for net zero in the Gulf is to be lauded, but building an industry at the expense of migrant workers undermines the very concept of a just transition. The findings of this report are a call to action for developers and others in the energy value chain who regard regional expansion as a boon to their green credentials and see it reflected in their bottom line.

**With rigorous risk assessment, human rights due diligence, attention to [fair recruitment](#) and pathways to [remedy for abuse](#), a just transition in the burgeoning Gulf renewable energy sector that attends to migrant rights is possible.** However, the transition in Gulf petrostates is unfolding fast. The renewables sector has a shrinking window within which to implement safeguards for workers engaged in constructing and maintaining the solar, wind and green hydrogen facilities elevated as a route to meet 2030 targets.

If this window closes, so too will the opportunity for a just energy transition in the Gulf.



# Recommendations for renewable energy developers and contractors

## Just transition

- ➔ Publicly support calls for Gulf governments to protect freedom of association and collective bargaining for migrant workers as a condition of doing business or investing in their countries;
- ➔ Use leverage and resources to ensure workers in Gulf operations access decent work, including ensuring workers receive a decent wage in full, secure employment and freedom of expression in the workplace;
- ➔ Commit to social dialogue with trade union representatives, or alternative worker representative structures where union rights are restricted – including relevant unions from origin countries and global union federations – on protecting migrant worker rights as part of plans for transition to renewable energy in the in the Gulf; and,
- ➔ Consult with key stakeholders including civil society organisations and diaspora groups regarding risks to migrant workers, their inclusion in social dialogue, and pathways for remedy and relief.

## Value chain transparency

- ➔ Acknowledge the heightened risk to human rights and labour standards from consortia operations and business relationships reliant on subcontracting and outsourcing;
- ➔ Commit to increased transparency on business partnerships on projects for which the company is a developer or contractor. Disclosure should include the names of contractors, subcontractors, labour suppliers and recruitment agencies, and information on the criteria and processes used to award licenses and contracts, the outcomes of award processes and the agreements signed with government off-takers, in line with with [EITI recommendations](#); and,
- ➔ Adopt, publish, cascade and enforce binding supply chain standards to ensure labour standards are upheld across all operations and at every level of subcontracting.

## Human rights due diligence, including risk assessment

- ➔ In line with international standards of equality and non-discrimination, adopt a migrant worker-centred approach to identify migrant workforces and high-risk sectors within Gulf business operations and the value chain – including the use of construction, security, transportation/delivery subcontractors and locally-headquartered labour suppliers;
- ➔ Conduct robust and transparent human rights due diligence on potential consortium partners and contractors prior to entering into agreements; and,
- ➔ Ensure clarity of roles and responsibilities for respecting labour rights among consortia operations and business relationships reliant on subcontracting and outsourcing.

## Fair recruitment

- ➔ Commit to international standards aligning with the implementation of the Employer Pays Principle, that employers and not workers should bear the costs of recruitment rather than the the worker; and,
- ➔ In collaboration with business partners, undertake migration corridor and process mapping to identify:
  - ➔ High-risk jurisdictions for fee-charging;
  - ➔ Recruitment channels, intermediaries and in/formal agencies to improve visibility of recruitment costs.

## Redress and remedy

- ➔ Respond proactively when concerns are raised regarding business practices or abuse within the value chain, investigate allegations immediately and privilege workers' testimony;
- ➔ Where abuse has occurred, commit to remedy abuse in line with [best practice](#), in consultation with migrant workers or their representatives within reasonable and transparent timeframes;
- ➔ Communicate transparently with all stakeholders on the process, results and remedy administered; and,
- ➔ Ensure protections for whistleblowers and labour rights defenders.



# Introduction:

## Threats to a fast and fair energy transition for the Gulf's migrant workers

The climate crisis looms large – a threat to people, planet and our human rights. A global transition to renewable energy sources cannot come quickly enough. In 2023, prior to UAE-hosted COP28, the International Energy Agency (IEA) urged governments to support [five pillars for action by 2030](#), including goals to triple global renewable power capacity and reach net zero by 2050. Undoubtedly, as the climate crisis exacerbates weather extremes and adverse human rights impacts [across the globe](#), decarbonisation of the global economy is crucial. The role of business and investors will be central to ensure this shift is swift.

But the transition must also be sustainable, centered on [private sector commitment](#) to fair [negotiations](#), [human rights and social protection](#), and [creating shared prosperity](#). This includes a duty of care for companies and governments to protect workers from harm during the energy transition, assessing and mitigating impacts on livelihoods, working conditions and living conditions, including the fundamental rights of workers. Binding commitments to engage in meaningful, ongoing social dialogue with unions, or alternative structures if necessary, are essential.

To date, global business conversations on the energy transition have failed to adequately assess what this transition will mean for migrant workers – who make up [164 million global supply chain workers](#) and who contributed [USD 840 billion in remittances](#) during 2023. In the Gulf, home to 24.1 million of those workers, governments' just transition initiatives have focused primarily on [up-skilling](#) for nationals. Whereas in the Gulf, social dialogue and fundamental freedoms of movement, expression and association are either illegal or limited in practice, companies should urgently consider how to ensure worker representation and empowerment, while respecting the jurisdictions where they operate. As this report sets out, this represents a significant gap to close for renewables companies operating in the Gulf, and risks to migrant workers should be paramount considerations.

### Core principles for a just transition to clean energy



The Resource Centre consolidated these principles from our research on the just transition and tested them with partners and allies.

For more information see [here](#).

## Energy diversification in the GCC

The Middle East, including the GCC countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE, is not only historically reliant on fossil fuels, but is particularly climate vulnerable. The Gulf is extremely arid, water scarce and temperatures are [rising](#) to unprecedented and deadly levels. [Rapid desertification in the Gulf](#) means some areas may be [uninhabitable](#) by 2100. [Extreme weather events](#) are occurring more frequently, with [direct consequences](#) for workers.

At the same time and across the board, the GCC states showcase a high solar irradiation rate and resource potential – for both solar photovoltaic and concentrated solar power – as well as moderate to good wind conditions. Conditions for renewable energy expansion are ripe, including the [ease of financing](#) and increasingly cost-effective and competitive nature of renewable technologies.

Currently, renewables still accounts for only a [small proportion](#) (3%) of the GCC's total electricity capacity, yet, for a region with a [rapidly growing domestic energy demand](#), renewables is looking increasingly attractive. The [last decade](#) has seen a [significant increase](#) in renewable energy capacity across the Gulf – to over 5.6GW in 2022 and constituting 10% of the MENA region's total market, compared with close to zero a decade earlier, according to the International Renewable Energy Agency (IRENA).

Three Gulf states – the UAE, Qatar and Saudi Arabia – are among the [Middle East's top 10](#) renewables capacity holders, despite only recently expanding into the sector. This expansion is driven by a [broader economic diversification strategy](#) the region is pursuing beyond oil and in line with [climate commitments](#), including on renewables specifically. [All six have adopted renewable energy targets](#), ranging from reaching 50% generation (Saudi Arabia) to 15% (Kuwait) by 2030. Nonetheless, [Climate Action Tracker](#) finds commitments for the two Gulf states assessed – [UAE](#) and [Saudi Arabia](#) – to be “critically insufficient”, which should prompt rapid expansion of renewable energy in the region.



## Risks to migrant workers in the Gulf

In the Gulf, where low-wage migrants, largely from South Asia, South-East Asia and East Africa, form the majority of the private sector workforce, human and labour rights violations, including the worst forms of forced labour – retention of documents, debt bondage, isolation, withholding of wages and employer intimidation – are [well documented](#). These cover the full recruitment cycle including exploitative recruitment conditions while seeking work in countries of origin, [abusive living and working](#) – including egregious health and safety risks – conditions in countries of destination, and inadequate access to redress and remedy for harm in either location.

### The “double impact” of the climate crisis for migrant workers

[Equidem has found](#) migrants to the Gulf – including the renewable sector – are already experiencing climate-linked harms in their home countries including flooding, drought, tropical storms, industrial pollution and disease outbreaks. Such workers are “doubly impacted” by the climate crises: fleeing from [lost livelihoods](#) and disasters at home, they arrive to scorching temperatures in the Gulf.

Heat exposure is a [salient risk](#) in the Gulf, where migrants undertake hard, physical labour in high humidity and temperatures that [can exceed 55°C](#). These conditions have pernicious, fatal health impacts, from cramps, fainting and heat stroke to long-term disease, including cardiovascular and chronic kidney disease. Government “midday work bans” fall short in protecting workers, and employers have been [accused](#) of limiting access to water, breaks and shade. As the climate emergency exacerbates the frequency, length and severity of heatwaves, the effects of heat exposure will only worsen.

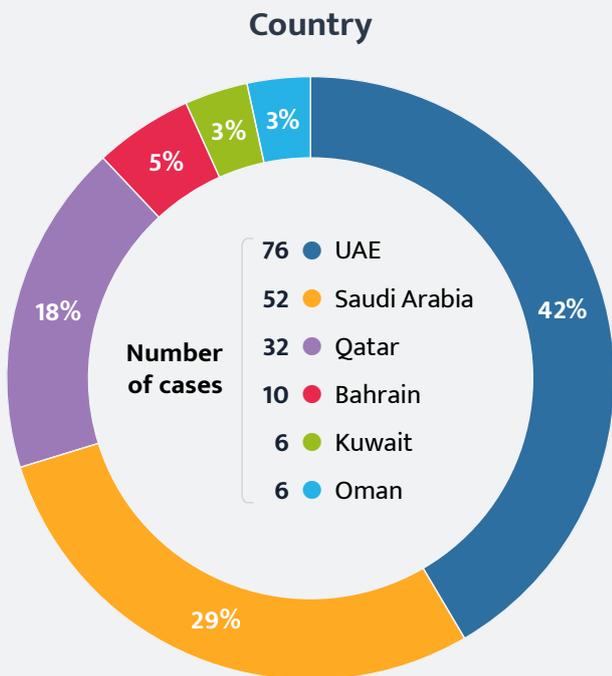


Reforms in Qatar, UAE and Saudi Arabia – partly driven by international scrutiny surrounding mega-events including the [Qatar 2022 World Cup](#), [Dubai Expo 2020](#) and [Saudi Arabia 2034 World Cup](#) bid – purport to address some of the worst forms of exploitation for migrants. However, NGOs and rights experts say claims of abolishing the Kafala system are, at best, inadequately implemented – and at [worst risk becoming undone](#). Years of research by the [Resource Centre](#) and [Equidem](#) reveal egregious, ongoing abuse perpetrated against migrant workers, overwhelmingly from Asia and Africa, across sectors and countries in the GCC. In practice, workers remain tied to employers and unable to leave the country without permission, subject to absconding charges filed by employers in reprisal for raising grievances. Severe restrictions on freedom of association and collective bargaining in law and practice are particularly problematic.

Since 2016, the Resource Centre has recorded over 1,000 allegations<sup>[1]</sup> of abuse impacting migrant workers across the Gulf countries; 182 cases were recorded in the 18 months to September 2024.

Construction and engineering workers consistently account for the highest proportion of cases – 44 (24%) – while other sectors providing crucial, outsourced services for the implementation of renewables projects are also linked to the abuse.

## Abuses by country, category, sector and nationality



### Abuse category



### Sector



### Nationality of migrant workers impacted<sup>[2]</sup>



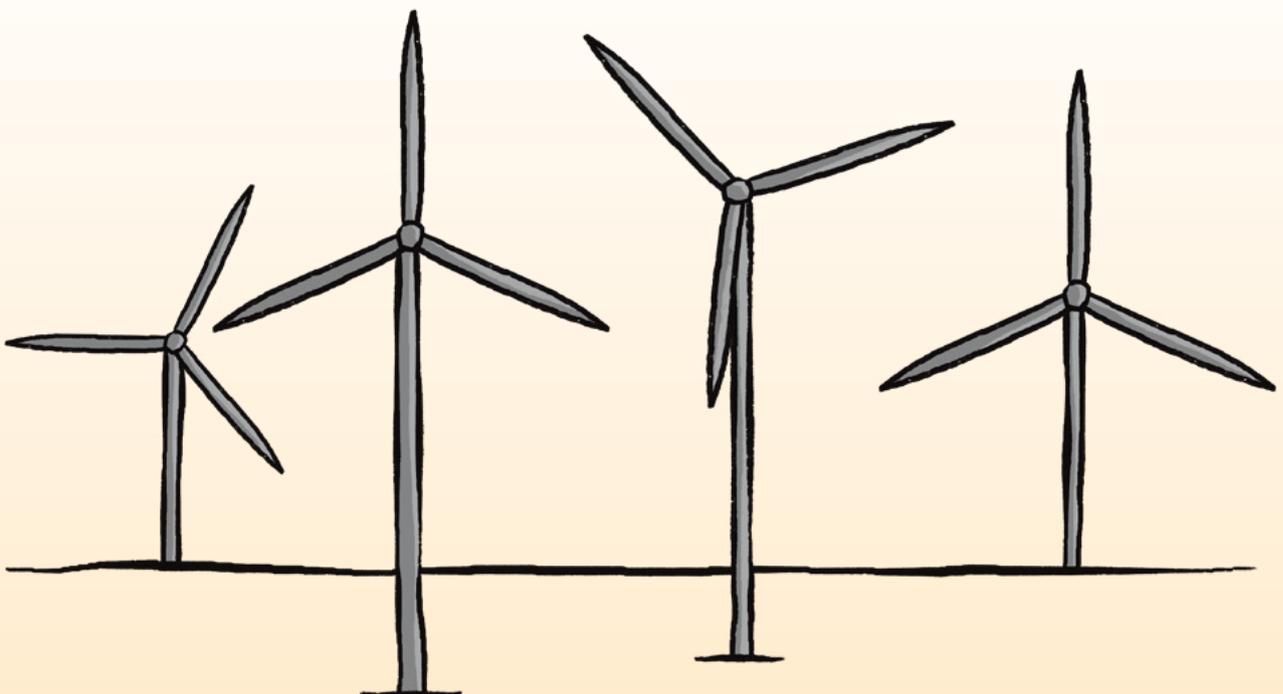
## Market pressures and migrant worker abuse in the construction sector

In the highly competitive Gulf construction and engineering sector, which will be key to the implementation of renewable energy in the region, [long chains of subcontracting](#) function with minimal oversight from main contractors: employers can avoid accountability, sometimes [for years](#). [Least-cost procurement practices](#) still dominate the industry: contracts are awarded to the lowest-priced bidder, pressuring the smallest subcontractors with the least reserves at the bottom of the supply chain. Coupled with a [pay-when-paid model](#) whereby subcontractors must wait for clients to pay them before they can pay workers, the industry continues to incentivise a race to the bottom.

Risks and financial pressures are passed onto migrant workers by a business model premised on profiting from outsourcing. Service providers including security companies, transport and delivery providers, cleaning and maintenance firms and specialist technicians are in line to receive lucrative contracts.

With an eye on renewables targets within just the next six years, the industry must bring projects online quickly. During [COVID-19](#) and in the run up to the [Qatar 2022 World Cup](#), [Equidem](#) and the [Resource Centre](#) documented how migrant workers bore the cost of compressed timelines as project completion was [prioritised over health and safety risks](#), and exploitative recruiters profited off the high demand for cheap, temporary labour. The renewable energy sector should remain alert to market, timeline and procurement pressures to avoid a repeat of such unintended impacts on workers.

The following section explores the landscape of renewables projects being planned and brought online in the GCC, as well as the stakeholders involved, and their role and responsibilities to mitigate risks to migrant workers in this high-risk context.



# Key findings



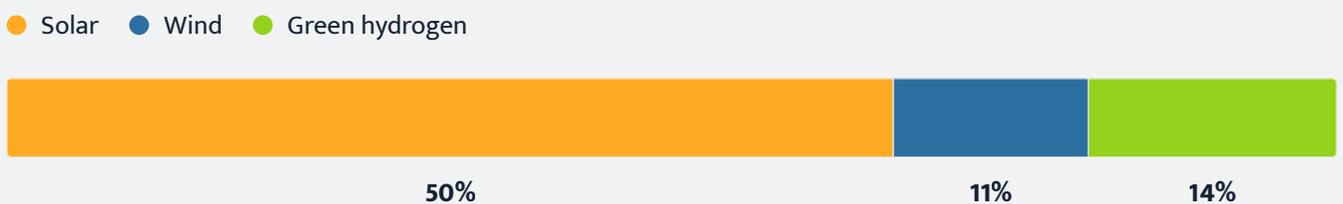
# Mapping the landscape for renewable energy and green hydrogen production in the GCC

Launched in November 2024, the Resource Centre’s [Gulf energy explorer: Renewables, rights and risks](#) (Gulf renewables explorer) records publicly available information on the type, location and capacity of solar, wind and green hydrogen<sup>[3]</sup> projects across the GCC. The explorer includes projects that were built since 2013 and have a capacity of 100MW or larger. It also identifies local and overseas-headquartered companies supplying to, developing, constructing, financing or providing professional services to these projects. See our full methodology [here](#).

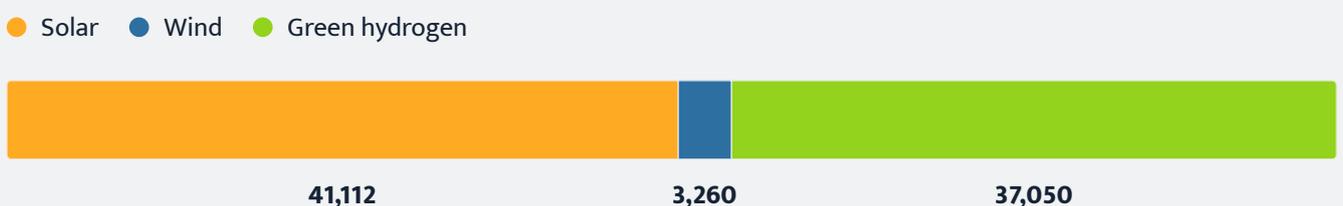
## In brief:

- ➔ Seventy-five solar, wind and green hydrogen projects are planned, under construction or operational across the GCC.
- ➔ Most projects are solar (50 projects), followed by green hydrogen (14 projects) and wind (11 projects) (Figure 1).
- ➔ Projects have a total capacity of 81,422MW (Figure 2) and an average (mean) investment of USD 1.4 billion.<sup>[4]</sup> Investments for each project range considerably, from USD 94 million investment (for 125MW Amin Solar Project) to USD 8.4 billion (for 3,900MW NEOM Green Hydrogen Project).
- ➔ In total, 180 companies have been involved<sup>[5]</sup> in 75 projects – as developers, construction/engineering companies, parts suppliers, professional service suppliers and financiers.
- ➔ Most companies – 113 (63%) – are headquartered outside the GCC.

**Figure 1. Number of renewables projects across GCC**



**Figure 2. Capacity (MW) of renewables projects across GCC**

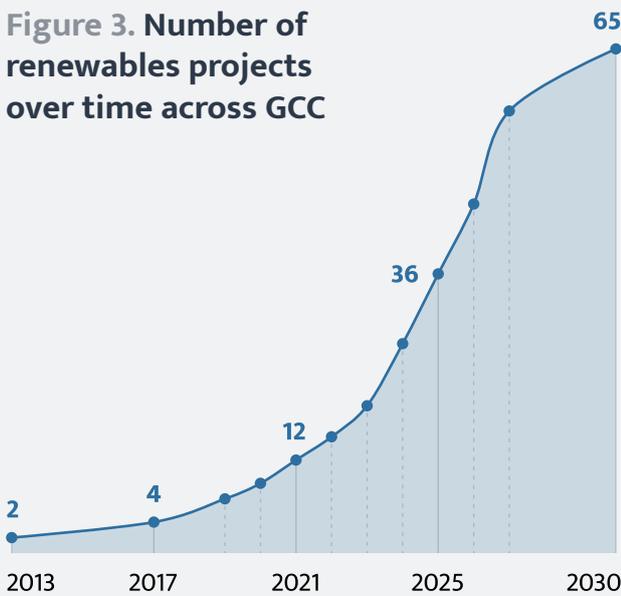


## An industry in transition: Potential for future growth

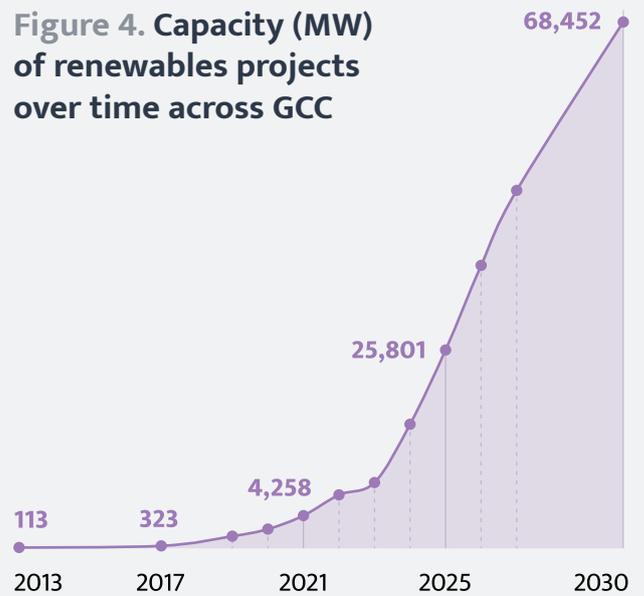
The potential increase in renewable energy capacity across the GCC is evident in the growing number of projects scheduled for completion by the end of this decade. While only 21 projects are operational and 19 are under construction, 35 are planned and the majority will be operational by 2030 to meet government renewables commitments within the next six years (see Figures 3 and 4).

The UAE has the highest number of operational projects (9), followed by Saudi Arabia (6). Bahrain is the only state where no projects over 100MW are currently operational. Saudi Arabia and Oman have high proportions of planned projects, with 15 planned in Saudi Arabia and 12 in Oman (Figure 5).

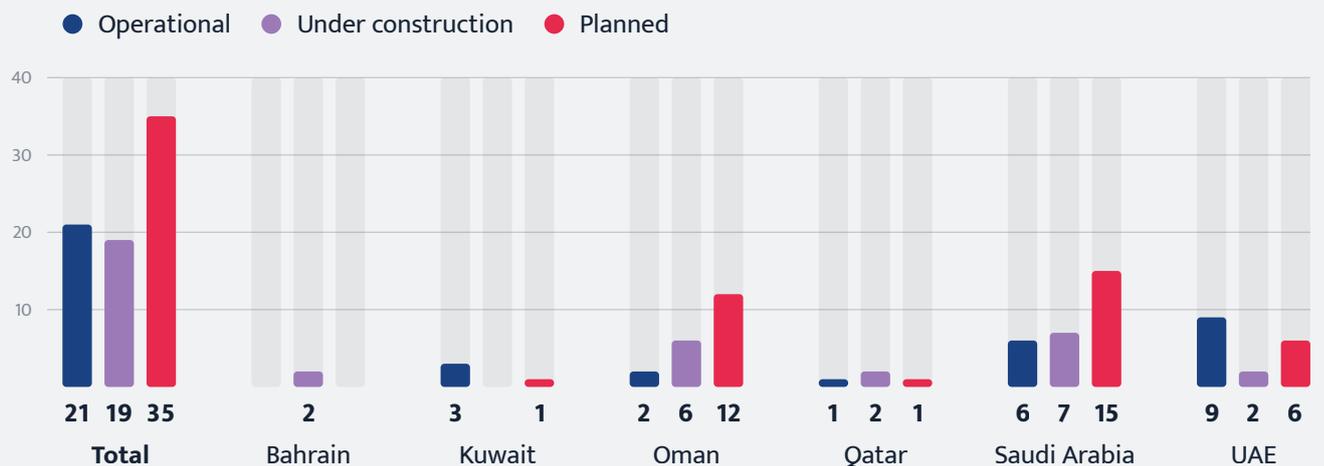
**Figure 3. Number of renewables projects over time across GCC**



**Figure 4. Capacity (MW) of renewables projects over time across GCC**

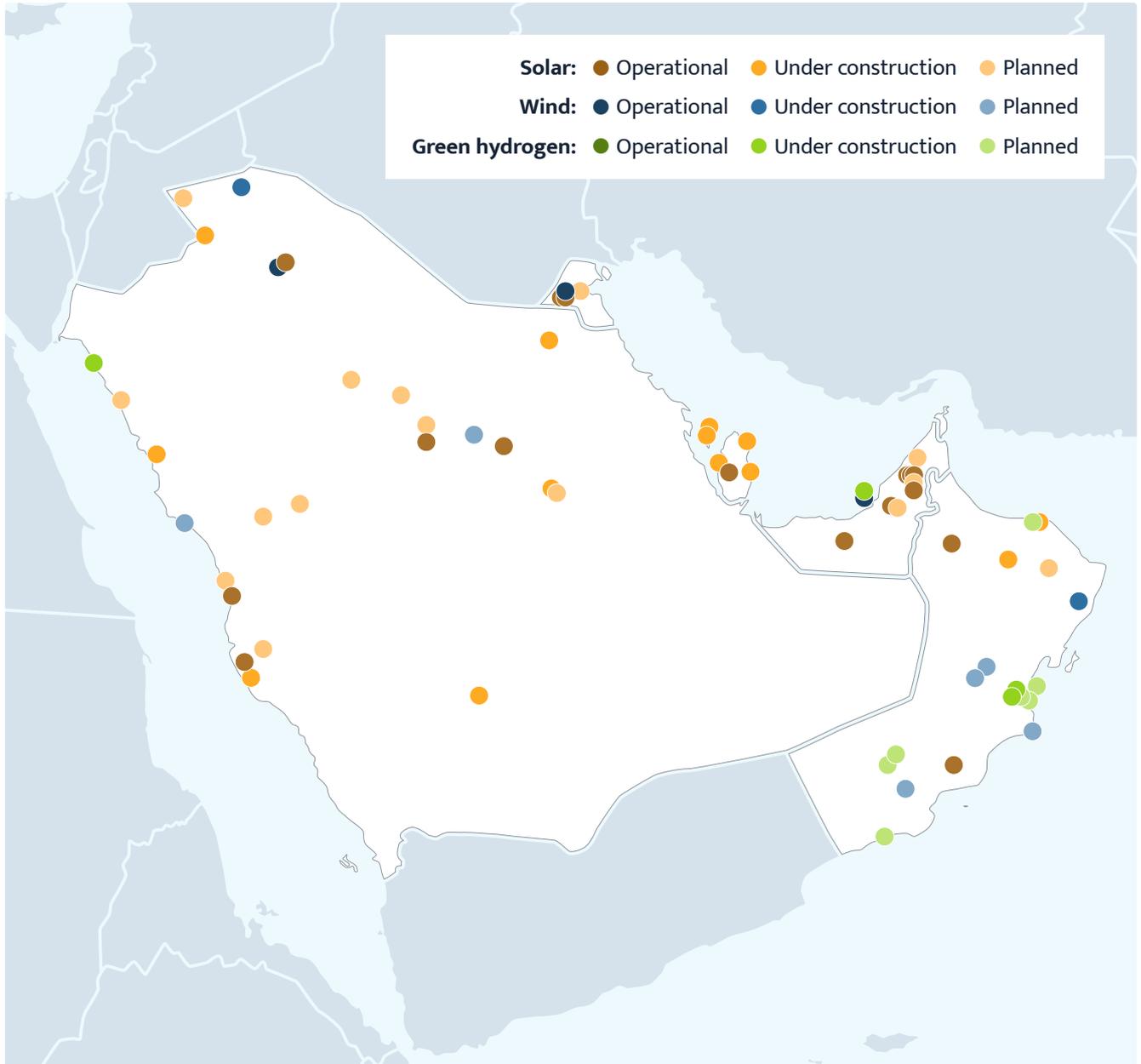


**Figure 5. Number of renewables projects by phase across the GCC**



## The industry landscape: Solar, wind and green hydrogen

This section provides an overview of renewable energy projects in the region by project type, including solar, wind and green hydrogen projects powered by solar or wind.



### **⚠️ Industry forced labour risk: Isolation**

Renewable energy project sites and worker accommodation are often located remotely from urban areas, where sandstorms can hamper travel and access, meaning non-sector personnel cannot easily meet with workers to witness or document working conditions, nor can workers easily leave the area. Access to projects is also severely restricted: security passes are needed to enter project sites in the UAE. It was impossible for Equidem investigators (see below) to enter projects without compromising security, demonstrating the extent to which projects and working conditions are operating without scrutiny.

Figure 6. Number of renewables projects by type across GCC

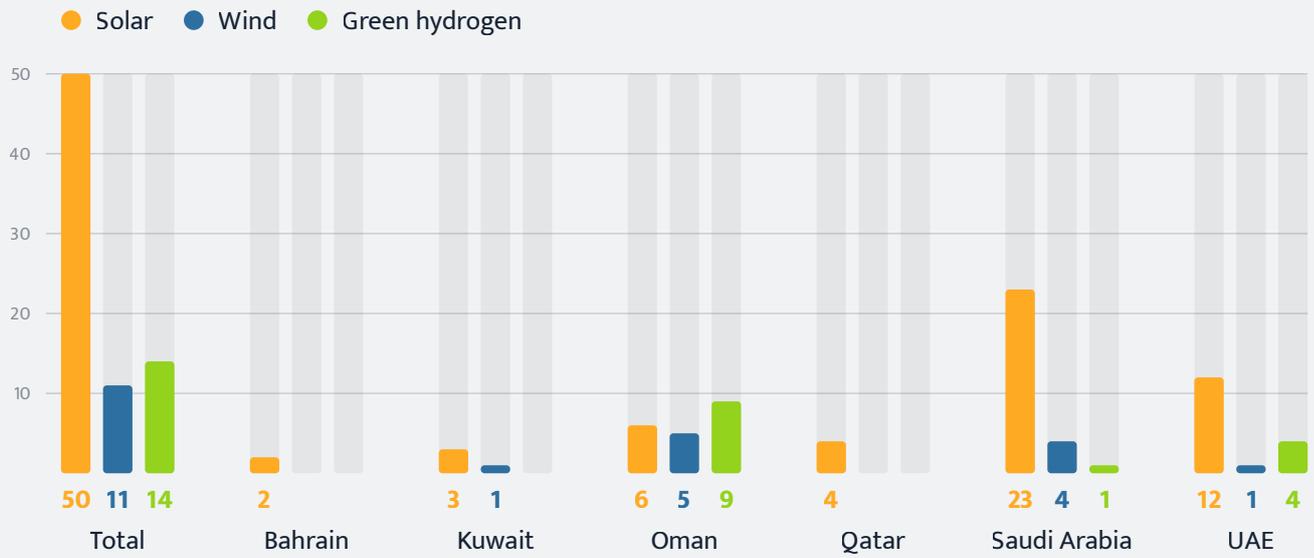
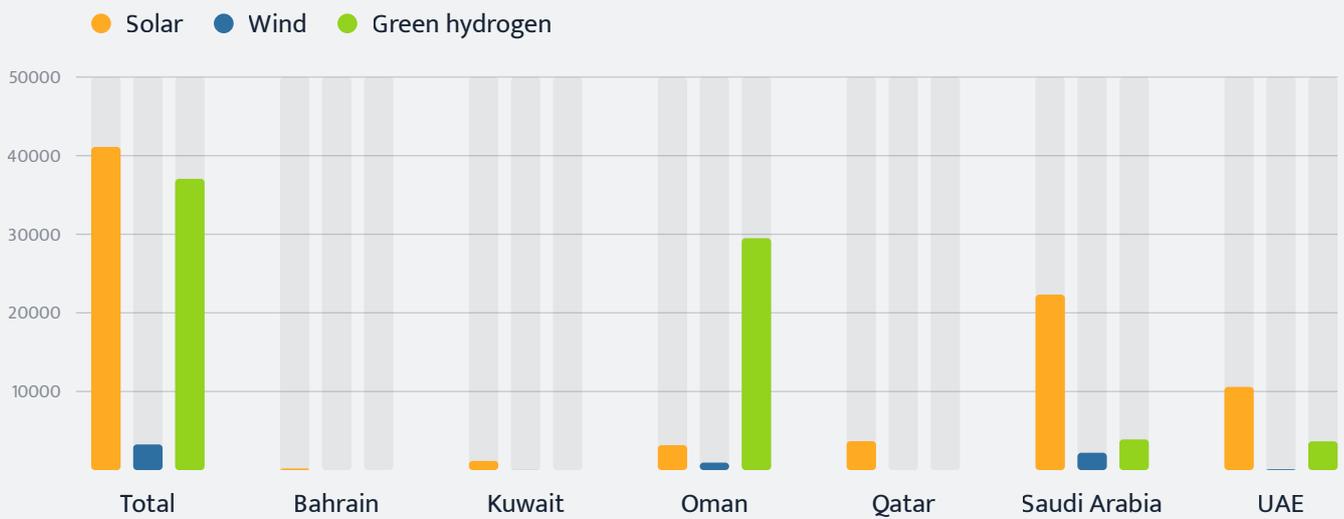


Figure 7. Capacity (MW) of renewables projects by type across GCC



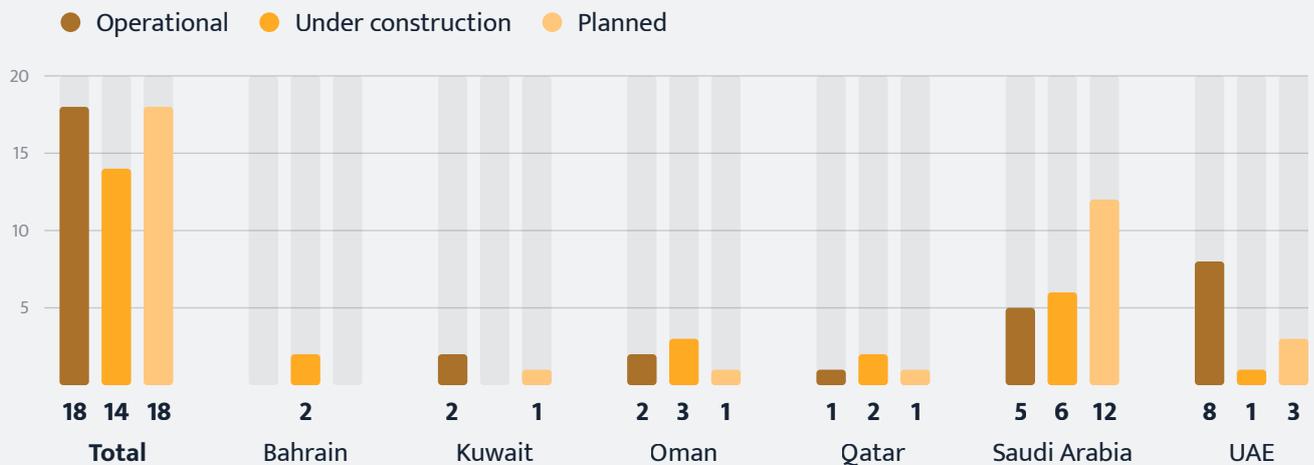
## ➔ Solar energy

**Sixty-seven percent of tracked projects (50) are solar farms, accounting for over half (51%) of the total MW capacity.**

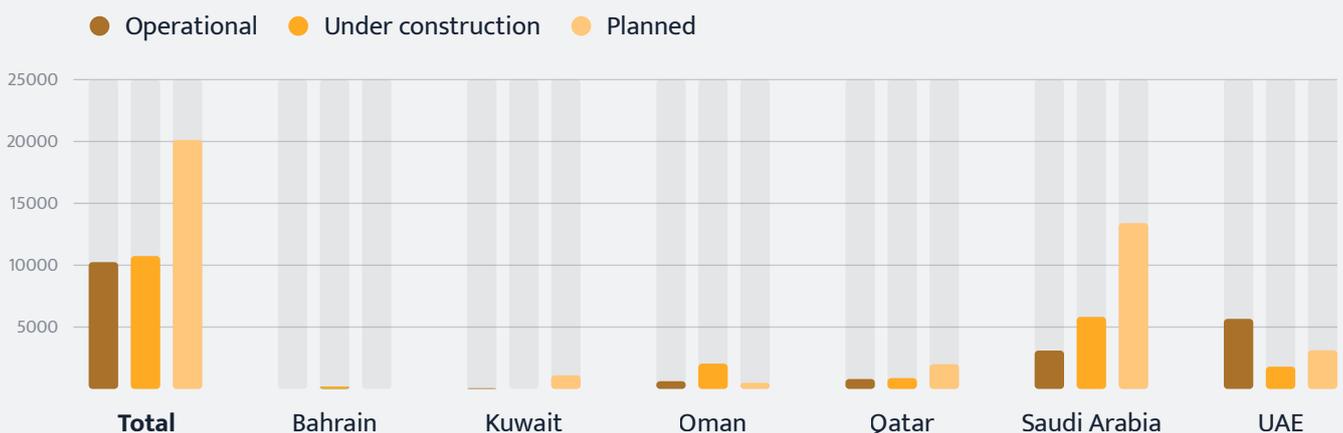
Most solar projects in the region are at planning (18 projects, with 20,125MW capacity) or operational stages (18 projects, with 10,248MW). Fourteen projects are under construction, with 10,739MW capacity).

Twenty-three solar projects (totalling 22,324MW) were tracked in Saudi Arabia, which has [particularly strong solar irradiation levels](#). Among these 23 solar projects, 12 projects are planned, six are under construction, and five are operational, representing an anticipated increase in operational capacity of 19,224MW. The UAE has the second-highest total number of solar projects across all stages of development (12 projects totalling 10,583MW), and the highest number of operational solar projects (eight projects totalling 5,663MW).

**Figure 8. Number of solar projects by phase across GCC**



**Figure 9. Capacity (MW) of solar projects by phase across GCC**



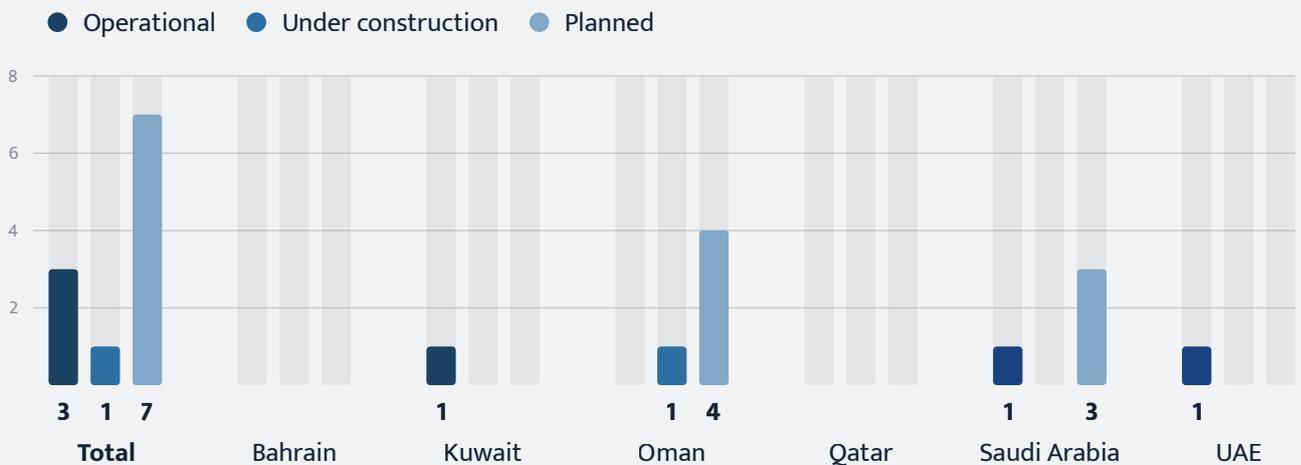
## ➔ Wind energy

**Fifteen percent of tracked projects (11 projects) are wind farms, accounting for 4% of the total MW capacity.**

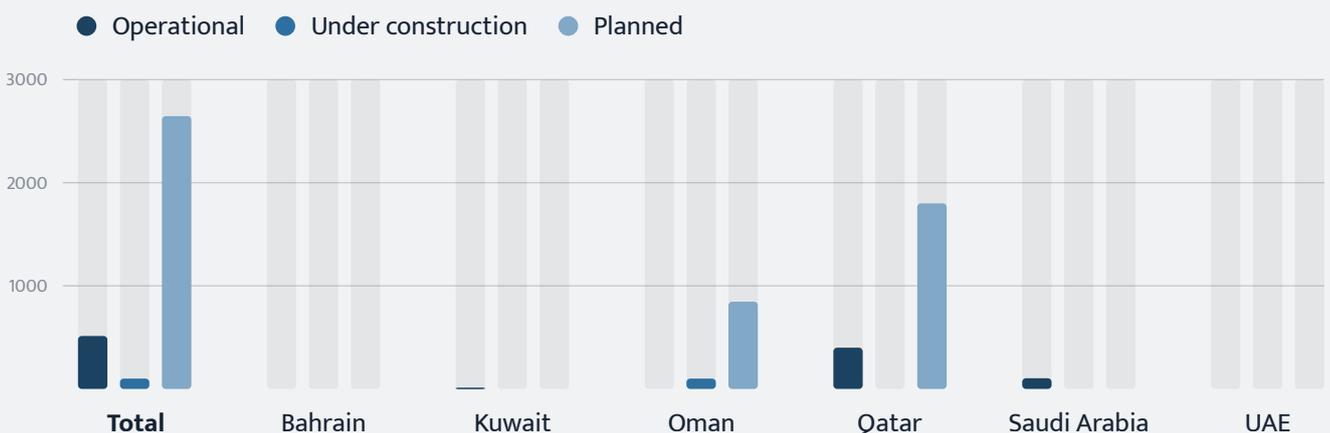
There are considerably fewer wind than solar projects in the region, despite relatively good wind resource potential, particularly in [Saudi Arabia, Oman and Kuwait, according to IRENA](#). Across the region, 11 wind projects were tracked, with a total capacity of 3,260MW: seven are planned, three are operational, and one is under construction. Operational wind farms were only tracked in Kuwait, Saudi Arabia and the UAE.

However, four projects are planned in Oman, totalling 846MW capacity, and one 100MW project is under construction in the country. Saudi Arabia also has three projects planned totalling 1,800MW capacity, forecasting the likely future growth of wind power in the region.

**Figure 10. Number of wind projects by phase across GCC**



**Figure 11. Capacity (MW) of wind projects by phase across GCC**



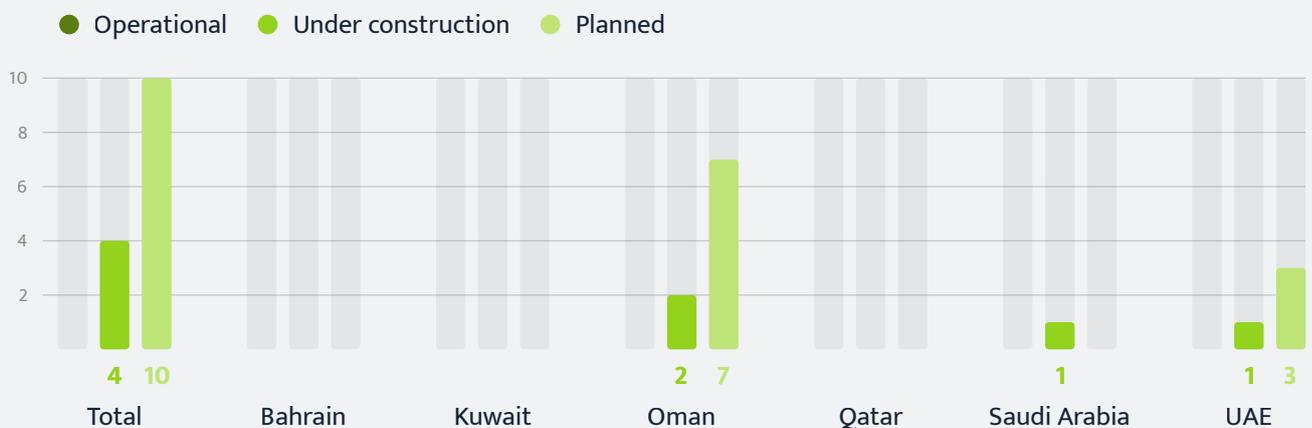
## ➔ Green hydrogen projects

**Nineteen percent of tracked projects (14) are green hydrogen production facilities powered by solar or wind energy, accounting for 46% of the total MW capacity.**

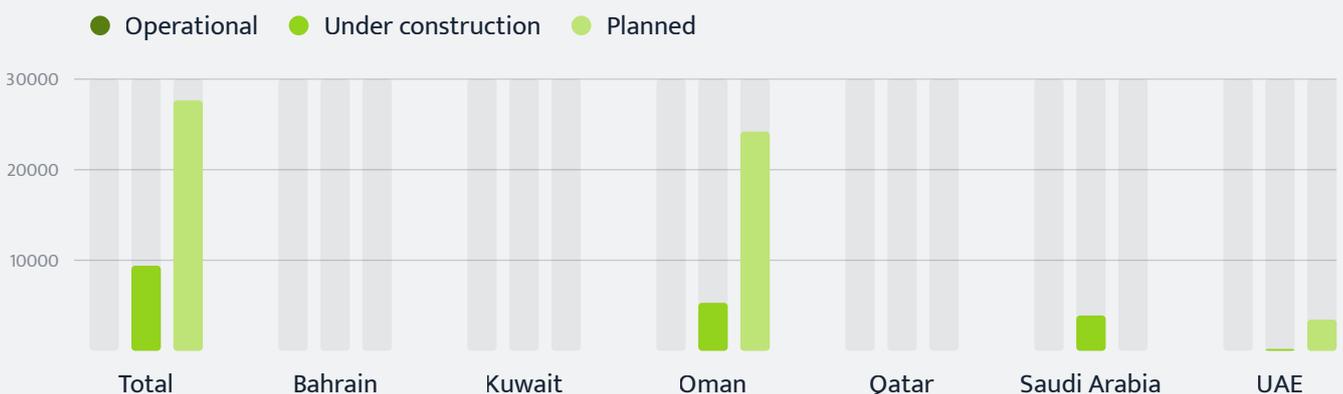
While there are just 14 green hydrogen projects, the projects have a relatively high MW capacity (totalling 37,050MW) relative to wind and solar power, averaging over 2,600MW per project. Green hydrogen projects also attract significant investment. For example, a [Posco Holdings-led consortium's green hydrogen plant](#) in Oman accounts for 5,000MW alone and is valued at USD 6.7 billion. The potential overseas export of ammonia from these plants highlights their global significance. For example, most ammonia produced by the Posco Holdings-led plant will be [shipped to South Korea](#) for steelmaking and power production.

No green hydrogen projects are currently operational across the GCC. However, Oman promises to be the leading country in green hydrogen production and is set to be the [sixth-largest exporter](#) of hydrogen globally by 2030, according to the [International Energy Agency](#). Nine production plants totalling 29,500MW capacity were tracked in Oman: seven are planned and two are under construction. Trailing behind, the UAE has the second-highest number of green hydrogen projects, with three projects planned and one under construction.

**Figure 12. Number of green hydrogen projects by phase across GCC**



**Figure 13. Capacity (MW) of green hydrogen projects by phase across GCC**



## ⚠️ Industry risk: Special Economic Zones

At least five of Oman's upcoming green hydrogen projects are located in special economic zones, including in Duqm, the [largest](#) Special Economic Zone (SEZ) in the broader MENA region. Projects are located here to facilitate the export of hydrogen globally through the region's port, which is strategically situated near [international shipping lines](#), and to attract significant investment through tax exemptions and favorable land lease agreements.

Special Economic Zones in Oman are also granted [reduced Omanization rates](#), including in Duqm and Salalah Free Zones where green hydrogen projects are based, enabling companies to hire more migrant workers in these areas. Migrants may be particularly at risk: labour rights violations linked to SEZs are [well-documented](#). The SEZs are designed to attract investment through the prioritisation of profit over labour rights protection, including through the suspension of ordinary labour law alongside limited labour law enforcement.



## Which companies have a stake in renewable energy and green hydrogen projects?

The mapping identifies key stakeholders across the three energy types. Here, these are generalised for the purpose of our analysis; some companies may perform several roles simultaneously on one project. Solar and wind projects may vary in the relationship structures formed in their implementation.



The Resource Centre identified 180 companies with stakes in 75 projects using publicly available reporting. These companies developed, constructed, financed, supplied, and provided professional advisory services to projects.

## ⚠️ Industry risk: Fragmented supply chains

The well-established industry practice of hiring most of the workforce through subcontracted companies, particularly for sub-sectors such as security or delivery, creates specific risks for migrant workers. These companies are known to engage in highly exploitative practices with minimal oversight from developers or other companies. Additionally, workers are hired on a temporary and project-by-project basis, across multiple renewable project sites and even by distinct companies and contractors on a particular site.

“ I have been working on Solar Project B for two years. Before that it was Solar Project A. First, I worked for a Spanish company on phase 2 and then another Spanish company on phase 3. Then I worked on phase 4 with a third Spanish company. Then a Chinese company took over on phase 5. In the UAE solar sector, we are hired on a project basis. When the project is complete, our contracts are terminated.”

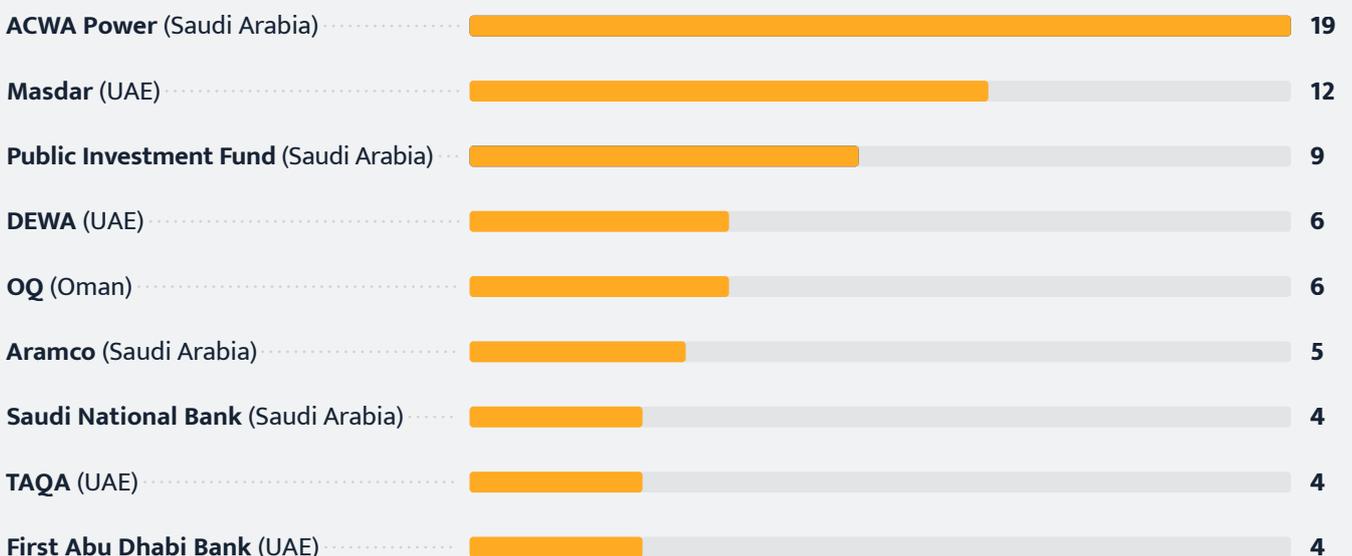
Rohan, Pakistani migrant worker, employed in the renewable energy sector for seven years

## Where are companies headquartered?

### ➔ GCC-headquartered companies

Sixty-seven GCC headquartered companies were involved in solar, wind or green hydrogen projects (Figure 14). All are partially or fully state-owned, often by common state entities, and with a select few holding significant sway over the industry. For example, **Badeel** is owned by Saudi Arabia’s **Public Investment Fund**, which also owns a [50% stake](#) in **ACWA Power** and an [16% stake](#) in **Saudi Aramco**. Developer, investor, co-owner and operator **ACWA Power** is involved in the highest number of projects, followed by Emirati state-owned renewable energy developer **Masdar** and Saudi Arabia’s **Public Investment Fund**, through its subsidiary, the Water and Electricity Holding Company (**Badeel**). **ACWA Power**, **Masdar** and **Badeel** are developers in 43% of projects, often in partnership with non-GCC headquartered firms (see below).

Figure 14. Number of renewables projects top nine GCC HQ companies are involved in



## ⚠️ Industry risk: Monopsony by state-owned GCC companies

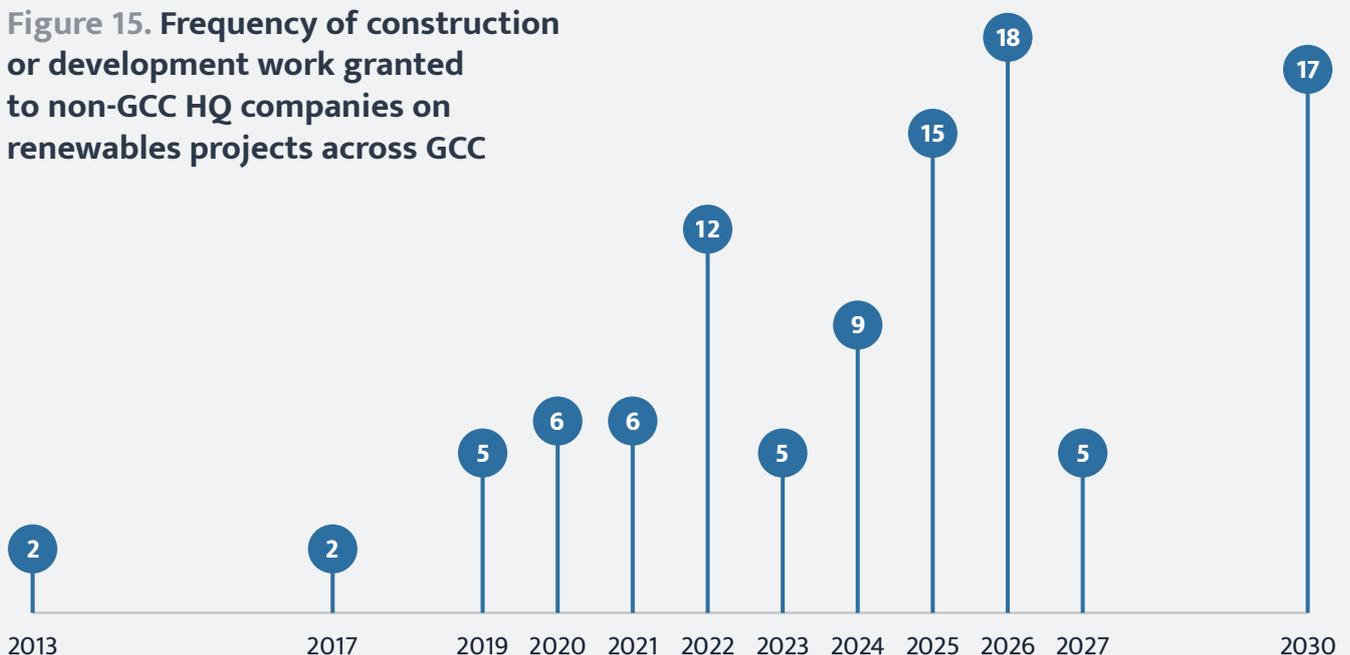
This monopsony by a select few GCC-headquartered firms should raise concerns beyond competitive integrity. All GCC countries are headed by autocratic monarchies whose links to [egregious human rights violations](#) are [well documented](#). Stakeholders should be cautious renewables projects are not furthered to promote political interests, functioning as “branding” for autocratic regimes. State ownership also limits the ability of investors and their business partners to create change or conduct robust due diligence – an issue which led Norway’s largest pension company, KLP, to divest from Saudi Aramco (linked to five projects) and other Gulf companies in December 2023.

To date, the Resource Centre has found Gulf-headquartered companies are often opaque and lack transparency. While the response rate to the Resource Centre’s [Company Response Mechanism](#) is, on average,<sup>[6]</sup> 60% globally, it is 26% on average among GCC-headquartered companies. Smaller GCC-based companies are often untraceable and uncontactable, and there is little public information on company structures and business relationships. This creates an environment where human rights abuse can proliferate with minimal accountability.

### ➔ Companies headquartered outside the GCC

Companies headquartered outside the GCC made up 63% (113) of the 180 companies tracked. Of the top nine non-GCC companies involved in the most projects (Figure 16), three are headquartered in Europe, two in Japan, two in China, one in India and one in Australia, reflecting the regional breadth and diversity of overseas-headquartered companies with interests in the region’s burgeoning renewables market. This is clear in the increasing number of construction and development contracts granted to non-GCC companies in recent years (Figure 15).

**Figure 15. Frequency of construction or development work granted to non-GCC HQ companies on renewables projects across GCC**



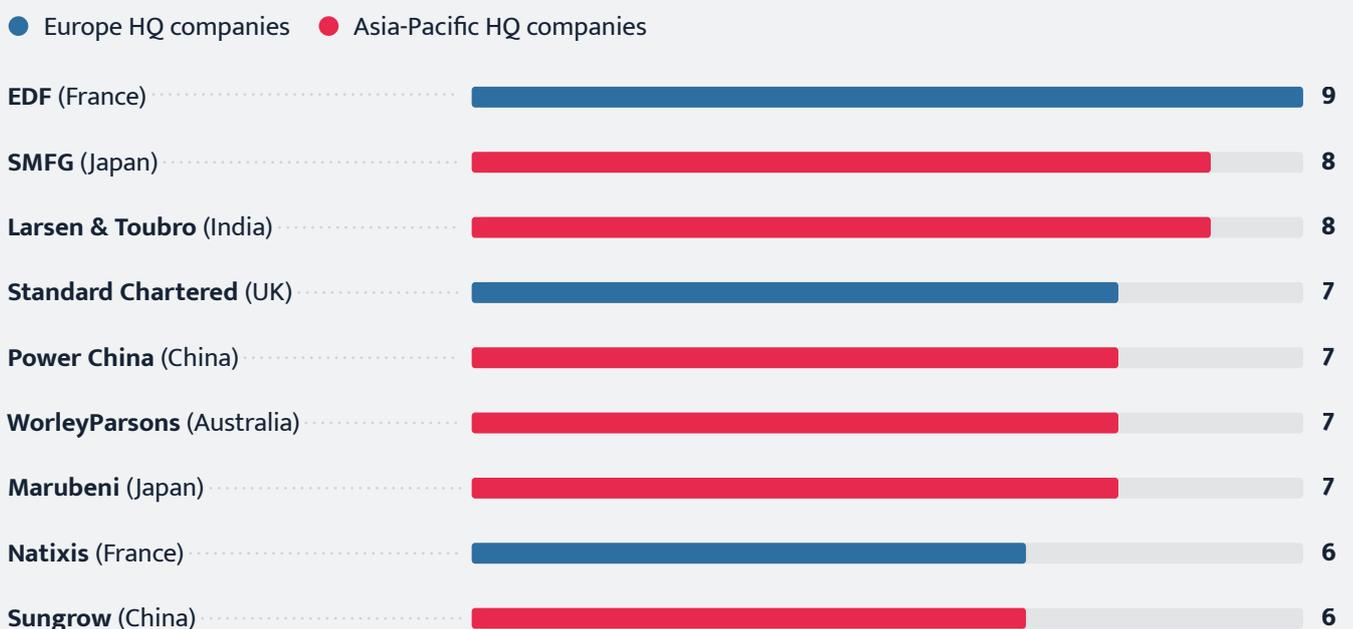
Of non-GCC headquartered companies, companies headquartered in the Asia-Pacific region were most frequently linked to projects in the Gulf. Fifty-three Asia-Pacific companies were involved in renewables projects 124 times, most commonly for projects based in Saudi Arabia, the United Arab Emirates and Oman (Figure 17).

Chinese companies were most frequently involved in projects (24 companies were linked to projects 53 times), most commonly to supply parts (awarded work 23 times) or to provide construction and engineering services (16 times). Chinese firms also hold [significant investments](#) in the region, reflecting the [increasing pace of growth](#) of Chinese overseas investment globally. In 2020, for example, China’s **Silk Road Fund** acquired a [49% stake](#) in Saudi Arabia’s **ACWA Power Renewable Energy Holding**, which owns several renewable energy projects.

The high presence of China-headquartered companies follows [increasing economic ties](#) between the GCC and China, with energy [selected](#) as a priority industry for collaboration. Trade is driven by Chinese companies’ expertise in renewable value chains (China is the [world leader](#) in installed renewable energy capacity) and by the country’s high [manufacturing capacity](#). Resource Centre [research](#) revealing higher rates of alleged social, environmental and human rights abuse in contexts such as the Gulf where Chinese investments are dominant underscores the need for greater scrutiny and robust due diligence by partners at all times.

Eleven Japanese companies were also frequently linked to projects (32 times), largely as financiers (16 times) or project developers (10 times). Japanese companies’ involvement comes amid increasing economic collaboration between Japan and the GCC, catalysed by Japan’s [dependence](#) on the GCC for energy security and its ability to support the region through [infrastructure development and technological expertise](#). Government [guidelines on human rights due diligence](#) published in 2022 set out clear standard-setting for Japanese companies that should be upheld in overseas jurisdictions.

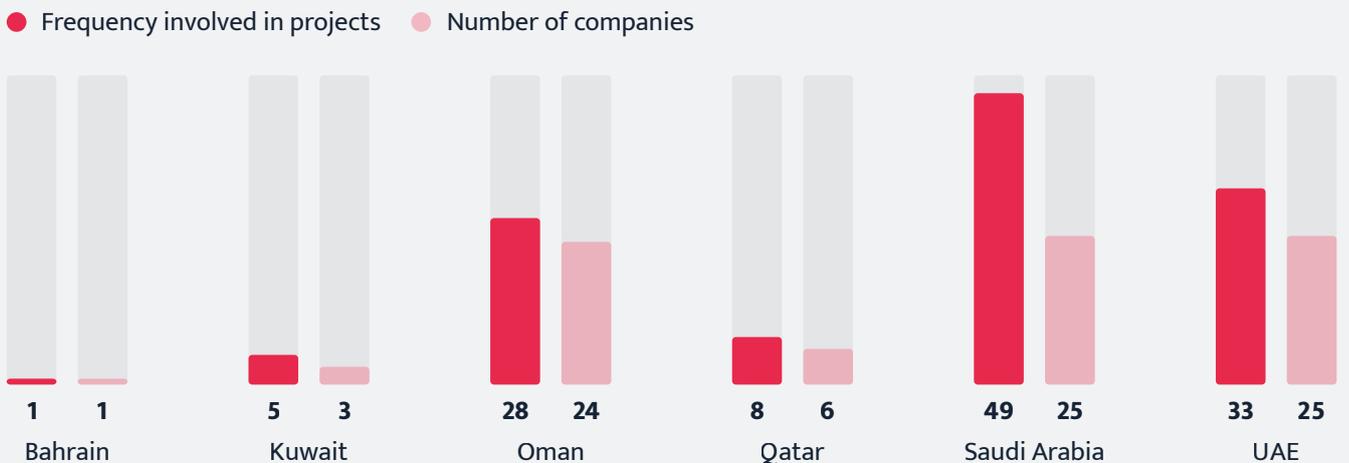
**Figure 16. Number of renewables projects top 9 non-GCC HQ companies are involved in**



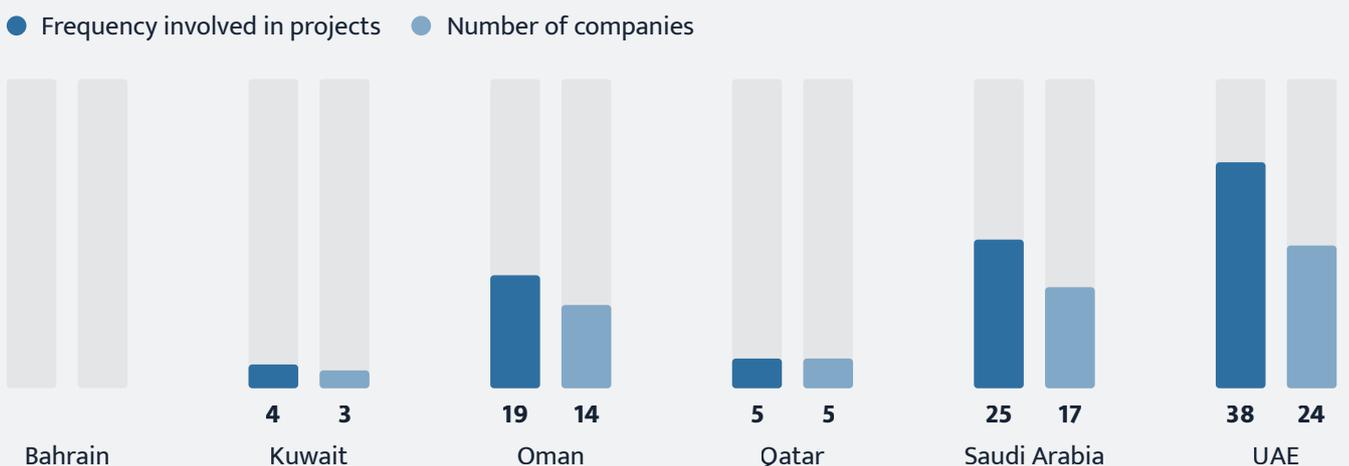
European companies were also frequently linked to projects, with 48 companies involved in projects 91 times across the region, most frequently in the UAE, followed by Saudi Arabia. Companies headquartered in France were most frequently linked to projects (seven companies were linked to projects 29 times), largely as financiers and developers (14 times each). The involvement of European companies in the GCC comes as the two regions increasingly co-operate on the just transition, including through the recent [EU-GCC Green Transition Project](#). Many of these companies will be required to comply with the European Union’s Corporate Sustainability Due Diligence Directive (CSDDD), which [entered into force](#) in July 2024 and requires companies to identify and manage actual and potential adverse human rights impacts of their operations, the operations of their subsidiaries and the operations of their business partners.

As noted by the [International Trade Union Confederation’s 2024 Global Rights Index](#), MENA ranks as the world’s worst region for workers’ rights. This contrasts with the higher Global Rights Index ratings for many of the countries where companies with large investments or operations in the GCC are headquartered, including Japan and countries in Europe. Amid this disparity in human rights protection, these companies should apply the same expectations of upholding labour rights in the GCC as they do at home.

**Figure 17. Asia-Pacific HQ companies involved in renewables projects across GCC**



**Figure 18. European HQ companies involved in renewables projects across GCC**



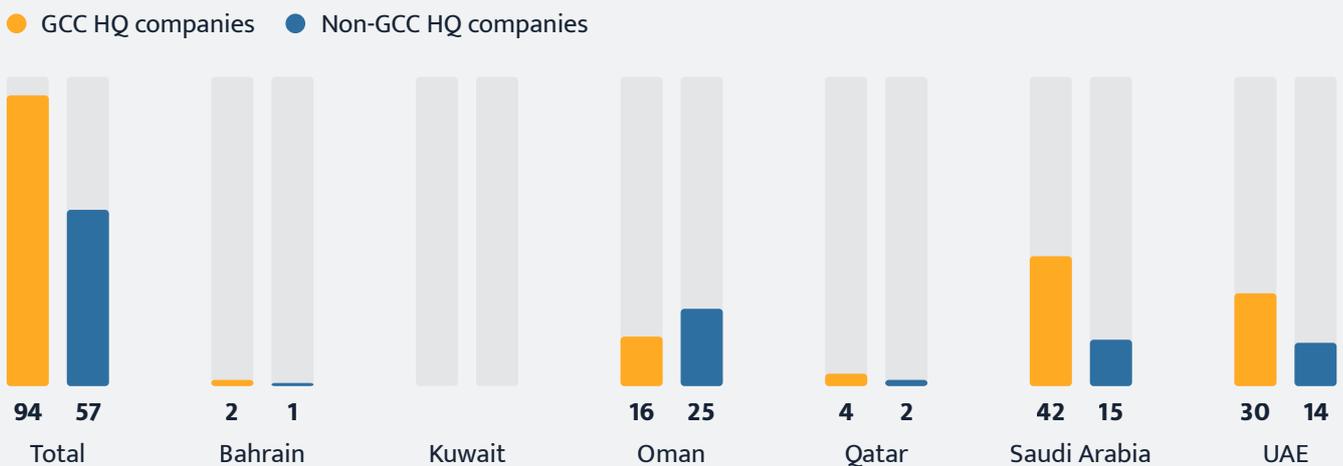
## Company headquarters by project role

Project development work was most commonly awarded to companies headquartered in the GCC (Figure 19), although often forming consortia or joint ventures to co-develop projects with non-GCC headquartered companies.

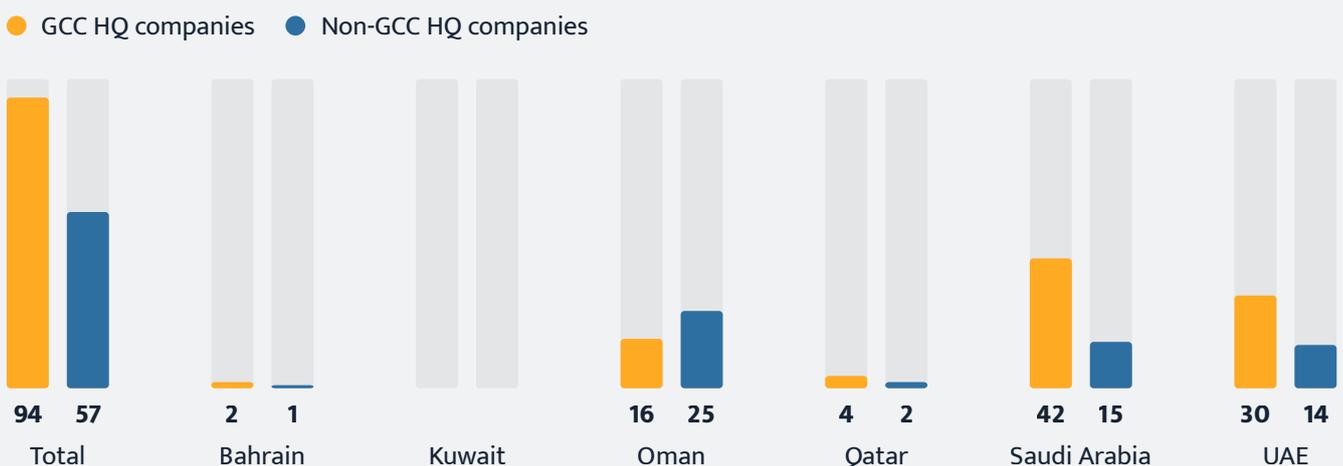
By contrast, 86% of construction and engineering work was granted to companies outside the GCC (Figure 20), which subcontract migrant workforces through local, smaller construction, security, maintenance and delivery companies. Working in partnership with local companies, developers and the construction contractors they appoint have a responsibility to ensure migrant rights are respected further down the supply chain.

The vast majority (90%) of work providing technical, financial or legal advice was given to companies headquartered outside the GCC. Most financiers (62%) of financiers were also headquartered outside the GCC, and 95% of parts suppliers were located outside the region.

**Figure 19. Ratio of GCC and non-GCC HQ developers on renewables projects across GCC**



**Figure 20. Ratio of GCC and non-GCC HQ construction/engineering contractors on renewables projects across GCC**



## “The company treats all the workers like animals”: Conditions for renewable energy workers in the UAE

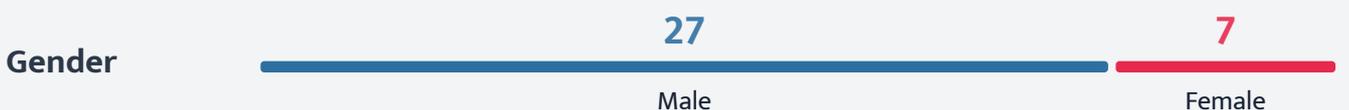
Between February-November 2023 and April-June 2024, Equidem documented a slate of rights violations impacting migrant workers from across South Asia, Southeast Asia, East Africa and West Africa in the labour supply chains of ten major renewable energy developers operating solar and wind farms in the United Arab Emirates (UAE). In many instances, investigators found conditions that were clearly in breach of UAE labour law, as well as international standards. Workplaces, employers and developers are not named to protect workers from the risk of reprisal, including detention and deportation. See full methodology in [Annex 1](#).

Precise numbers of migrant workers contributing to the UAE renewable energy industry are difficult to calculate given the complex network of employers and project structures. Workers themselves are difficult to access to understand individual experiences, needs and demands. The below findings and analysis nevertheless provide valuable insight into the experiences and abuse of workers on renewables projects across the Gulf. The 34 interviewed workers were employed by 14 subcontracted companies providing outsourced construction, installation, security, facilities management and delivery services to four solar and wind farms in the UAE. Their testimony speaks directly to the need for private sector stakeholders and governments to ensure an environment where migrant work is dignified and rights-respecting – a guarantee the transition to renewable energy is not only fast but also fair.

During the investigation, Equidem confirmed 10 out of 11 forced labour indicators – including abuse of vulnerability, deception, restriction of movement, physical and sexual violence, intimidation and threats, holding identity documents, withholding wages, abusive living and working conditions, and excessive overtime. The presence of these indicators, when taken together, create conditions of forced labour for migrant workers in the renewables sector in the UAE.



## Overview: Rights violations in the renewable energy value chain in the UAE



### Sector/job roles



### Country of origin



## Abusive employment conditions

### Wage theft

**Two thirds of workers (67%) experienced one or more types of wage theft.**

“ I have never received any overtime payments despite working overtime since I joined the company.”

**David**, a worker from the DRC, subcontracted as a solar panel installer for a North American energy company

“ Our salary is supposed to be paid by the 27<sup>th</sup> of every month but sometimes they delay up to two months, leaving me with debts to pay all over.”

**Barasa**, a Kenyan worker subcontracted as a security guard for a European renewable energy developer

Wage theft allegations in the renewables sector in the UAE included instances of unpaid wages, non-payment and underpayment of overtime, irregular and delayed wages, and wage stagnation amid rising inflation owing to the cost-of-living crisis. Moreover, systematic denial of wages and employment benefits was found across the renewables value chain, among subcontracted workers of all job roles and sectors.

### Illegal working hours

**Half of workers (50%) worked over the legal maximum: more than 10 hours a day, six days a week, without overtime.**

“ The company treats all the workers like animals. There is a lot of work here and there is a shortage of workers. I work for 12 hours a day. If I do my work comfortably, the work will not be finished and if the work is not finished, the supervisor will shout at me. Even my salary can be cut. There is so much work that I do not get even a minute’s rest.”

**Suaid**, an Indian worker subcontracted to pack solar equipment for a European renewable energy developer

Under UAE labour law, working hours for the private sector are [eight hours a day](#) and workers may not work for more than five consecutive hours without a break of no less than an hour, two overtime hours a day, or more than 144 hours during a single three-week period.<sup>[7]</sup> Nevertheless, workers routinely described working between 60 and 72-hour work weeks, amounting to 180-216 hours in a three-week period or between 25 and 50% over the legal limit. In one particularly extreme case, a worker described working up to 84 hours a week; within a three-week period, this amounted to 252 hours, 75% higher than the legal maximum working hours.

## Understaffing and overwork

**A third of workers (33%) described understaffing and overwork, requiring them to complete physically intensive work for extended hours and days on end without a break.**

“ We are a group of 10 drivers in the busy city. This is not enough people to manage the amount of work. I always find myself doing the work of two people – from delivering the systems to offloading them without getting help.”

**Achen**, a Ugandan driver subcontracted for a European renewable energy developer

Some workers mentioned understaffing levels of as much as 50%. This was particularly the case for delivery drivers, who were expected both to transport and offload goods at project sites, and for installers, many of whom were handling heavy renewables parts including solar panels and windmill blades. Workers also described working under threat of punitive action from supervisors if they did not hit performance targets, including verbal abuse and salary cuts.

## Contract violations

**20% of workers underwent contract violations related to wages, overtime, promotion, accommodation occupancy and food allowances.**

“ Most of the contract promises have been broken. I no longer have trust in my employer. They promised to pay 10 dollars for every hour of overtime, but they only pay five dollars an hour. They also promised to adjust our food allowance every year and they have not even though life has become very expensive in the UAE.”

**Chinyere**, a Nigerian security guard subcontracted for a European energy developer

“ They promise promotions every year in the contract, but I have been in the company for a long time and still have not received any promotions.”

**Nala**, a South African saleswoman employed by a European renewable energy developer

In some cases, working conditions did not match contracts, in others, workers reported being promised improvements in working conditions by employers that never materialised.

## Restrictions on mobility

**12% of migrant workers** were prevented from transferring between employers or leaving the UAE.

“ I cannot change employers whenever I want. I must complete my contract first before I could think of changing employers. If I try and change employers, they will ban me from working in the UAE because I didn't complete my contract.”

**Shafiq**, a Bangladeshi facilities management worker subcontracted for a European renewable developer

The threat of dismissal or simply refusal of requests to transfer or leave was clearly a deterrent for interviewees wanting to find new work. For example, workers said they had not even tried to change employers, believing they would be banned from future work in the UAE. Others said they had to complete at least their one-year contract before seeking transfer to another company or requesting leave to return home.

## Unfair recruitment

### Extortionate and illegal recruitment fee-charging

**50% of workers** were charged illegal or extortionate recruitment fees, ranging from USD 250 to USD 1,300, despite [UAE law requiring recruitment costs to be borne by the employer](#) and prohibiting recruitment agencies from soliciting or accepting any fees from workers.<sup>[8]</sup>

### Withholding identity documents

**23% of workers** had identity documents withheld.

“ They are holding my passport. They say it is not safe to keep it with me due to security reasons.”

**Wambiu**, a Kenyan worker subcontracted as a security guard for a major European energy company

Employers are prohibited from confiscating employee passports under UAE law.<sup>[9]</sup> Nevertheless, this was frequently the case with employers preventing workers leaving jobs and seeking new employment opportunities. Some employers told workers it was not “secure” for their passports or ID to remain with the workers to justify holding workers' documents. One construction worker explicitly said his employer withheld his passport “in case I decide to leave the company without notice.”

## Living conditions

### Overcrowded and unhygienic accommodation

**59% of workers returned to overcrowded and unsanitary accommodation.**

“ I am sharing with 18 people – we live in a small room and the sanitation is not good. It is overcrowded. I have to wait for my roommates to shower in order to take a shower and this takes a lot of time. I have to wake up very early to get ready for work. There is not enough ventilation, and it is hard to breathe.”

**Akwasi**, a Ghanaian worker subcontracted as a solar parts delivery driver for a multinational energy company

In stark violation of legally proscribed living conditions in the UAE,<sup>[10]</sup> workers described living in rooms with up to 19 others, sometimes with no space except to sleep. Accommodation was poorly ventilated, and workers had inadequate access to toilets and showers.

### Inadequate food and food allowance

**50% of workers said food was insufficient to meet their nutritional needs.**

“ The food allowance is not enough to take m through the whole month. This makes me skip some meals in order to afford the next meals. I can’t afford healthy food because my allowance won’t allow me to. Food prices in Dubai have really gone up and my company hasn’t done any adjustments on the food allowance.”

**Arjan**, a Sri Lankan worker subcontracted as a solar panel installer for a European energy developer

None of the interviewed workers had cooking facilities in their accommodations and therefore had to either buy expensive, prepared food or eat in the company canteen where some workers described food as unpalatable. Others said food prices had become exorbitant, while at the same time employers had failed to factor rising costs-of living into salary bands. Consequently, workers reported skipping meals and buying food on credit – especially due to routine delays in receiving food allowances.



## Race and nationality-based discrimination

**44% of Asian and African workers** experienced discrimination based on race and nationality.

“Racial discrimination is evident during hiring. White people dominate the office and they get higher salaries than Africans. I have also seen lots of Africans lose their jobs when the business is not doing well.”

**Nala**, a South African saleswoman directly hired by a European renewable energy developer

“The Asians are getting less wages than the Arabs which is not making any sense since we are both working same jobs but getting different salaries. They also discriminate against us in terms of work division. We work longer hours. Arab workers come to work later, but if we are late they reduce our salary.”

**Arsalan**, a Pakistani worker subcontracted for a multinational energy company’s wind farm

Migrant workers described discrimination in hiring, promotion and termination, lower wages, payment delays, extended working hours, selective granting of leave, and derogatory comments from supervisors for certain nationalities. A particular trend was for workers of Arab nationality or white workers to be given preferential treatment while being less likely to receive punishment. Nationality-based discrimination in the UAE and across the Gulf is anchored in the Kafala system that binds migrant workers to sponsoring employers, setting up a de-facto caste system based on national origin. Laws designed to protect migrant workers’ rights are poorly enforced, entrenching interpersonal, institutional and structural racism, and nationality-based discrimination.

## Occupational health and safety breaches

### Workplace violence

**38% of workers** suffered violence, including physical, sexual and rampant verbal abuse.

“My supervisor is always approaching ladies sexually and if I refuse his advances, he might not give me my weekly off which I feel is unfair.”

**Akira**, a Kenyan worker subcontracted security guard for a multinational energy company

“If a worker does not listen to the officer or is found resting during work, the officer gets angry and sometimes he slaps in anger. Once a worker who worked with me burnt his hand and was sitting and resting. Then the supervisor came and slapped him without asking anything and was shouting abuses at him. This mostly happens with new workers.”

**Suaid**, an Indian worker employed as a solar equipment packer for a multinational energy company

Sexual violence was a risk particularly for female workers, while those more likely to experience physical or verbal abuse were more likely to be newer workers. The perpetrators were exclusively managers or supervisors, revealing how power differentials manifested in the workplace.

## Exposure to occupational hazards

**29% of workers were exposed to occupational health and safety risks; 44% were denied sick leave.**

“The risk is high while working on a ply sheet, and it harms the body. Mostly there is a possibility of getting burnt, and new workers get hurt most often because they are not given training before work. I was burnt by fire many times and had blisters on my hands. During that time, I was not even given money for treatment, and I was not even given leave to rest. I complained about this to the company official but instead of solving my problem the official started shouting at me and said that I got hurt due to my carelessness. After that, no other worker can complain because we are afraid.”

**Suaid**, an Indian worker subcontracted for a solar equipment packing company

“Working long hours damages the body and the brain and it’s difficult to get good rest when one is off duty because the mind and body cannot function properly.”

**Bernard**, a worker from Burundi subcontracted as solar panel installer for a major solar park

Workers encountered toxic materials, burns, and electric shock on worksites, as well as the exhaustion and adverse mental health impacts of working under stressful conditions. Workers described how newer workers were more likely to be hurt as they received training while on the job rather than prior to starting. Injured workers also said they faced barriers accessing healthcare, including the expense of medicines or systematic denial of paid sick leave.

## Exposure to heat stress

**29% of workers suffered adverse health impacts after engaging in heavy, physical activity in extreme heat without adequate water and breaks.**

“I am exposed to high temperatures in the park which leads to heat rashes and heat strokes from working under the sun. I often have skin rashes due to excessive sweating.”

**Arjan**, a Sri Lankan solar panel installer subcontracted for a European renewables developer

“This job causes very serious health issues. Sometimes I am made to stand more than 10 hours in the scorching sun and this gives me a constant headache.”

**Akira**, a Kenyan worker employed as a security guard for a multinational energy company

Between April and September, temperatures in the UAE can reach 55°C (131°F) even in the shade, with humidity exceeding 80%. Many workers in the renewable sector are forced to engage in heavy, physical outdoor work under extreme heat and each step in the value chain – construction/installation, operation, and maintenance – has presents occupational hazards. Even when workers acclimatise, ozone layer loss and corresponding spikes in solar radiation increase associated heat risks. Health impacts include dehydration, fatigue, rashes, heat syncope, cramps, rhabdomyolysis, exhaustion, heat stroke and death.

Labour laws in the UAE offer some provisions for protection from heat stress, including a mandatory break between the hours of 12:30pm to 3:00pm from 15 June – 15 September.<sup>[11]</sup> While violations are punishable by fines or business closures, the effectiveness of the policy is limited, since temperatures are still extremely high outside of the banned hours. Moreover, fixed hour-based restrictions are insufficient to protect workers from heat stress as the climate crisis grows and labour inspection and enforcement are limited.

Extreme temperatures even affected one Ghanaian solar parts delivery driver whose vehicle had air-conditioning: the contrast in his car with the “harsh” outdoor weather damaged his respiratory system. Another subcontracted solar installer from Rwanda said his employer told workers to apply sun lotion and drink water to protect against the heat; he was hospitalised owing to a heat-caused skin condition.

## Barriers to access remedy

**59% of workers described one or more barriers to seeking remedy.**

“ There are many problems here but I cannot report them because the worker does not have the right to complain. Even if I go to complain, I will not be heard. Whatever the officers here say will be accepted. Here, action is taken against the person who complains, or he is fired.”

**Suaid**, an Indian worker subcontracted as a solar equipment packer for a multinational energy company

“ Consequences depend on the people involved. Most of these seniors are related to the top management and this makes it difficult for them to be given any form of discipline even if they are abusive.”

**Bafana**, a construction worker from Cameroon subcontracted to work on a major solar park for a European renewable developer

Most barriers cited by workers included practicalities linked to other abuses such as withheld documents or being unable to change employers. Others described the inadequacy of existing grievance mechanisms such as reporting violations to the police, perceived or actual retaliation from employers for speaking up, and threats of termination or visa bans which would jeopardise future work opportunities.

Several linked their experiences to the broader state of UAE labour rights law, standards and implementation or, again, the power differential between workers and supervisors whose explanation was privileged above theirs and who avoid accountability. A Ugandan worker said he could only complain to his employer, despite the major solar park on which he installed panels being developed by a large, European renewables company. One subcontracted Sudanese solar panel installer said he simply did not know how to make a complaint as he was “*still learning how things work here before I can file a complaint.*” Another Bangladeshi facilities management worker said his busy working hours meant he had no time to report a complaint, and he did not know who he could talk to.

Testimony gathered from renewables workers and presented here is sadly not unusual in the UAE and [characteristic](#) of conditions across the broader Gulf region. Their experiences reveal how abuse manifests in the renewable energy industry. Renewable projects are being developed at pace, increasing the urgency for companies along the value chain to mitigate the well-known risks to migrant workers in the region. The energy transition will only be just if clean energy projects are not developed off the back of human rights abuse.

# Baseline assessment: Commitments to respect labour and migrant workers' rights in a just transition

## Which companies were assessed?

This analysis presents a baseline assessment of how project stakeholders measure up on fundamental human rights principles, with a particular focus on risks to migrant workers in the context of a just transition. While sources for analysis were primarily companies' globally or group-applicable policies, commitments and supply chain standards, little information was found on how these are applied in practice or in specific jurisdictions.

Assessed companies are developers and construction and engineering contractors at the top of value chains, including companies forming consortia and joint ventures to provide capital and expertise behind the projects mapped in the [Gulf renewables explorer](#). The 27 assessed companies are headquartered across the Asia-Pacific, Europe, the Middle East and North America and have been awarded work on recently operational, or currently being constructed, projects in one or more GCC countries.



To date, nine companies in the selection have been publicly linked to allegations or concerns relating to migrant worker abuse in their operations or supply chains globally since 2022.

## Human rights policy and commitments

As evident through the scale and egregious nature of the human rights abuses explored above, migrant workers are crucial to renewables value chains, yet their experience is obscured by complex business relationships while workers lack grievance and remedy channels. As a foundational step, companies should consider specific workforce vulnerabilities in corporate human rights commitments and risk assessments.

- ➔ **Fourteen of the 27 companies published a human rights policy aligned with international standards on human rights** and which addressed labour rights risks aligned to international standards, including the ILO Core Conventions on Fundamental Rights at Work. Of those which did not, one was headquartered in India, four in China and six in the Gulf.
- ➔ **Only 12 companies recognised risks specific to migrant workers.** Four refer to migrant workers within a broad category of “vulnerable people” as [defined by the UN](#) and international law, but without relating this to their own value chain in practice.
- ➔ **Eighteen companies** disclosed one or more methods of assessing labour rights risks, such as the use of human rights indices, social audits, heat mapping tools, and stakeholder or worker surveys. However, most failed to demonstrate meaningful, participatory risk identification processes – in line with [good practice](#).

**Better practice:** In its [Modern Slavery Statement](#), Australian energy company **Fortescue** disclosed specifically where its migrant workforce was found to be at risk, including outsourced and subcontracted services such as labour hire companies, manufacturing, cleaning, catering and security subcontractors. As next steps, the company should publish data on how mitigation measures identified alongside risk areas are working in practice for year-on-year progress tracking.

## Identifying supply chain risks

International standards are clear: companies' responsibility to respect human rights extends to their business relationships with other entities, including suppliers and subcontractors.<sup>[12]</sup> Developers and contractors should therefore adopt clear standards in line with international norms, and actively implement them throughout the supply chain beyond Tier 1.

**Better practice:** In its [Sustainability Policy](#), Japanese energy giant **Hitachi** described conducting a migrant worker survey, identifying risk in both their own and business partners' operations and developing mitigating guidelines for on-site implementation. As next steps, the company should publish transparent information on exactly when and how these measures will be implemented at sites where they are not to date to enable greater civil society scrutiny.

- ➔ While **24 companies published a Supplier Code of Conduct, only 16 were aligned with the ILO fundamental principles and rights at work**, suggesting that supplier codes of conduct cannot necessarily be relied upon in practice to independently set standards.
- ➔ **Eleven companies required first-tier suppliers to cascade or implement human rights standards** throughout their own supply chains and all business relationships. Some companies included commitments to “consult” or to support suppliers through capacity-building to uphold standards. However, better practice examples from other sectors evidence progress towards cascading standards by publishing, at a minimum, quantitative data on the number and proportion of first and second-tier suppliers undergoing capacity-building, as well as on outcomes, numbers and target roles among attendees (sustainability, procurement roles) of trainings.

## Fair recruitment

The [Employer Pays Principle](#) is the international standard on fair recruitment.<sup>[13]</sup> Its two elements – that (1) no worker should pay for a job, and (2) the costs of recruitment be borne by the employer – seek to mitigate the devastating impact on lives, families and whole economies wrought by unfair and illegal fee-charging in the recruitment cycle.

- ➔ **Only eight out of the 27 companies prohibited worker-paid fees**, explicitly stating no worker in their supply chain should pay for a job. These commitments are most often found in companies' human rights policy or supplier code of conduct/procurement guidelines.
- ➔ Concerningly, **no company aligned with the Employer Pays Principle**, an alarming blindspot for any industry operating in a region where recruitment costs and charging, despite being illegal, are both normalised and devastating for low-paid migrant workers. This should be adhered to by both buyers and a cascaded requirement for suppliers.

## Stakeholder engagement

Fair and ongoing negotiations are a cornerstone of a truly just transition and social dialogue between workers and business should be prioritised. Operating in a context like the Gulf where freedom of association is severely restricted and [freedom of expression](#), [protest](#) and press freedom are also curtailed, companies should be ready at a minimum to confront the gap between their global commitments to civil society engagement, freedom of association and the right to collective bargaining, and the reality for workers and groups on the ground.

### ➔ Sixteen companies have a publicly available policy in line with freedom of association and collective bargaining

- ➔ Ten companies explicitly prohibit intimidation, harassment, retaliation and/or violence (union-busting tactics) against trade union members or equivalent worker bodies and trade union representatives.
- ➔ Only three companies – [KBR](#), [TotalEnergies](#) and [Vestas](#) – expressly recognise and respect the right of all workers to form and join equivalent worker bodies where these rights are restricted under local law.

In the Gulf, this last commitment is essential where legal frameworks allowing freedoms of association and unionisation are limited. Migrants cannot join unions in [Qatar](#), [Saudi Arabia](#), or the [UAE](#), and union rights are significantly restricted in [Bahrain](#), [Kuwait](#) and [Oman](#), including bans from taking leadership roles and from joining unions prior to living in the country for five years.

➔ Alongside a global or group-wide policy, **17 companies disclosed to some extent working with local or global trade unions in practice to support worker empowerment**, beyond a simple commitment or recognition unions could be considered within the company's stakeholder engagement framework. Six companies disclosed data on the proportion of their global workforce covered by a collective bargaining agreement.

- ➔ **Only three companies – [EDF](#), [Engie](#), and [TotalEnergies](#) – have entered into a Global Framework Agreement with a global trade union federation.**<sup>[14]</sup>
- ➔ A minority of companies mentioned contacting migrant-led groups in the course of risk assessments or pilots relating to specific initiatives, however, **no company disclosed engaging or consulting with migrant workers or their representatives in the pursuit of improving collective worker empowerment.**



## Just transition planning

- ② While many companies, irrespective of where they are headquartered, recognise their role in the transition to renewable energy in public disclosure and on their websites, **only three companies – EDF, Engie and TotalEnergies – commit publicly to engage in social dialogue with unions or workers specifically on the just transition.**
- ② Explicitly **as part of their just transition planning**, no company had committed to engage with alternative worker representatives where freedom of association is restricted under the law.
- ② Explicitly **as part of their just transition planning**, no company explicitly included migrant workers and their representatives as a named stakeholder to engage.

This assessment of 27 of the largest, best-resourced and most influential renewables stakeholders reveals several areas for improvement across the sector. Companies are failing to demonstrate meaningful understanding of migrant worker-specific risks posed by their business operations and in the context of the Gulf, let alone evidencing mitigation efforts or acknowledgement relevant international standards should be upheld. Given the industry's reliance on business relationships, supply chain standards should be much stronger, including articulating supplier expectations at every tier to reach vulnerable workers employed by subcontractors. Our full set of recommendations can be read [here](#).



# Annex 1:

## Methodologies

### This report brings together findings from three key sources:

- ③ The Resource Centre’s [Gulf energy explorer: Renewables, rights and risks](#) is a tool for research and advocacy in the region, including to identify which companies are awarded work on renewable energy projects and therefore best placed to monitor and uphold respect migrant worker rights in their value chains. The Gulf renewables explorer relies on publicly available reports on the announcement, tendering, construction and financing of renewable projects and green hydrogen production in the region. The data referred to in this briefing takes a snapshot of data published prior to May 2024, though the database itself is updated on an ongoing basis. The methodology can be read in full [here](#).
- ③ The analysis in this report assesses the **publicly available policies and disclosure of 27 renewable energy developers and construction/engineering contractors** identified through the Resource Centre’s Gulf renewables explorer against five themes representing fundamental human rights principles relating to migrant workers. Analysis took place during August and September 2024; disclosure published after this time was not credited in the analysis, but we highlight where companies have since met the criteria. The themes and indicators can be read in Annex 3 below; the analysis on a company-by-company basis is published in Annex 2.

Developers and construction/engineering contractors were selected because they met one or more criteria:

- ③ Involved in three or more projects in at least one GCC country within the last three years;
  - ③ Assessed within Resource Centre’s [Renewable Energy and Human Rights Benchmark](#) and were linked to at least one project in the GCC;
  - ③ Already associated with allegations of migrant worker abuse in their global operations or supply chains and were linked to at least one project in the GCC.
- ③ **Testimonies from 34 migrant workers** working on solar and wind farms in the UAE, interviewed from February to November 2023 and April to June 2024. Owing to the risk of reprisal against interviewees, no workers, workplaces, renewable projects or employers are identified in this publication. Equidem investigated 10 renewable energy developers, finding rights violations taking place at 14 local subcontracting companies and among directly-employed workers at developer’s office. Some subcontractors were renewables-specialist, for example solar installers or technicians, others provided services such as transportation and security to the project site and workers. Workers were deployed to at least four renewable energy projects over the course of their employment. The sample is heavily weighted towards the experience of male workers, given the rarity of female employment in these roles or industry in the UAE.

# Annex 2:

## Relevant articles in UAE labour law

These rights violations are rooted in laws and employment practices in the UAE that ensure that renewable sector employers have access to a hiring pool of migrant workers, while systematically excluding workers from adequate labour, employment, and social protections. Risk factors for labour and human rights abuses in the UAE include widespread employment of migrant workers in temporary positions, where workers are subjected to employer control without adequate labour standards protections, including the freedom of association protections required to enforce labour standards. Attesting to these gaps in protection for migrant workers, the rights violations documented in this report violate a slate of UAE labour laws.

- ➔ Article 4, Equality and Discrimination, of Federal Decree- Law No.33 of 2021, prohibiting discrimination which prejudices equal opportunities in employment, equal access to jobs and continuity of employment.
- ➔ Article 6, Federal Decree-Law No. 33 of 2021 regarding the Regulation of Employment Relationships, requiring recruitment costs to be borne by the employer.
- ➔ Articles 17 and 18, Federal Decree Law No. 33 of 2021 of the Regulation of Labour Relations in the Private Sector, governing working hours
- ➔ Article 19, Federal Decree-Law No.33 of 2021 of the Regulation of Employment Relationship, pertaining to overtime payments
- ➔ Ministerial Resolution No. 598 of 2022 Regarding Wages Protection System
- ➔ Article 14, Federal Decree-Law No.33 of 2021 regarding the Regulation of Employment Relationship prohibiting sexual harassment, bullying, and verbal, physical, and psychological violence
- ➔ Article 31, Federal Decree-Law No.33 of 2021 regarding the Regulation of Employment Relationship and pertaining to paid sick leave
- ➔ Ministerial Resolution No.44 of 2022 Regarding Occupational Health and Safety and Labour Accommodation
- ➔ Clause 13 of Article 13 of Federal Decree Law No. 33 of 2021 on the Regulation of Labour Relations in the Private Sector, prohibiting employers from confiscating identity documents
- ➔ “Safety in Heat,” Abu Dhabi Public Health Center, requiring employers to take measures to protect workers from heat stroke

# Annex 3:

## Company assessment – themes, indicators and scores

### Commitment to respect human rights

- 1a** The company has a publicly available, written human rights policy statement committing it to respect human rights under the Universal Declaration on Human Rights and/or the International Bill of Rights
- 1b** **AND** that policy addresses labour rights risks with reference to the fundamental principles that are subject of the ILO Core Conventions as set out in the Declaration on Fundamental Principles and Rights at Work
- 1c** **AND** the policy (or other public document) references risks to migrant workers specifically
- 1d** **AND** the company outlines publicly the processes used to conduct risk assessments to monitor labour rights risks in both its own operations **AND** supply chains

### Supply chain risk

- 2a** The company has a publicly available, mandatory or legally-binding supplier code of conduct
- 2b** **AND** that code of conduct commits it to respect the human rights that the ILO has declared to be fundamental rights at work
- 2c** **AND** that requires suppliers throughout its supply chain and business relationships to be aware of and implement effectively the ILO standards, including requiring suppliers to cascade the standards down its supply chain

### Fair recruitment

- 3a** The company has a publicly available, written policy requiring no worker in its supply chains should pay for a job
- 3b** **AND** that the costs of recruitment (in alignment with the ILO definition of recruitment fees and related costs) should be borne not by the worker but by the employer

### Stakeholder engagement

- 4a** The company has a publicly available, written policy requiring respect for freedom of association
- 4b** The company has a publicly available, written policy prohibiting intimidation, harassment, retaliation and violence against trade union members or equivalent worker bodies and trade union representatives
- 4c** The company has a publicly available, written policy requiring respect for the right of all workers to form and join equivalent worker bodies where the rights to freedom of association and collective bargaining are restricted under law
- 4d** To support collective worker empowerment, the company works with local or global trade unions to engage with stakeholders, including potentially and actually affected stakeholders and/or other worker representatives (where FOA is restricted under the law)
- 4e** To support collective worker empowerment, the company works with migrant workers and/or their representatives, and migrant rights advocacy groups are explicitly identified as priority for engagement
- 4f** The company has entered into a Global Framework Agreement that covers its supply chains and/or an enforceable supply chain labour rights agreement with trade unions or worker organisations

### Stakeholder engagement

- 5a** The company has a public commitment to engage in social dialogue on a Just Transition with unions
- 5b** The company has a public commitment to engage in social dialogue on a Just Transition with other worker representatives, where FOA is restricted under law
- 5c** The company has a public commitment to engage in social dialogue on a Just Transition **AND** explicitly discloses categories of engaged stakeholders, including migrant workers

Company	HQ	1a	1b	1c	1d	2a	2b	2c	3a	3b	4a	4b	4c	4d	4e	4f	5a	5b	5c
ACWA	Saudi Arabia	✗	✗	✗	✔	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Air Products	USA	✔	✔	✗	✔	✔	✔	✔	✗	✗	✔	✗	✗	✔	✗	✗	✗	✗	✗
Aramco	Saudi Arabia	✗	✗	✗	✔	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CMEC	China	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✔	✗	✗	✗	✗	✗
DEWA	UAE	✗	✗	✗	✗	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EDF	France	✔	✔	✔	✔	✔	✔	✔	✗	✗	✔	✔	✗	✔	✗	✔	✔	✗	✗
Engie	France	✔	✔	✔	✔	✔	✔	✔	✗	✗	✔	✔	✗	✔	✗	✔	✔	✗	✗
Fortescue	Australia	✔	✔	✔	✔	✔	✔	✗	✔	✗	✔	✗	✗	✔	✗	✗	✗	✗	✗
Hitachi	Japan	✔	✔	✔	✔	✔	✔	✔	✔	✗	✔	✔	✗	✔	✗	✗	✗	✗	✗
Jinko Power	China	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
KBR	USA	✔	✔	✔	✔	✔	✔	✗	✔	✗	✔	✗	✔	✗	✗	✗	✗	✗	✗
KEPCO	South Korea	✔	✔	✔	✔	✔	✔	✔	✗	✗	✔	✔	✗	✔	✗	✗	✗	✗	✗
Larsen and Toubro	India	✗	✗	✗	✔	✔	✔	✗	✗	✗	✔	✔	✗	✔	✗	✗	✗	✗	✗
Marubeni	Japan	✔	✔	✗	✔	✔	✔	✗	✗	✗	✔	✗	✗	✔	✗	✗	✗	✗	✗
Masdar	UAE	✗	✗	✗	✗	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
NEOM	Saudi Arabia	✗	✗	✔	✗	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OQ	Oman	✗	✔	✗	✗	✔	✔	✔	✗	✗	✔	✗	✗	✔	✗	✗	✗	✗	✗
Posco Holdings	South Korea	✔	✔	✗	✔	✔	✔	✔	✗	✗	✔	✔	✗	✔	✗	✗	✗	✗	✗
PowerChina	China	✗	✗	✗	✗	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
QatarEnergy	Qatar	✗	✗	✔	✔	✔	✗	✗	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Samsung Engineering	South Korea	✔	✔	✗	✔	✔	✔	✔	✔	✗	✔	✔	✗	✔	✗	✗	✗	✗	✗
Shanghai Electric	China	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✔	✗	✗	✗	✗	✗
Shell	UK	✔	✔	✔	✔	✔	✔	✔	✔	✗	✔	✗	✗	✔	✗	✗	✗	✗	✗
Siemens Energy	Germany	✔	✔	✔	✔	✔	✔	✔	✗	✗	✔	✔	✗	✔	✗	✗	✗	✗	✗
TotalEnergies	France	✔	✔	✔	✔	✔	✔	✔	✔	✗	✔	✔	✔	✔	✗	✔	✔	✗	✗
TSK	Spain	✗	✗	✗	✗	✔	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Vestas	Denmark	✔	✔	✔	✔	✔	✔	✗	✔	✗	✔	✔	✔	✔	✗	✗	✗	✗	✗

# Endnotes

- 1** Our database captures publicly reported allegations of labour abuse implicating businesses. These figures are just the tip of the iceberg as we know workers face restrictions to reporting exploitation. For more information see our methodology [here](#).
- 2** Where information on workers' nationality is available.
- 3** In line with the IPCC, the Resource Centre acknowledges wind and solar energies are the primary mitigation options to transition away from fossil fuels, however, the [Gulf renewables explorer](#) does also consider green hydrogen production, given the significant presence of these projects in the region and the lessons in respect of human rights that may be transferrable to the solar and wind sectors.
- 4** Excludes 30 projects with unknown total investments; these are generally planned solar and green hydrogen projects, with around 200MW higher average capacity than projects with known investments. Therefore, the average total may be higher than our estimate and increase over time.
- 5** "Involvement" or being awarded work includes, but is not limited to, companies which sign project contracts; companies which publicly commit to develop or work on a project, prior to signing a contract, such as through a letter of intent; and companies providing financing to projects or stakeholders.
- 6** Figures based on company outreach in the 18 months to September 2024.
- 7** Article 18, [Federal Decree Law No. 33 of 2021](#) on the Regulation of Labour Relations in the Private Sector.
- 8** See Ministerial Decree No. 52 of 1989, Ministerial Decree No. 1283 of 2010 and Cabinet Decision No. 40 of 2014, as well as in the Standard Employment Contract of 2015 and the Worker Welfare Policy.
- 9** See UAE Ministry of Interior's Circular No. 267 of 2002, the Standard Employment Contract and the Worker Welfare Policy.
- 10** Ministry Of Human Resources & Emiratisation: [Labour accommodation](#).
- 11** Ministry Of Human Resources & Emiratisation: [Ministerial Resolution No.\( 44 \) of 2022](#).
- 12** See: [UN Guiding Principle 13](#). "The responsibility to respect human rights requires that business enterprises b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts."
- 13** The [Dhaka Principles for Migration with Dignity](#) were developed and published by IHRB in 2011 after wide private, government, trade union and civil society consultation, aligned with the UN Guiding Principles and endorsed by the International Trade Union Confederation and the World Employment Confederation. Principle 1 is the source for the Employer Pays Principle.
- 14** Credited where there is confirmation from both parties that an agreement is finalised.



## Business & Human Rights Resource Centre

NOVEMBER 2024

**Business & Human Rights Resource Centre** is an international NGO which tracks the human rights impacts of over 10,000 companies in over 180 countries, making information available on our 10-language website.



## equidem

**Equidem** is a human rights and labour rights not-for-profit working globally to promote the rights of marginalised communities, accountability for serious violations, and building the human rights movement. Our team of worker activists, investigators and policy experts expose injustice, provide solutions for the most intractable human rights challenges and work closely with other grassroots and global civil society to empower the individual and the community.

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