Sustainability Report **2018** *Living Our Values* 







A WORLD ELECTRIFIED BY RENEWABLE ENERGY



# Contents

1. Intro	duction	3
1.1	Welcome from our CSR Committee Chairman	
1.2	Letter from our Group Chief Executive	
1.3	Sustainability at Mainstream from our CSR Committee Convenor and Group Head of HR	
1.4	Mainstream at a glance	
2. Our	Sustainability Journey	_ 10
3. Livin	g our Values	_ 13
3.1	Our approach to sustainability reporting	
3.2	Materiality and introducing our four pillars	
3.3	Our Global Development Standard	
3.4	Our values	
3.5	Pillar One – Marketplace	
3.6	Pillar Two – Workplace	
3.7	Pillar Three – Environment	
3.8	Pillar Four – Community	
4. Our	2018 Sustainability Performance	30
KPI	1 – Governance and ethical business practice.	
KPI	2 – Labour practices	
KPI	3 – Workforce health and safety	
KPI	4 – Energy use and emissions (GHG)	
KPI	5 – Waste and hazardous materials	
KPI	6 – Project lifecycle and related ecological impacts	
KPI	7 – Community impacts and local benefits	

02

# Introduction

Renewable energy programme, Tata Inti solar park, Chile





## Highlights: 2018

1 Carbon Disclosure Project A- Leadership status awarded.\*

2 CO<sub>2</sub> emissions avoided\*:
 996,447 tonnes = taking O
 211,560 cars off the road in one year

3 First energy company in Chile to receive ISO 45001 Occupational Health & Safety certification.

4 All employees completed Anti-Bribery and Corruption Training.

5 8,906 MW projects in active development and 707 MW projects in construction

# 1.1 Welcome to Mainstream CSR Committee Chairman, Brendan Halligan

I'm very pleased to welcome you to Mainstream's first standalone Sustainability Report. This marks an important step in Mainstream's evolution as we embrace sustainability, and focus on providing our stakeholders with greater insight into our environmental, social and governance performance.

Mainstream is committed to be a responsible business and this Report provides an understanding of our business actions in an open and transparent way and reflects upon our successes and challenges in 2018.

I am moved and encouraged by the new generation influencing the future of the world and its politics who are so clearly voicing their concerns for the environment. The inspirational Swedish activist, Greta Thunberg who began protesting outside the Swedish parliament in August 2018 about the need for immediate action to combat climate change has galvanised a world that at times has appeared distracted and disengaged from the huge challenges posed.

Influenced by the overwhelming scientific evidence of climate change, we are driven as

a company to develop utility scale renewable energy power plant in a manner that is both commercially successful as well as sustainable and which brings tangible benefit to the communities and countries in which we operate. Continuing to build and operate fossil fuelled power plant, on a business as usual basis, is no longer an option. Thankfully, because companies like Mainstream have invested in renewables allowing our industry to innovate and to reach a global scale, we can now provide grid-scale power plant that is cheaper, more reliable and quicker to build than coal or gas fired generation, while actively reducing global carbon emissions.

We are proud of our achievements in 2018 and, we recognise this is an ongoing journey, updating and implementing further initiatives along the way. Our CSR Committee is fully engaged with our global team to deliver these by working closely with all our stakeholders to build upon the success of the business.

Brendan Halligan Chairman

\*Mainstream is reporting on our emissions for 2017 and will continue to report one year in retrospect. \*\*https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Ó







Colleagues at Sarco wind farm, Chile

# 1.2 Letter from Andy Kinsella Group Chief Executive

In February 2018 Mainstream celebrated our tenth birthday. Publishing our first standalone Sustainability Report is one of the ways that we are marking this anniversary, and our continued evolution as a global company.

Mainstream's Vision is of a world electrified by renewable energy, and our Mission is to lead and accelerate the once-off transition from fossil fuels to sustainable forms of energy. Through our first decade we have invested to build a company that is now the world's leading pure play developer of utility scale renewable energy projects . We are the largest renewable energy company in Chile, and our Lekela joint venture is the largest pure play renewable energy developer in Africa.

We have delivered 804MW of onshore wind and solar projects into operation, and have consented and delivered into pre-construction a further 3,450MW of offshore wind. Mainstream's Group audited accounts for 2018 show a profit of EU487.5million. Our ambition for the next decade is to become a global renewable energy major. The driving force behind this success is our people. Our values, which are set out through this Report, unite all the Mainstream family and create an energy that brings life to our vision, our sense of mission, and a commitment to deliver for the business. Our in-house Global Development Standard encapsulates our uniqueness as a developer, and enables us to put our values into practice. The Standard is aligned with international best practice including the IFC Environmental and Social Standards, the Equator Principles and the UN Guiding Principles. It means we develop our projects to the highest global standards, even if these are above and beyond local regulation and practice.

Our commitment to renewable energy, and to sustainability, which is set out in this Report was rewarded in 2018 by the award of A- leadership status by the Carbon Disclosure Project, placing us among the most pioneering businesses in the world for acting on climate change.

We may only be ten years old, but our commitment is to help lead the world in a once-off transition to sustainability.

Andy Kinsella, Chief Executive Officer





Colleagues support day care centre, Cape Town, South Africa

# **1.3 Sustainability at Mainstream** Elaine Quinlan, CSR Committee Convenor and Group Head of HR

We are delighted to bring you our first Sustainability report covering our activities in 2018. This is an important first step for us as our company grows and evolves. It allows us to provide you with a more in-depth view of how we operate our business with our stakeholders – our partners, contractors, employees, communities, and the environment.

My journey with Mainstream began ten years ago – and I am proud of the team of people we have drawn together. We are a people and values driven company, and I am certain they are the key to our success. Sustainable innovation and growth require the best talent, and we invest in our people through training, development, and leadership programmes. This investment will continue to improve our performance and accelerate our efforts to transform.

In Mainstream, we are committed to operating sustainably and strive to have a positive and lasting impact through our activities and relationships as we pursue our business goals. Although we are a private company, we seek to operate like a listed company, and the publication of this Report adds a further level of transparency and visibility to our conduct as a global corporate citizen.

As we innovate and find new and improved ways to doing business, we work closely with all of our partners, our communities and our stakeholders to measure our impact and our performance. In 2016 and 2018 we undertook Reputation Audits, measuring our standing in the global village. In every year since 2015 we have carried out colleague surveys to identify ways to improve our performance and to deliver an enhanced work/life balance for our teams across all of our markets. Our business is our people, inside and outside our offices, and this Report is in part a tribute to the hard miles and long hours that they have contributed to make us a world-leading renewable energy company.

Elaine Quinlan CSR Committee Convenor Group Head of HR



# 1.4 At a glance About Mainstream

<b>Offices across</b> <b>our regions</b> Africa, APAC, Europe, LATAM, North America	196 Employees	7 Core Values Safety, Respect, Entrepreneurship, Innovation, Integrity, Sustainability, Working Together	Net CO <sub>2</sub> emissions avoided in 2017 <b>996,447</b> metric tonnes
In Development 8,906 MW 66 projects	In Construction 707 MW 5 wind projects	Delivered into operation 804 MW 9 wind & 2 solar plant & 2 parks	Offshore projects sold with environmental approval <b>3,450 MW</b> <b>2</b> projects

#### Accreditations in 2018 We have successfully attained ISOs















# **OUR GLOBAL FOOTPRINT**

#### Europe

#### Office: Dublin

#### Ireland

- > Two wind plants delivered into operation one which was sold to the IKEA Group in 2014.
- > One wind farm in late stage development.

#### Scotland

- Successfully consented 450MW Neart na Gaoithe offshore wind farm.
- > Inflation-linked CfD awarded for fifteen years.
- > Sold project to EDF Group in May 2018.

#### England

- > Established JV with Siemens Project Ventures.
- Successfully consented 3,000 MW, Hornsea Projects 1 and 2.
- Sold Hornsea offshore wind farm to Ørsted in 2015.

#### **North America**

#### Office: New York

#### Canada

- Developed, constructed and delivered into operation 46 MW wind plant.
- > Wind plant sold to the IKEA Group in 2013.

#### USA

- Developed and helped construct and deliver into operation 110 MW wind plant.
- Successfully awarded 20-year offtake from Illinois Power Agency.
- > Wind plant sold to Goldwind USA.

#### LATAM

Offices: Santiago and Bogotá

#### Chile

- > 1,300 MW of contracted wind and solar projects won in 2016 electricity auction.
- > Two wind farms in construction (299 MW).
- > One wind farm delivered into operation (33MW).
- > Projects in development (3,143 MW).

#### Colombia

> Development office opened in Bogotá in 2018.

#### **Africa** Office: Cape Town

#### South Africa

- Six wind and solar PV plants delivered into operation (598 MW).
- > Two wind farms in construction (250 MW).
- > Projects in development (4,123 MW).

#### Egypt

 Two wind farms in late stage development and expected to reach financial close in 2019 (570 MW).

#### Ghana

 > Wind farm in late-stage development (150 MW).

#### Senegal

> Wind farm in construction (158 MW).

#### APAC

Offices: Hanoi, Ho Chi Minh City, Manila and Melbourne

#### Vietnam

 One offshore wind farm under development (800 MW).

#### Philippines

 > Two wind farms in late stage development (120 MW).

#### Australia

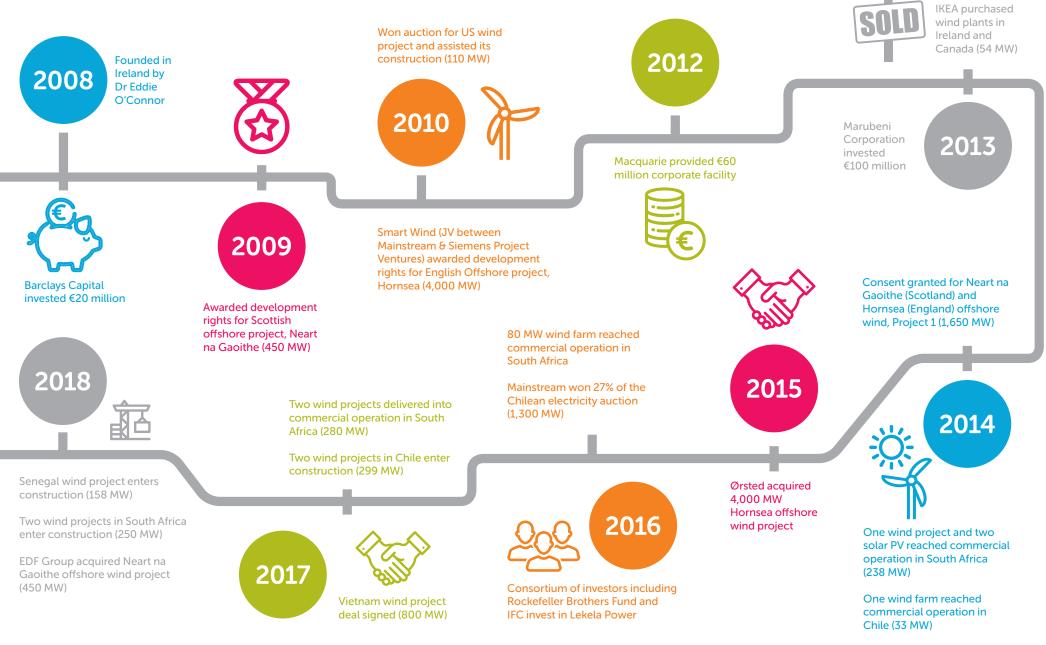
 Development office opened in Melbourne in 2018.



Solar PV Onshore wind Offshore wind

Offices

## SIGNIFICANT MILESTONES 2008 TO 2018



# Our sustainability journey

Universal Children's Day – Loeriesfontein wind farm, South Africa



# 2. Our Sustainability Journey



- Safety and Corporate Social Responsibility (SCSR) Committee founded.
- SCSR reports to the Board of Directors on the company's performance in living and leading on its values.
- > Terms of Reference agreed to oversee company strategies, policies, management, initiatives, targets and performance for:
  - Occupational H&S and security
  - Societal role and interaction with communities and environment
  - Workplace policies
  - Corporate polices and compliance.
- > CSR Benchmarking programme Mainstream engaged with Business for Social Responsibility (BSR) to help inform, shape and implement a set of KPIs for the company's CSR activity. These KPIs would help the company:
  - Monitor and manage our sustainability performance across the business
  - To align our reporting to recognised international standards
  - To quantify the impact of our investment in CSR activity globally.



- > BSR assessed and peer-reviewed Mainstream's CSR activities and existing standards of CSR performance measurement and recommended KPIs closely aligned to recognised CSR reporting standards, including:
  - The Global Reporting Initiative (GRI G4)
  - Sustainability Accounting Standard Board (SASB)
  - Global Impact Investing Network IRIS 4.0 metrics
  - IFC Environmental
     Finance Corporation (IFC),
     Environmental and Social
     Performance Standards and
     Guidance and



- The Equator Principles

   a risk management
   framework adopted by
   financial institutions for
   determining, assessing and
   managing environmental
   and social risk in projects.
- > The BSR recommended KPIs were aligned with Mainstream's existing SCSR Terms of Reference. The SCSR undertook a materiality assessment on the proposed KPIs which were then adopted.









Closing ceremony for renewable energy programme, Tata Inti solar park, Chile



- To provide greater Board visibility of CSR activities, Mainstream divided the SCSR into the Chief Executive's Safety Committee and a standalone CSR Committee. The CSR Committee agreed that the company's CSR activity should be measured across four pillars: Marketplace, Workplace, Environment and Community.
- > The Committee also took the opportunity to review its existing KPIs and set 2018 as the first base reporting year.



- Mainstream is awarded
   A- Leadership status by the
   Carbon Disclosure
   Programme (CDP) for the
   2017 reporting year.
- Mainstream publishes its first standalone Sustainability Report.



# Living Our Values

-

89=

Third Terro

-

Twice

-

Drop-in centre and community-based aftercare programme, South Africa

Think Tatio



Thing Twice

# 3. Living Our Values

# 3.1 Our approach to sustainability reporting

#### Our stakeholders

Our business success is founded on positive relationships with our stakeholders including our customers, partners, contractors, employees, communities, governments and the wider public. By engaging regularly, we are aware and responsive to issues that matter to them.



Renewable energy programme, Tata Inti solar park, Chile

#### Our channels of communication

We use various sources of information and feedback to inform us including:

- > annual employee engagement survey
- reputation surveys (desk based and one-to-one interviews with a cross-section of our business partners, contractors, government and communities)
- community engagement activities.

#### The engagement process

This process informs us of the issues that matter most to those who are affected by our business activities.

When developing a project, we align our stakeholder engagement process with the requirements of the Equator Principles, and the performance standards contained in the IFC's Sustainability Framework. The Global Development Standard is our end-to-end documented development process and contains guidance on conducting stakeholder research at a local level to ensure that it is consistent and applies to international standards.



Construction at Sarco wind farm, Chile

Feedback from the communities where we develop our projects is hugely valuable and important to us. It is considered alongside the Environmental Impact Assessment (EIA) and channelled into the project design stage, all of which is underpinned by a robust communications plan to ensure transparency and build trust with our local communities.

#### Environment and wider society

We also consider the environment and wider society as stakeholders since our business activities have the potential to affect issues that have a wider impact, such as climate change and energy security. To guide our approach to wider societal concerns, we have also considered the UN Sustainable Development Goals that are relevant to our business purpose and operations and have incorporated these into the format of this Sustainability Report.





Economic Development programme benefits local milliner business, Noupoort wind farm. South Africa

# 3.2 Materiality

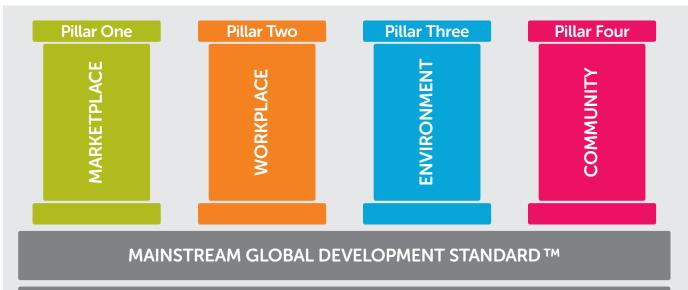
This report subscribes to the principle of materiality and completeness. In determining the content of the report, the following aspects were considered as part of the materiality process:

 Output from stakeholder engagement and its implications on business strategy and policies.

Safety

- International standards that are applicable to development projects including the IFC Sustainability Framework and the Equator Principles.
- > Criteria for environmental, social and governance (ESG) used by providers of capital.
- > Voluntary agreements that guide business practice such as Mainstream's Community Charter.

- > Results from employee engagement surveys.
- > Business and reputational risk considerations.
- > Societal expectations.
- Consideration of the economic, social and environmental impacts of business decisions and activities.
- > Climate-related risks and opportunities.
- > Company values and purpose.



**OUR VALUES** 

**Sustainability** 

Innovation

Integrity

Respect

Entrepreneurship

# Our four strategic pillars

In July 2017, we began to measure our CSR performance across four pillars. The first, Marketplace, reflects the impact of our business activities on stakeholders across all our platforms, and the following three; Workplace, Environment and Community, enable us to capture the activities in specific parts of the business based on BSR recommendations and GRI standards and are aligned with the UN Sustainable Development Goals.

Underpinning our four pillars is our unique world-class Mainstream Global Development Standard™ and Our Values. They are the foundations of our business.

**Working Together** 

#### Sustainability Report 2018 Living Our Values



# 3.3 Our Global Development Standard™

Mainstream's Global Development Standard ('Standard') is our in-house development system used to develop best-in-class projects globally. Our unique Global Development Standard capitalises on our significant in-house experience and is benchmarked against established international standards including the IFC Framework, the Equator Principles and World Bank Standards on Health and Safety.



The Standard gives us a competitive advantage assuring lenders, project owners and stakeholders that all projects – in mature or emerging markets – are designed and developed not only to regionally accepted standards, but also to international best practice.

The Standard has been designed to facilitate the efficient deployment of renewable energy projects ensuring attention to detail around the design of these projects and with meaningful engagement with local communities. It is reviewed and updated regularly to incorporate best industry practice in wind and solar project development. The Global Development Standard covers all stages of project development including:



Environmental and Quality



Analysis



Grid



Fatal Flaw Analysis / Project Acquisition DD

Environmental

Studies

Engineering



Land Control and Third Party Rights



Permits



Communities, Stakeholder Engagement & Public Affairs

Sustainability Report 2018 Living Our Values

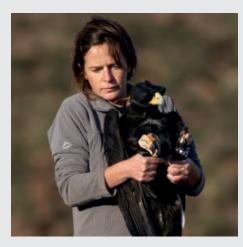


#### Sustaining the eagle population – South Africa

Mainstream initiated an Environmental Impact Assessment (EIA) for two wind projects near Victoria West in the Western Cape, South Africa, amounting to a planned 280 MW. The EIA included one year of active bird monitoring. Shortly after monitoring commenced, it became evident that several Verreaux's eagles resided on or close to the sites. Guided by the Mainstream Global Development Standard <sup>™</sup>, extra measures were implemented to determine the potential impact that the proposed wind farms might have on the eagles and we initiated a project to track the eagles to better understand their behaviour.

This involved trapping 6 to 8 territory-holding adult eagles and fitting each with a harness-mounted GPS tracking device. The tracking devices generated location and flight pattern data (including flying heights) allowing Mainstream to fully understand the eagle risks. After 14 months of tracking it became evident that the risk of eagle mortality and displacement through collisions was higher than first anticipated.

While the risk was still deemed 'manageable', Mainstream decided to cease development of the projects.





#### Sustaining local cultural heritage – Chile

Mainstream is committed to working closely with our communities to understand local needs and we are fully aligned through the Global Development Standard to the community engagement principles outlined by the 169 ILO Convention (C169 – Indigenous and Tribal People's Convention, 1989). During the development phase we look at ways we can be involved and support local initiatives.

In 2018, we welcomed the opportunity to sponsor the 'Mujeres del Desierto' initiative in Northern Chile – aimed at sharing stories of Andean women who play a key role in preserving and passing on local cultural heritage from 14 different groups that live in the region. The stories, gathered by a local author and now recorded in a book



are available in local libraries and educational institutions and they have been distributed to indigenous communities and associations. The women in the book work as potters, weavers, herbalists, healers, farmers, shepherdesses and caretakers of the local churches.



# 3.4 Our Values

Our values help us speak the same language and communicate what's important to us across our business. These core values together with our Global Development Standard are the foundation of everything we do supporting the company's activities to achieve its goals and objectives.

#### Safety

"Our key objective is to provide a safe and healthy working environment for all employees, contractors and other personnel working for us" Liesl Esau, SHEQ, South Africa

#### **Working Together**

"We have a strong track record for bringing together and leading world class consortia which have won thousands of megawatts of government tenders across Europe, South America and Africa." Robin Otero, Engineering, Ireland

#### Respect

"As we move into new communities, we must work hard to earn their respect each time. Fortunately, having gained a reputation for being respectful,

people are more open to our proposals. It often means the difference between building a project or not."

Daniela Rodriguez, Community Relations, Chile.





Bird study programme, Kangnas wind farm, South Africa

### Integrity

"The Mainstream Global Development Standard is our in-house system that guarantees highest development standards are upheld across our markets. As a result, we have secured investment from the IFC, and the Rockefeller Brothers." Hung Tran, Development, Vietnam

### Sustainability

"In Vietnam, a 2-degree temperature rise, likely if we do not scale back carbon emissions urgently, would flood 40% of the Mekong Delta and destroy 30 million livelihoods. Deployment of large-scale renewable energy projects is essential to a sustainable future." Huong Tran, Commercial, Vietnam



#### Innovation

"In 2016, we won 27% of the competitive electricity tender in Chile and committed to deliver 3,366 GWh of firm power each year. To meet this commitment, we are developing



our geographically spread projects in portfolios matching distribution company demand profiles." Nathalia Quiroz, Corporate Affairs, Chile

#### Entrepreneurship

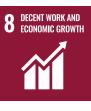
"As one global team, we work closely to gather ideas and make efficient business decisions enabling us to secure and deliver better projects quickly." Marcus Andre Ong, Business Development, Philippines.







#### Related SDG's



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



# 3.5 Pillar One: Marketplace

This pillar relates to how Mainstream manges its relationships with its customers, buyers and business partners and, how we manage risk in the complex business environment where we operate.

# Pillar One

#### Highlights:

- > Country risk monitoring
- > In-depth reputation audits
- > Industry support
- > ISO accreditations

Mainstream monitors its business and interactions through several management practices to ensure our reputation and long-term viability of the company remains intact. In a constantly evolving world, we must be aware of the risk landscape where we operate and be prepared to act quickly.

We operate our business across four platforms:

- > Africa
- > APAC
- > LATAM
- > Offshore



#### Country risk monitoring

Mainstream operates primarily in emerging markets and with that comes a degree of risk. Mainstream proactively monitors all country risks closely.

We record the potential impacts that the risk will have and put a plan in place on how we can best mitigate against these risks. The types of risk included are; political, financial, laws/regulations and policy change, external geopolitics, internal conflict, and social activism.

#### IRENA

In 2018 Mainstream joined the Coalition for Action, the international network supporting the work of the International Renewable Energy Agency ("IRENA"). The Coalition exists to promote the wider and faster uptake of renewable energy technologies, particularly in emerging markets. Its mission is to develop actions to increase the share of renewables in the global energy mix.

# **COCIITION** FOR ACTION

Sustainability Report 2018 Living Our Values

#### **Reputation risks**

Mainstream has monitored its marketplace reputation since 2016 when it engaged on its first external reputation audit. The second audit took place 18 months later in 2018 to measure Mainstream's reputation across all its stakeholders including; government, regulation, suppliers, banks and finance institutions and communities. The reputation audit focused on receiving both quantitative and qualitative information to measure perceptions about Mainstream and gain insights about the issues and topics of interest and, of concern to specific stakeholders.

In 2018, the reputation audit received 118 online responses and 30 one-to-one interviews concluded.

#### 2016 Results Professional High Duality Driven Edite 0 Connor Renewable Energy Prepared Developer Entrepreneurial Fundicated Pragmatic Energy Prepared Developer Entrepreneurial Fundicated Pragmatic Energy Prepared Developer Entrepreneurial Programmic Processed

#### 2018 Reputation Audit Highlights

#### **Business Model**

- > Nimble approach
- > New market exploration approach
- > New market adaptability
- > Creative capital structures
- > Risk & cost management processes

#### Expertise

- > Deep market knowledge
- > Technical expertise
- > Economists of wind energy

#### People & Culture

- > Determined and hardworking
- > Pioneering and daring
- > Entrepreneurial
- > Solutions oriented



#### **Industry support**

Mainstream works closely with not-for-profit trade associations in each of its target markets. This includes GWEC (Global Wind Energy Council), SAWEA (South African Wind Energy Association), ACERA (Chilean Renewable Energy Association) and many more. Our involvement includes actively contributing to industry/ government white papers and guiding task forces, committees and steering groups in areas of expertise. Our colleagues local expertise coupled with Mainstream's international experience helps to steer best practice within the industry.

Mainstream also has a representative on the advisory board of RE100, the global corporate leadership initiative aimed at bringing together businesses committed to 100% renewable energy.

#### Membership associations



#### ISO accreditation

Our performance is judged by our stakeholders through our ability to deliver economically viable and sustainable energy solutions with minimal risk exposure. We are committed to satisfying the requirements of our stakeholders, and all other applicable compliance obligations, in reaching our business targets.

We strive to attain the highest standards in everything we do through our highly experienced staff who are at the forefront of the global delivery of renewable energy projects.

#### Ireland

Our policies are communicated within Mainstream and available to all stakeholders. The policies detail our commitment to adhere with compliance obligations and to the continual improvement of the systems in place through regular management review meetings.



ISO recognition:

- > Quality Management System (ISO 9001).
- Environmental Management System > (ISO 14001).
- > Occupational Health and Safety (OHSAS 18001) - recertification.
- Information Security (ISO 27001).
- > Information Technology Service Management (ISO 2000).





#### Chile

In Chile, Mainstream became the first energy company in the country to receive its ISO 45001. Mainstream Chile's Environmental and Health and Safety Policy is promoted in the Mainstream office and at its construction sites. It provides information on compliance to SHEQ legislation and standards, developing sustainable projects ensuring environmental protection and awareness and, the continuous improvement of all activities relating to SHEQ and the environment.



Manuel Tagle, General Manager LATAM receives ISO45001 certification

ISO recognition:

- Occupational Health and Safety (ISO 45001). >
- Environmental Management System > (ISO 14001).



Sistema de ISO 14004:2015 ISO 45001:2018 www.tuv.com ID 9108654869

#### South Africa

During 2018, Mainstream South Africa commenced the process for ISO accreditation and this will be attained by mid-2019.



#### Related SDG's



# 10 REDUCED INEQUALITIES

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

# 3.6 Pillar Two: Workplace

Under this pillar, we review our labour practices, focus on how we can conduct our business in an open and transparent manner and providing a safe environment for everyone.

#### Pillar Two

#### Highlights:

- > 100% of employees completed online Anti-Bribery and Corruption Training
- > 90% of employees have succession planning in place
- Average 6.3 days training for employees with 12+ months service.

#### Labour practices

As a global organisation, our ability to attract and retain the very best people from around the world is essential to delivering on our strategic goals. We have almost 200 colleagues working together to create an innovative and entrepreneurial culture to deliver our mission. The company is committed to ensuring employees are motivated and engaged and we receive this feedback each year through a thirdparty anonymous employee engagement survey.

We continue to build an environment where people develop to their potential and feel empowered to succeed and work in an open, work environment.

#### In 2018, Mainstream:

- > promoted 34 colleagues representing 20% of the workforce (12 women, 22 men).
- women represented 37% of the total workforce.
- > employed 21 nationalities.
- > turnover of staff was 10%.
- > invested over €260,000 in training for colleagues – average of 6.3 days training for employees with 12+ months service.
- > staff retention was 10%.

During 2018 interns from universities in Dublin and Cork took up 9 month work placements in Mainstream Dublin. We value these placements and view them as a opportunity to assist in their career development by providing real-life work experience to develop their skills further.

#### Andrew McGregor: Energy Analysis

In 2017 Andrew was an intern in our Energy Analysis team for five months during his B. Eng. Energy Engineering studies in UCC. Andrew was offered a permanent

position in the Energy Analysis team in June 2018 and will mentor our incoming Energy Analysis Intern in March 2019.

#### Jared Momple – Engineering Manager, Central

Jared joined Mainstream in April 2015 as an Electrical Engineer initially in our Cape Town office and was instrumental in successful on time/ budget delivery of the Round 3 projects

there. In October



2017, Jared transferred to the Dublin office where he has been working in the Asset Engineering team assisting new markets as well as documenting the central engineering standards and employers requirements for use across the company.

"My time as an intern at Mainstream gave me a valuable insight into the renewable energy industry. I learned about key energy analysis activities and was given numerous opportunities for professional development. The skills I acquired during the internship proved invaluable to the success I achieved in my degree. I was delighted to be offered the opportunity to continue my career in renewable energy at the world's leading pure-play renewable energy developer." Governance and ethical business practice

Responsible business conduct is essential to our business and we are committed to promoting ethical behaviour across the company.

Mainstream operates in an increasingly complex regulatory and global environment and ensuring compliance across our markets is a fundamental challenge. We look to continuously improving our approach to compliance adding GDPR to the areas of responsibility.

We are compliant with applicable laws, regulations and international standards and we strive to meet stakeholder expectations, and we are constantly building a strong compliance mindset across the company.



Colleagues on site at Sarco wind farm, Chile

#### Code of conduct

The Mainstream Code of Conduct is essential to our compliance approach. It defines the fundamental principles and expectations on how employees engage and interact with our suppliers, business partners and all stakeholders. Our Code of Conduct governs how we do business and includes statements and policies covering anti-bribery and corruption, employment practices, environment, human rights, lobbying, gifts and entertainment, reporting of misconduct and raising integrity concerns. Every year, all employees must sign a declaration they have read and understood the company's Code of Conduct.

Our Code of Conduct is aligned with the UK Modern Slavery Act 2015, and we reject any form of forced labour, slave labour and human trafficking. Our employees are committed to continuously identifying and mitigating potential violations.

#### Governance

Mainstream is governed by its Board of Directors and six sub-committees with representatives from the Board. In 2018, the new Chief Executive Safety Committee was established and is responsible for developing and implementing our Health and Safety strategy.

#### Data privacy

In May 2018, the General Data Protection Regulation 2016/679 came into effect. During the past year, we have made significant progress in our efforts to ensure data privacy compliance under the regulation. An updated privacy policy procedure was put in place along with training for all colleagues to ensure compliance to the regulation. All high-risk areas have undergone assessment and action plans formulated to address and mitigate all risks.

#### Case Study: Safecall whistleblowing hotline

The freedom to raise concerns is an essential element of an ethical corporate culture. In 2014 Mainstream engaged with Safecall to provide the whistleblowing hotline 'Speak Up'. The anonymous hotline enables employees, contractors and suppliers to report issues and speak up in confidence, by phone or email, on any issues relating to the working environment. This external service helps to create and enhance a culture of openness and demonstrates that malpractice is taken seriously and dealt with at the highest level. It also demonstrates Mainstream's commitment to best practice and good governance. The service is highlighted in our Code of Conduct and promoted throughout the company with posters distributed across our offices.

During 2018, there were zero calls made to the Safecall hotline.



Construction at Loeriesfontein Wind Farm, South Africa.

#### Anti-bribery and corruption

Mainstream opposes all forms of bribery and corruption and we have a clear policy covering these areas which is implemented and communicated company-wide through our Code of Conduct. It is clearly stated that when doing business, no employee may directly or indirectly offer, give or take money or anything else of value to obtain an improper advantage.

#### Suppliers and business partners

We expect the highest standards of governing compliance from all our customers, joint venture partners, intermediaries, suppliers and business partners and if necessary, we will seek to review their policies to ensure our commitment is shared. Our procurement teams work closely with Tier 1 suppliers ensuring SHEQ standards are upheld. In 2019, we will implement new procedures to improve supplier management through information consolidation and transparency. In addition we will roll out key supplier anti-bribery and corruption training.



Construction at Noupoort Wind Farm, South Africa.

#### Workforce health and safety

Our objective is to provide a safe and healthy working environment for our employees, our contractors, communities and other stakeholders. As part of Mainstream's business model, we are contracted to manage the construction of project sites and work closely with all our contractors, turbine suppliers and other stakeholders to deliver the projects into commercial operation safely.

In 2018, a new Chief Executive Safety Committee was established. Headed up by the Group Chief Executive with participation from the Chairman, and Non-Executive Board Directors and SHEQ team, the committee is accountable for ensuring that

- The Mainstream Renewable Power group complies with all health and safety legislation.
- Appropriate health and safety policies and procedures are in place across the company.
- > The policies are integrated into the culture of the company.
- > Health surveillance and security arrangements are effective.
- Risk assessments and method statements (RAMS) have been completed for all activities.
- Emergency response and business continuity provisions are appropriate and effective across the business.

#### Case Study: Stop Work Authority ('SWA') programme

The Mainstream SHEQ team published a "Proactive Safety Standard", the first of five Safety Standards to be implemented across Mainstream in 2018. The proactive Safety Standard introduces the Stop Work Authority (or "SWA") obligation which applies to all Mainstream staff.

Under the SWA each Mainstream employee and Contractor is empowered to call a halt to work as soon as somebody identifies a situation which they feel is unsafe. The SWA also imposes an obligation on all Mainstream employees and Contractors to stop working themselves as soon as they are requested to do so by somebody invoking the SWA.

Stop Work Authority is considered as the last resort to prevent incidents and thereby serious injuries and fatalities.



De Aar solar park, South Africa





De Aar solar park, South Africa

During 2018, there were no work related fatal incidents recorded for Mainstream employees and contractors. In addition, there were no health and safety incidents for Mainstream employees recorded. However, contractors on our construction sites reported 13 lost time injury incidents equating to a lost time incident frequency rate of 5.1 per million hours worked. This translated to a Lost Day Rate of 27 average days lost per incident, where the target in 2018 was zero loss time incidents.

A wide range of initiatives and campaigns have been implemented to improve the safety culture and reduce incidents on site. In particular, construction at our sites in Chile provided key learnings to improve our processes in the future to help reduce contractor injuries on site. We saw a significant reduction in on-site injuries during the second half of 2018. We continue to monitor and work closely with our partners to reduce injuries.



Colleagues on site at Sarco wind farm, Chile

Improving the safety culture:

- > CEO video address: SHEQ produced a Health and Safety video as part of the ILO World Day for Safety and Health at work in May 2018. The CEO heightened awareness in Mainstream offices and on-site to the priority of Health and Safety in the workplace, regardless of where employees are located. The video was shown in all Mainstream offices and at our construction sites. The video continues to be used in the Mainstream Dublin induction for new starters.
- Preventative campaign on dangers of assembly and suspended loads on site.
- > Preventative campaign on electrical risks.
- > Improved reporting platform with digitalisation and live data dashboards were established and available to Mainstream management and employees to both monitor and track SHEQ performance.
- SHEQ Induction all new employees in the offices or on construction sites receive a SHEQ induction from a member of the team.

The SHEQ team have undertaken to prepare a safety culture survey for staff and selected contractors in early 2019 to explore Mainstream's HSE culture and how we can effectively plan a future culture change programme to drive HSE across the company.



Construction contractor at Noupoort wind farm, South Africa



#### Related SDG's



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE

# 3.7 Pillar Three: Environment

As a leading independent developer of renewable energy, our vision is to electrify the world with renewable energy and to do so with minimal environmental impact through sustainable business processes.

#### Pillar Three

#### Highlights:

- > CDP Awarded A- grade
- > 8,906 MW in development and 707 MW in construction
- Accreditation: ISO 14001
   Environmental Management
   System (Ireland and Chile).

Mainstream is committed to ensuring that environmental protection and awareness is at the forefront of all our activities. We expect all employees to comply with the principles in our Safety, Health, Environment and Quality Policies (SHEQ) and to act with respect for the environment as stated in our Code of Conduct.

#### Energy use and emissions

We track and report on both our energy consumption (travel and electricity usage) and the amount of emissions we offset through the operation of wind farms and solar parks in which we maintain an ownership position. We

have been reporting to the Carbon Disclosure Project (CDP) for the last 3 years. CDP exists to encourage some of the

world's largest emitters of greenhouse gases to commit to carbon reduction pathways.

This year, we were delighted to be awarded Aleadership grade status for 2017 which ranked us highest of all power companies who participated in Ireland. This is improved compared to the reporting year 2016, where we scored a C grade.

This internationally recognised reporting method calculates our  $CO_2$  emissions and the figure we report takes account of Mainstream's Scope 2 and Scope 3 emissions (comprising our electricity consumption and business travel).

#### Case Study: Innovative concrete reduces carbon emissions in wind farm construction

DISCLOSURE INSIGHT ACTIO

Two of South Africa's largest projects in the government's round 4 tender, the Kangnas wind farm in the Northern Cape and the Perdekraal East wind farm in the Western Cape, are using foundations that are designed using a 70% replacement of cement. This means the carbon footprint of the concrete mix design was reduced by 32.5% from projects in Round 3, saving approximately 1,900 tonnes of CO<sub>2</sub>. We would like to commend our contractors, Concor on their progressive and meticulous approach to the concrete works and helping to achieve this. Foundations continue to be laid into 2019 with all foundations expected to be in place by July.



Construction at Perdekraal East wind farm using 70% replacement of cement





Community member wins bicycle in wind farm naming competition, Entre Ríos wind farm. Chile

#### Project lifecycle and related ecological impact

Our business is the development of renewable energy through the development, construction and operational phase of the project.

Mainstream is responsible for ensuring the general environmental management provisions are in place and ecological impacts through the project lifecycle are minimised.

In 2018, Mainstream received ISO 14001 certification in Ireland and Chile for both offices and at all the project sites. The process for certification in South Africa started in 2018 with certification expected in 2019.





# ISO 14004:2015 ISO 45001:2018



Mainstream Chile team receives ISO 45001 accreditation

#### Case Study: Water conservation in South Africa

In all our activities both in our offices and on-site we look at ways we can reduce our energy use and impact on the environment. At our Kangnas wind farm construction site in South Africa, our Environmental Officer. Marnu Gouws undertook to monitor water usage weekly to ensure the project complied with the licence stipulations provided by the Department of Water and Sanitation. He also carried out water guality tests and measured the static water level of the borehole to ensure it was not over-utilised and provided samples to the Department and to laboratories bi-annually.

In addition Marnu performed PH and electric conductivity tests to determine water quality and these findings were reported to the Department of Water and Sanitation guarterly.



Marnu Gouws, Environmental Officer, Kangnas Wind Farm project, South Africa

#### Waste and hazardous materials

As a company with construction activities, we look at ways to minimise our environmental footprint and track environmental impacts. We ensure any environmental events are controlled, contained and dealt with in accordance with both local and international standards. During 2018, we had spillages on our sites in Chile and South Africa relating to construction and machinery leaks. Measures were taken by SHEQ and the Operations teams to minimise these incidents.

As we move into 2019, we will reinforce our corporate reporting processes for environmental incidents and streamline our reporting and measurement procedures company wide. The purpose will be to deliver transparency and help drive further actions to reduce environmental impacts.

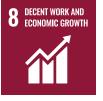


Barry Nelson, Central SHEQ Manager

#### Related SDG's



4 QUALITY EDUCATION



# 3.8 Pillar Four: Community

How we engage with our communities as we develop our projects.

#### **Pillar Four**

#### Highlights:

- > 100% of community plans in place – Chile
- > 90% implementation of plans vs Milestones – Chile

Right from when Mainstream was founded, we recognised that working closely with our communities is a fundamental part of any project development. We engage early and often to get local insights and consider all views to help shape our projects and to get acceptance within communities.



Economic Development programme benefits poultry and egg laying business, Noupoort wind farm, South Africa

#### Community impacts and local benefits

Our community relations teams work closely with local community representatives to better understand their needs and put plans in place to help support initiatives that are important to them. These types of initiatives include early childhood education, literacy, capacity building and entrepreneurial programmes along with cultural heritage.

During 2018, we focused on health, entrepreneurship and education as three of the primary ways we could make a difference in our local communities:



Certificate award for renewable energy programme, Tata Inti solar project, Chile

#### Case Study: Schools environmental education programme - Ventrola y Ventarron, Chile.

The Ventrola y Ventarron environmental education programme in Northern Chile has been running for the past 5 years. This year, eight sessions were rolled out designed to educate and raise awareness on renewable energy, with a particular emphasis on wind energy. This programme raises awareness and educates new generations on the benefits of clean energy sources and the importance of taking care of the environment in which we live. Each programme has a different focus, which is unique to every community and is developed with their specific needs in mind. The playful material is used to capture the children's imagination and stimulate creativity and self-expression.

**Case Study: Enterprise development programme benefits local entrepreneurs, South Africa** The programme commenced during 2016 and continues to benefit local entrepreneurs, celebrating 25 start-ups and 28 existing businesses. The initiative continues to assist those who wish to get new businesses off the ground as well as existing entrepreneurs who needed skills to move forward with their business vision. Fikile Maliti, owner of Karoo Fresh Eggs, had been supplying eggs from his home for about a year when he joined the course. He was accepted onto the programme because of his willingness to learn and to grow his business from a hobby into an operational enterprise through hard work, persistence and perseverance. Karoo Fresh Eggs now supplies the local community as well as supplying eggs to both the public and small retailers.

#### Case Study: Neart Na Gaoithe Offshore Wind Coalition – bringing together a supply chain industry

Mainstream was one of the main founders of the Neart na Gaoithe Offshore Wind Coalition (NnG Coalition). The initial group of Scottish-based companies came together in 2017 to champion the economic, social and environmental benefits of Scotland's nascent offshore wind sector. This was a difficult time for the industry; from the 10 Scottish territorial water sites identified in 2008, only 3 projects had received planning consent and only 2 revenue support. A long-running judicial review threatened 4 projects in the Forth and Tay prompting a former Energy Minister to opine that Scotland's offshore sector was "pretty much dead".

Launched in August 2017, 29 supply chain organisations established the NnG Coalition in support of the 450MW Neart na Gaoithe (NnG) project; as well as promoting the socio-economic and environmental benefits of offshore wind, the coalition demonstrated the power of collaboration across the supply chain and established a foundation for future 'Brand Scotland' development mechanisms such as the OWIG (Offshore Wind Industry Group) – now known as the Scottish Offshore Wind Supply Chain Forum.

A progressive media campaign focused on key project "wins": tangible jobs (construction and operation), offset carbon emissions, a significant uplift to Scottish GDP and the opportunity to develop an indigenous supply chain capable of competing globally. A study was commissioned via the Fraser of Allander Institute to substantiate the perceived benefits and the campaign quickly garnered public and cross-party political support.

The campaign was revolutionary via its use of video and photograph testimonials to tell the stories of the real people behind the organisations directly impacted by the project.



Alan Duncan, Convenor of the NnG Coalition presenting the Scottish Minister with the findings from the Offshore wind supply chain survey.

By 2018, the Coalition had grown to over 70 and a member survey revealed an industry in waiting and sizeable economic and employment benefits for communities ravaged by the demise of traditional industries from Montrose to Methil, and from Errol to Eyemouth.

The Coalition continues its activity to promote and support the NnG project and the wider Scottish supply chain. In early 2019, it became known as the Forth and Tay offshore cluster.

# About Neart na Gaoithe offshore wind farm

In 2009, Mainstream won the exclusive rights to develop the Neart na Gaoithe (NnG) offshore wind farm in Scotland as part of a competitive bidding process.

It proceeded to secure onshore and offshore consent, grid connection and obtain a Contract for Difference. In 2018, Mainstream exited the project when it was sold to EDF Group.



In 2018, the NnG Coalition won the Champion of Renewables award.

# Our 2018 Sustainability Performance

Negrete Wind Farm, Chile.

Sustainability Report 2018 Living Our Values





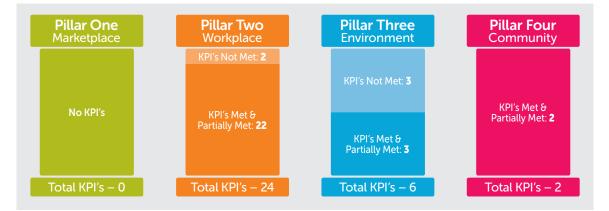
# Our 2018 Sustainability Performance

As part of our preparation for this report and setting of base year KPIs we engaged with colleagues across the business.

In the following pages, we set out the KPIs for 2018. We also disclose if the KPI has been met, partially met or not met and accompany this with a summary.

A number of stakeholders were involved in drawing conclusions on the KPIs and a detailed process undertaken including a workshop with the sustainability team, internal experts, an independent external consultant. During the process, the material issues were considered and aligned to the four pillars of the sustainability strategy to ensure that these issues are appropriately managed and reported on. The issues were also mapped to the GRI reporting standards and the SDGs. The report structure and proposed content was then reviewed by the Safety and CSR Committees and considered to be reflective of the material economic, social and environmental issues the company faces as set out in the KPIs.

It is intended to develop this issue prioritisation further as part of the ongoing sustainability reporting journey by considering the relative importance of these issues. In future reports the presentation of material issues will be in the form of a materiality matrix.



## **KPI 1 – GOVERNANCE AND ETHICAL BUSINESS PRACTICE**

Mainstream is committed to operating its business is an open and transparent manner. Our governance structures and procedures coupled with our Code and Conduct, Policies and Modern Slavery Statement are recognised and abided by all colleagues across the company.

Investors Government	Related SDG's:	8 DECENT WORK AND ECCNOMIC GROWTH	10 REDUCED NEQUALITIES	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Employees				

KPI Indicators		KPI met	Summary
GE1 Governance Bodies	GE1.1: Each director of Mainstream Renewable Power Limited signed Compliance Statements each quarter confirming their compliance with the Mainstream Code of Conduct and Anti-Bribery and Corruption Policy	Met	Our directors compliance statements require each director to confirm that they accept and observe the Mainstream Renewable Power Code of Conduct and associated polices including our Anti-Bribery and Corruption policy. In 2019, we will replace the quarterly compliance statements with one annual statement and broaden it to address statutory and fiduciary duties, political donations, conflicts of interest and training.
	<ul> <li>GE1.2: Review and approve the Terms of Reference annually for Mainstream's Sub-Committees.</li> <li>1. Risk and Investment Committee</li> <li>2. Remuneration Committee</li> <li>3. Audit Committee</li> <li>4. Corporate Social Responsibility Committee</li> <li>5. Nominations Committee</li> <li>6. Chief Executive Safety Committee</li> </ul>	Met	There were no material changes to the Committee Terms of Reference during 2018. The Terms of Reference will be reviewed again during 2019 and any changes will be formally approved by the Board.

KPI Indicators		KPI met	Summary
GE2 Code of Conduct, Anti-Bribery and Corruption	GE2.1: All Mainstream employees are required to complete mandatory Anti-Bribery and Corruption training each year and to sign an employee declaration stating they understand and agree with these and the Mainstream Code of Conduct.	Met	<ul> <li>Anti-Bribery and Corruption is an integral part of our Code of Conduct and all employees must complete an online Anti-Bribery and Corruption training module every year. This year, 100% of employees completed the online training.</li> <li>In 2019, we will extend the training module and request our business partners, contractors, and other third parties to complete this training.</li> </ul>
	<ul> <li>GE2.2: Hold compliance workshops in our target regions promoting compliance within the Mainstream Code of Conduct and Anti-Bribery and Corruption Policies.</li> <li>1. Europe</li> <li>2. Africa</li> <li>3. LatAm</li> <li>4. APAC</li> </ul>	Met Partially Met Partially Met Partially Met	A Compliance Workshop was held in Ireland in June 2018 and all Dublin-based employees attended this. We did not hold specific regional compliance workshops during the year however, all new starters from regional offices received compliance induction in October 2018.
	GE2.3 Compliance Champion appointed from each of our target regions with responsibility for promoting compliance within Mainstream's Code of Conduct and to be a local point of contact for compliance related queries, concerns and training.	Met	In 2018, the company appointed a compliance champion in each of our regions. Europe: Catherine Hawthorne Africa: Shahida Misbach LatAm: Alejandra Alvarez APAC: Chris Dorman

KPI Indicators		KPI met	Summary
	GE2.4 Hold quarterly 'Compliance Champions' meetings during 2018 to ensure Mainstream's Code of Conduct is being upheld in all of our markets and thus promoting a culture of transparency and ethical business practices.	Partially Met	The Compliance Champions held meetings in 2018 to discuss compliance related matters and implement a Committee terms of reference. At the end of 2018 it was agreed that the Compliance Champions Committee would be replaced with an Ethics Committee with participants from each regional office.
	GE2.5 Confirm the 'Speak Up' Whistleblowing service (operated by Safecall) is in place and highlighted to all employees and contractors.	Met	In 2018, Posters have been displayed in prominent locations ensuring that employees and contractors were able to report issues. At the end of 2018, zero calls had been made to the Safecall hotline.
GE3 Human Rights screening	GE3.1 Ensure Mainstream's Modern Slavery Statement is in place and approved by the Board of Directors formalising the company's agreement to operate within the (UK) Modern Slavery Act 2015.	Met	In 2018, the company agreed its Modern Slavery Statement. It was approved by the Board and is now in place.

## **KPI 2: LABOUR PRACTICES**

Mainstream attracts and retains the best employees. The company prides itself on the unique opportunities it provides for employees to develop both professionally and personally. It provides both external and internal training and given the geographical nature of our business our employees are provided with opportunities to work abroad. Mainstream measures employee engagement and satisfaction through its annual employee survey.

Stakeholders: Employees

Investors



KPI Indicators		KPI met	Summary
LP1 Annual performance and succession planning	LP1.1: Performance management: Managers to set annual performance management objectives with employees.	Met	All employees set performance objectives for 2018. Objectives were reviewed mid-year, updated and again reviewed and appraised at the end of 2018.
	LP1.2: Succession planning: Senior managers to identify key roles in the business that require a successor to ensure business continuity.	Met	In 2018, we targeted to have more than 90% of key roles with succession plans in place. We achieved this with 91%. All roles and successors were presented to the CEO in April with some roles identified as requiring external recruitment.
LP2 Employee Engagement	LP2.1: Employee engagement: Third party annual employee engagement survey to be completed by October.	Met	The 2018 Employee Engagement survey was launched in September with the results presented to the Senior Management Team on 22 October and to the Board on 30 October.
	LP2.2: Achieve greater than 95% participation in the employee engagement survey by colleagues.	Met	Mainstream continued to receive high levels of participation in the annual survey. In 2018, the company achieved a rate of participation equal to 96%.
	LP2.3 Achieve overall satisfaction rating greater than 70% in the 2018 employee engagement survey.	Met	Mainstream received an overall satisfaction rating of 84% comparing well against performance in 2017 – 76% and in 2016 – 82%.



KPI Indicators					KPI met	Summary
	LP2.4 Benchmark overall 2018 employee satisfaction levels against 2017 and 2016 percentage levels.				Met	In 2018, the employee engagement survey results showed that staff are highly engaged across the
		2016	2017	2018		business, reflected in the increase in satisfaction.
	Mainstream	81.80%	76.30%	84%		The overall results are higher than the industry
	Chile	79%	82.90%	84%		benchmark and indicate that Mainstream remains an
	North America	81.80%	74.70%	79.5%		exceptionally good place to work.
	UK	75.80%	83.30%	N\A		
	Ireland	85.30%	78.90%	87.4%		
	South Africa	80.50%	64.50%	81.7%		
	APAC	N\A	81.10%	77.9%		
LP3 Employee demographics		LP3.1 Employee retention: minimise turnover rates less than or equal to 10%.			Met	In 2018, the company's ability to retain staff throughout the year was met with 10% of employee turnover during the year.
	LP3.2 Employee ret minimise turnover		•		Met	During 2018, 61 new employees joined the company with only 2 leaving at the end of the probation period. This equated to a 3% turnover rate of new employees.
LP4 Training	LP4.1: Employee tra 12+ months service (3 days) training eac	to receive a		•	Met	Training for employees with over 12 months service averaged 6.3 days while training for employees with under 12 months service averaged 3.3 days in 2018.
	LP4.2: Employee SHEQ training: Each employee to receive a minimum of 2 hours SHEQ training each year.LP4.3: Employee Induction: each new employee to receive H&S induction.		Met	A total of 361 hours training (internal and external training) was provided to colleagues during 2018.		
			Met – Chile Met – Ireland Partially Met – SA	Mainstream Chile and Mainstream Ireland met this KPI with all new employees receiving H&S induction.		
						Mainstream South Africa met 75% of its target and those who did not participate in induction due to offsite meetings/site visits will receive induction in Q1, 2019.

# **KPI 3 - WORKFORCE HEALTH AND SAFETY**

Safety is our number one priority. We monitor and track safety at the workplace and at our operational sites closely. We are committed to ensuring a safe workplace for everyone. 2018 was a challenging year, in particular at two of our construction sites in Chile and we took extra measures to improve site safety.

In the workplace, Mainstream has received its re-certification in Ireland for OHSAS 18001 in 2018, and we received accreditation in Chile for ISO 45001 – the first energy company in Chile to receive this. In South Africa we completed the first phase of accreditation and will receive accreditation in 2019.

Stakeholders: Investors Contractors Employees



KPI Indicators		KPI Met	Summary
WH1 Health and Safety Management	WH1.1: Achieve certification in occupational health and safety management systems OHSAS 18001/ISO 45001 for offices in Chile, South Africa and Ireland.	Met – Ireland Met – Chile Partially Met – South Africa Met* – Scotland	<ul> <li>Mainstream Ireland achieved recertification under OHSAS 18001.</li> <li>In Chile, Mainstream achieved ISO 45001 certification making it the first energy company in Chile to receive this.</li> <li>Mainstream South Africa achieved Stage 1 certification and continues the process into 2019 with certification expected in May 2019.</li> <li>*In addition, Mainstream Scotland received ISO 18001 certification for its 450MW Neart na Gaoithe offshore wind project before its sale to EDF Group in May 2018.</li> </ul>
	WH1.2: Achieve accreditation OHSAS 18001 and ISO 45001 in locations where we have operational sites.	Met – Chile Partially Met – South Africa	Mainstream Chile received accreditation for its Negrete wind farm site (33MW). Mainstream South Africa will commence the accreditation process for its operational plant once the office accreditation is achieved in May 2019.

KPI Indicators		KPI met	Summary
WH2 Total Recordable Injury rate	WH2.1 Zero recorded lost time injury incidents. Employees Contractors	Met Not Met	<ul> <li>In 2018, there were zero lost time injury incidents for company employees.</li> <li>In 2018, there were 13 lost time injury incidents for contractors. Our Lost time incident frequency rate was 5.10 per million hours worked.</li> <li>Our incident recording is based on the International Labour Organization ICLS/16/1998/III Report III and the EUROSTAT methodology:</li> <li># of incidents divided by # of hours worked x 1 million hours worked.</li> </ul>
	WH2.2 Zero recorded lost time incidents or lost days. Employees Contractors	Met Not Met	In 2018, there were zero recorded lost time incidents or lost days for company employees. In 2018, Mainstream reported that its contractors had 13 Lost Time Incidents (LTI) averaging 27 lost days per incident. A total of 357 days were lost in 2018. Our incident recording is based on the International Labour Organization ICLS/16/1998/III Report III as a reference and the EUROSTAT methodology: # of days lost divided by # lost time incidents x 1 million hours worked.
	WH2.3 We had no fatalities for both employees and contractors at any project stage during 2018: Employees	Met	In 2018, there were zero fatalities recorded across the company for both employees and contractors.
	Contractors	Met	

## **KPI 4: ENERGY USE AND EMISSIONS (GHG)**

We track and report on both our energy consumption (travel and electricity usage) and the amount of emissions we offset through the operation of wind farms and solar projects in which we maintain an ownership position. This consumption and these emissions are reported in our submission to the Carbon Disclosure Project (CDP). The CDP runs a global disclosure system that enables companies to measure and manage their environmental impact. The figures below reflect Mainstream's emissions during 2017.

Stakeholders:Related SDG's:InvestorsEmployees	7 AFFORDABLE AND CLEAN ENERGY	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	11 SUSTAINABLE CITIES	13 CLIMA ACTIO
-----------------------------------------------	----------------------------------	----------------------------------------------	-----------------------	-------------------

KPI Indicators		KPI	Summary
EU1 Greenhouse Gas Emissions GHG in CO <sub>2</sub> e	EU1.1 Scope 1 emissions (tCO <sub>2</sub> e) Gross negative/displaced emissions from wind farms and solar in operation	-1,000,040 tCO <sub>2</sub> e	Mainstream has no scope 1 emissions. This figure represents the emissions avoided in 2017 as part of our CDP submission in 2018 based on the operation of power plant of which we have an ownership position.
	EU1.2 Scope 2 tCO <sub>2</sub> e – purchased or acquired electricity consumption	Scope 2: 1,700 tCO <sub>2</sub> e	This was our 2017 "carbon footprint".
	Scope 3 tCO <sub>2</sub> e - overall business travel	Scope 3: 1,893 tCO <sub>2</sub> e	
	EU1.3 Net total emissions for reporting year (scope 1, 2 and 3) Net negative/displaced emissions from wind farms and solar parks	-996,447 tCO <sub>2</sub> e	We were rated A- (Leadership) for the 2017 reporting year, and were the only Irish company in the electricity sector to gain the Leadership award. We are evaluating the CDP evaluation methodology to ensure that it captures Mainstream's business model of only developing renewable energy power plant and will engage with CDP before making our 2018 submission. In 2017, Mainstream made its first submission in respect of 2016 emissions and received a 'C' (Awareness) grade.
	EU1.4 Our emissions per unit of energy generated $tCO_2e$ / MWh for reporting year 2017	-0.86 tCO <sub>2</sub> e/MWh	

## **KPI 5: WASTE AND HAZARDOUS MATERIALS**

As a company with construction activities we look at ways to minimise our environmental footprint and track environmental impacts. We ensure that any environmental events are controlled, contained and dealt with in an upfront and quick manner. We strive to leave the natural environment the way we have found it and ensure the bio-diversity of the area is maintained or returned to its natural state.

Stakeholders:
Investors
Communities
Contractors
Employees



KPI Indicators		KPI Met	Summary
WH1 Number of environmental events with negative impact (spills, chemicals, oil, fuel, wastes)	<ul> <li>WH1.1 Zero negative environmental events across our projects in construction.</li> <li>Chile</li> <li>South Africa</li> </ul>	Not Met Not Met	Mainstream's projects under construction in Chile and South Africa experienced a total of 40 environmental events during the year (31 in Chile and 9 in South Africa). More than 90% of these events related to spills of less than 200 litres of liquids. This included vehicle oil, hydraulic fluids and other chemicals. All were controlled, contained and remedied quickly ensuring soil was cleaned and contaminated materials removed in accordance with both local and international standards During 2018 additional measures were put in place which saw a reduction in the number of events occurring as the the year progressed.
	<ul> <li>WH1.2 Zero negative environmental events across our operational projects.</li> <li>&gt; Chile</li> <li>&gt; South Africa</li> </ul>	Not Met Not Met	There were 4 incidents due to transformer leaks, all minor in size. Mainstream engaged with our contractors to perform maintenance works on turbines and they followed correct procedures to contain, clean, and dispose of contaminated materials in accordance with both local and international standards. The transformer leaks were under 200 litres.

## **KPI 6: PROJECT LIFECYCLE AND RELATED ECOLOGICAL IMPACTS**

We measure our impact on the environment where we are developing, construction and operating wind and solar plant to ensure we leave the land as we have found it. We strive to minimise the impact of our activities and control any negative impacts with due respect to the environment and to the communities surrounding it.

<b>Stakeholders:</b> Communities Government Investors	Related SDG's: 6 CLEAN WATER AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION CONTACT AND SAMITATION C		
KPI Indicators		KPI Met	Summary
PL1 Environmental Management System	<ul> <li>PL1.1 Receive accreditation for our environmental management systems (ISO 14001) across our offices:</li> <li>&gt; Chile</li> <li>&gt; Ireland</li> <li>&gt; South Africa</li> </ul>	Met Met Partially Met	Mainstream Ireland and Chile separately received accreditation under ISO 14001 for environmental systems assuring our stakeholders that our environmental management system meets international industry specific environmental standards, and Mainstream South Africa is in the process of being accredited by May 2019.
	<ul> <li>PL1.2 Receive accreditation for our environmental management systems (ISO 14001) across our operational sites:</li> <li>&gt; Chile</li> <li>&gt; South Africa</li> </ul>	Met Partially Met	Mainstream Chile received its ISO 14001 for the 33MW Negrete wind farm in southern Chile. Mainstream South Africa is working on the accreditation process and this is expected in May 2019.



KPI Indicators		KPI met	Summary
PL2 Product and services Lifecycle	<ul> <li>PL2.1 Meet and/or outperform MWh production for 2018 in line with expected P50 value (load factor).</li> <li>&gt; Chile</li> <li>&gt; South Africa</li> </ul>	Not Met Not Met	<ul> <li>All four sites had lower than expected wind resource during the year. On the three South African projects there was a serial defect in the turbines that required repairs and this led to unplanned downtime.</li> <li>&gt; Chile: Negrete (33 MW) – met 92% of its expected P50 value.</li> <li>&gt; South Africa: Noupoort (80 MW) – met 93.5% of its expected P50 value.</li> <li>&gt; South Africa: Loeriesfontein (140 MW) – met 87.7% of its expected P50 value.</li> <li>&gt; South Africa: Khobab (140 MW) – met 90% of its expected P50 value.</li> </ul>
	PL2.2 Lifetime recording of tCO <sub>2</sub> e emissions (tonnes) offset by wind farms in which we have an ownership position at 31 December 2018	2,391,843 tCO <sub>2</sub> e	<ul> <li>MWh produced over lifetime of plant measured against a carbon intensity offset factor using publicly available data.</li> <li>Chile: Negrete (33 MW) - 188,994 tCO<sub>2</sub>e *</li> <li>South Africa: Noupoort (80 MW) - 864,177 tCO<sub>2</sub>e</li> <li>South Africa: Loeriesfontein (140 MW) - 649,285 tCO<sub>2</sub>e</li> <li>South Africa: Khobab (140 MW) - 689,387 tCO<sub>2</sub>e</li> <li>* This reflects the lower grid carbon intensity in Chile compared to South Africa.</li> </ul>

42

KPI Indicators		KPI met	Summary
	PL2.3 Number of MWs in development vs business plan targets		In Chile at year end, the company had a total of 3,143 MW in development exceeding its development business plan targets.
	> Chile     Met       > South Africa     Met       Number MW's in construction vs business plan targets     Image: Chile of the second sec		At the end of 2018, South Africa had a development pipeline of 4,123 MW. The business plan target was to maintain the development MWs in place and this was achieved.
	<ul><li>&gt; Chile</li><li>&gt; South Africa</li></ul>	Met Met	Chile met its business plan targets with 299 MW in construction. South Africa also met business plan targets with 250 MW in construction.
PL3 Environmental Lifecycle	PL3.1 Total number of projects in development with environmental consents at end 2018.	40	At the end of 2018, 40 projects in our development portfolio of 66 projects had received environmental permits.

## **KPI 7: COMMUNITY IMPACTS AND LOCAL BENEFITS**

We take our role in the community seriously. We recognise that working closely with our communities is fundamental to the success of the project. We engage early and often to get local insights and consider all views to help shape our projects and to get acceptance within communities. Our community relations teams work closely with local community representatives to better understand their needs and establish community plans. By working together early we can ensure projects are developed ethically, and respectfully in line with communities' expectations.

Stakeholders: Communities Investors	Related SDG's:	1 POVERTY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	11 SUSTAINABLE CITIES	17 PARTNERSHIPS FOR THE GOALS
Government		/   #	¥	715			609
Employees							

KPI Indicators		KPIs Met	Summary
CL1 Impact of projects on local communities	CL1.1 All <b>active projects</b> have community plans in place <ul> <li>Chile</li> <li>South Africa</li> </ul>	Met Partially Met	In 2018, all Mainstream Chile projects in active development had stakeholder engagement plans in place. We aim to ensure we engage with our communities early and often and scope out how we can work together. We ensure to engage with our communities early and often leading to a community plan for all our projects. In South Africa due to uncertainty in the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) we were not in a position to complete plans for all of our projects in 2018.
	<ul> <li>CL1.2 Achieve greater than 90% implementation of our 2018 project milestones in each project community plan.</li> <li>&gt; Chile</li> <li>&gt; South Africa</li> </ul>	Met Partially Met	In Chile, we achieved 91% implementation of 2018 community plan milestones. In South Africa, we achieved 77% of the project milestones due to the continued uncertainty in relation to REIPPPP in 2018.

Mainstream Renewable Power Top Floor, Arena House, Arena Road, Sandyford, Dublin 18, Ireland. Tel: +353 (0)1 290 2000 Email: info@mainstreamrp.com www.mainstreamrp.com