



**Fairfield**Energy

**2020 Annual  
Public Statement**  
Fairfield Energy Limited





**For Further Information,  
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## 1. Environmental Policy

It is the policy of Fairfield Energy Limited (Fairfield) to seek to conduct its business in a responsible manner that prevents pollution and promotes the preservation of the environment.

Fairfield appreciates that our activities can interact with the natural environment in many ways. We recognise that sustained development of Fairfield and our long term success depends upon achieving high standards of environmental performance. We are therefore committed to conducting our undertakings in an environmentally responsible manner.

This means that we will:

- Integrate environmental considerations within our business and ensure that we treat these considerations with at least equal importance to those of productivity and profitability;
- Incorporate environmental risk assessment in our business management processes, and seek opportunities to reduce the environmental impact of our activities;
- Continually improve our environmental management performance;
- Comply with all environmental laws, regulations and standards applicable to our undertakings;
- Allocate necessary resources to implement this policy;
- Communicate openly in matters of the environment with government authorities, industry partners and through public statements.

In particular, we will:

- Maintain an environmental management system in accordance with international best practice and with the BS-EN-ISO 14001:2015 standard, including arrangements for the regular review and audit of our environmental performance;
- Conduct environmental analyses and risk assessments in our areas of operation, in order to ensure that we understand the potential environmental impacts of our activities and that we identify the necessary means for addressing those impacts;
- Manage our emissions according to the principles of Best Available Techniques;
- Publish an annual statement on our public web site, providing a description of our environmental goals and performance;
- Maintain incident and emergency systems in order to provide assessment, response and control of environmental impacts.

Ultimate responsibility for the effective environmental management of our activities rests with the Managing Director and the Board.

This policy shall be implemented by line management through the development and implementation of working practices and procedures that assign clear responsibilities for specific environmental activities with our employees and contractors.

In addition, each of our employees has a personal responsibility to conduct themselves in a manner that enables us to implement this policy and our environmental management system.



**John Wiseman**  
Managing Director

## 2. Overview

### 2.1. Background

Fairfield Energy (Fairfield) was established in 2005 and was created specifically as a UK focused independent company to participate in the realignment of North Sea asset ownership in this mature province.

Having concluded that Dunlin had reached the point of maximum economic recovery, particularly in the light of prevailing industry conditions, termination of production from the Greater Dunlin Area was announced by Fairfield on 15<sup>th</sup> June 2015. Approval for Cessation of Production (CoP) was received from the Oil & Gas Authority (OGA) on 15<sup>th</sup> January 2016 with CoP confirmed to have occurred on 15<sup>th</sup> June 2015.

Fairfield is an experienced, late-life asset and decommissioning operator. Our current project is the decommissioning of the Greater Dunlin Area incorporating Osprey and Merlin subsea satellite fields and associated infrastructure.

### 2.2. Our Operations

The Greater Dunlin Area is located in Blocks 211/23 and 211/24 of the UK Continental Shelf which is in the Brent oil province in the Northern North Sea (NNS). The Dunlin Alpha platform stands some 500km north-northeast of Aberdeen within the East Shetland Basin, and 11 km from the boundary line with Norway.

#### 2.2.1. Dunlin Alpha

The main operations on the Dunlin Alpha platform in 2020 focussed on Plug and Abandonment (P&A) and Make Safe and Handover (MS&H) activities.

All forty five Dunlin platform wells are in the process of being permanently abandoned as part of a large-scale P&A campaign which commenced in January 2016. By the end of 2020, all wells have been worked on since the campaign began of which twenty six have had their conductors removed, forty one had been abandoned to Phase 2 status and a further one well had been abandoned to Phase 1 status.

MS&H activities ensure that the topsides are hydrocarbon free in order to safely remove equipment and isolate modules prior to eventual removal. Activities were hampered during 2020 due to the response to the Coronavirus pandemic, however, the following key MS&H activities were undertaken:

- Integrity maintenance activities
- Installation of 'Quikdeck' access system underdeck
- Removal of conductor clamps to facilitate full removal of conductor via platform rig
- Hydrocarbon pipework removal in preparation for Topsides Removal;
- Legs A, B, C & D debris and cut zone clearance;
- Installation of leg caps

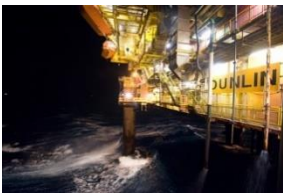
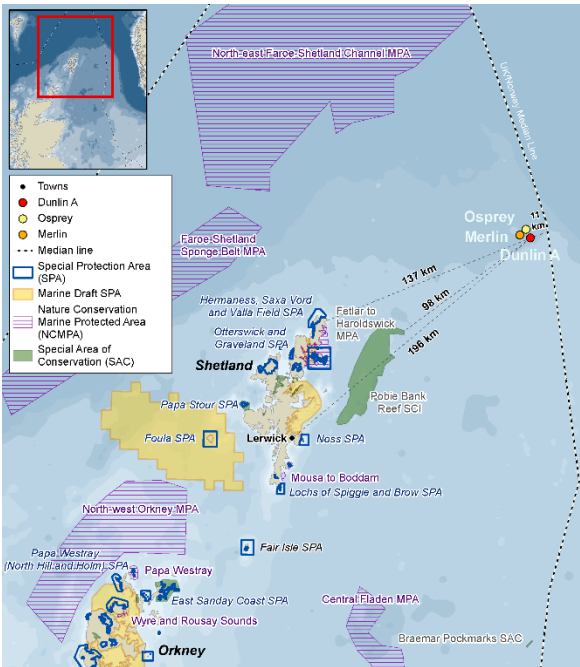
### **2.2.2.Subsea Infrastructure Decommissioning**

The execution phase of Subsea Infrastructure Decommissioning (SID) was completed in Q3 2019, though the following activities were undertaken during 2020:

- Completed final waste disposal and recycling of recovered subsea infrastructure
- Closed out the Osprey, Merlin and Dunlin subsea infrastructure decommissioning programmes

The remaining subsea activities included the following operations as part of the PL5 decommissioning program:

- Rock protection installation was completed
- Post decommissioning pipeline surveys and debris clearance completed



## Dunlin Alpha

**Location:**  
196 km north east of Lerwick

**Block:**  
211/23

**Water Depth:**  
151 m

**Operator / Duty Holder:**  
Fairfield Betula Limited

**Installation Type:**  
Four-leg, concrete gravity base multi-cell substructure with a steel box girder based topsides supporting the drilling deck, module deck and lower deck.

**Platform Wells:**  
45

**Production Commenced:**  
August 1978

**Production Ceased:**  
June 2015

**Estimated Total Recovery:**  
522 million barrels

**Tie-backs:**  
The Osprey field is a subsea development located 6 km to the north-north west of the platform. The Merlin field is a subsea development located 7 km to the west-north west of the platform.

- Infrastructure:**
- 8" oil production pipeline from Merlin to Osprey crossover manifold
  - 38" Osprey south production bundle
  - 38"/31.5" Osprey north production bundle
  - 10" water injection pipeline to Osprey
  - 8" water injection pipeline to Merlin
  - 16" oil import pipeline from Thistle Alpha
  - 24" oil export pipeline to Cormorant Alpha
  - 4" fuel gas import line from Thistle Alpha (10.3 km)
  - Dunlin Power Import Cable from Brent Charlie (22.3 km)

### 3. Environmental Management System

Fairfield has a structured Environmental Management System (EMS) which communicates company policy and establishes the company standards for environmental risk management. The EMS provides a controlled and systematic approach to promoting best practice in environmental management as well as outlining the mechanisms through which compliance is maintained.

The EMS has been developed in accordance with current UK environmental legislation and is certified in accordance with ISO 14001:2015.

Progress against the key objectives / programmes within our 2020 environmental programme is summarised in Table 3.1.

Our 2021 environmental programme continues and builds upon our 2020 programmes and objectives. Specifically for 2021, targets and objectives have been set in the Environmental Management System within the following programmes.

- Achieve recertification of the EMS;
- Audit / Inspection Programme;
- Continued support of the Dunlin Alpha Topsides Delivery Programme;
- Continual improvement of EMS.

Objective / Programme	Summary of Progress
<p><b>Audit / Inspection Programme</b></p>	<p>Due to COVID-19 restrictions on in person audits site visits were limited to essential personnel only though onsite monitoring through monthly platform-wide and weekly drilling package environmental inspections were undertaken on Dunlin Alpha throughout the year.</p> <p>Audits of two of our waste management contractors were undertaken in 2020 to monitor the Duty of Care process.</p>
<p><b>SID/PL5 Programme</b></p>	<ul style="list-style-type: none"> <li>• The SID programme close out report was issued to the regulator in Q3 2020</li> <li>• The PL5 decommissioning programme was concluded with a final rock placement and debris clearance campaign in Q2 2020</li> </ul>
<p><b>Continual Improvement of the EMS</b></p>	<p>Highlights for the year include:</p> <ul style="list-style-type: none"> <li>• Recertification of the EMS under BEN ISO 14001:2015</li> <li>• Continued support of HSEMS integration and alignment</li> </ul>

Table 3.1 – 2020 Key Objectives and Summary of Progress

## 4. Environmental Performance

Given the nature of Fairfield's operations during 2020, the potential for significant environmental impact arose from:

- atmospheric emissions from power generation;
- chemical use and discharge;
- waste; and
- accidental releases.

The environmental performance of Fairfield's operations in 2020 are summarised in the sections that follow, and has been reported to the Department for Business, Energy & Industrial Strategy (BEIS) via the UK Environmental Emissions Monitoring System (EEMS).

### 4.1. Atmospheric Emissions

Atmospheric emissions from the Dunlin Alpha are derived from the generation of power required to support well plug and abandonment operations, as well as making the topsides safe prior to removal.

In 2020, 100% of the power generated by Dunlin was from diesel combustion, as fuel gas is no longer available and power is no longer imported from the Brent Charlie installation.

A summary of the atmospheric emissions generated from the Dunlin Alpha in 2020 is given below.

Emissions in tonnes	CO <sub>2</sub>	NO <sub>x</sub>	N <sub>2</sub> O	SO <sub>x</sub> *	CO	CH <sub>4</sub>	VOC
Power Generation	11305.00	210.00	1.0	7.0	55.0	1.0	7.1
Venting	0.42	0	0	0	0	1.4	1.4
<b>Total</b>	<b>11305.42</b>	<b>210.0</b>	<b>1.0</b>	<b>7.0</b>	<b>55.0</b>	<b>2.4</b>	<b>8.5</b>

\*Diesel used for power generation has 0.1% sulphur content.

Table 4.1 – Summary of Atmospheric Emissions Generated From Dunlin Alpha in 2020.

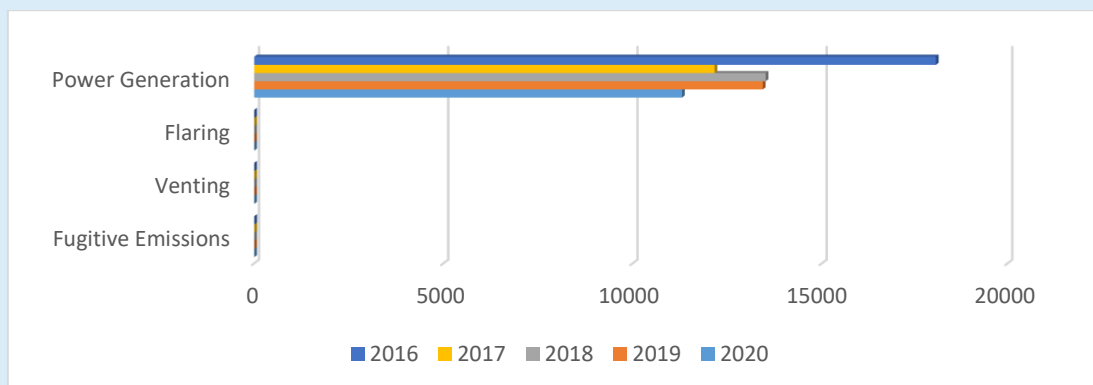


Figure 1 – CO<sub>2</sub> Discharges (mT) by Source



## 4.2. Accidental Releases

The prevention of oil and chemical releases is of the highest priority during Fairfield operations, and consequently we maintain procedures, training and awareness campaigns in order to minimise the risk of release and to ensure a rapid response to any such event.

Oil and chemical release incidents are reported to BEIS in accordance with the Petroleum Operations Notice 1 (PON1) system. Fairfield was responsible for the occurrence of nine such incidents in 2020, a summary of which is provided in Table 4.2 below.

Reference	Date	Nature of Incident	Type of Spill	Estimated Maximum Quantity Released (kg)	Location
PON1/9370	27/03/2020	Diesel hose failure	Oil	0.475	Dunlin
PON1/9528	12/06/2020	Hydraulic hose release	Oil	0.064	Vessel
PON1/9559	27/06/2020	Release from annulus valve during P&A	Chemical	3.8	Dunlin
PON1/9566	01/07/2020	Pinhole leak from mud transfer pipework	Chemical	2.0	Dunlin
PON1/9767	16/09/2020	Failure in deck compressor diesel return line	Oil	4.1	Dunlin

Table 4.2 – 2020 Oil and Chemical Release Incidents



### 4.3. Waste

In total, 2,738.34 tonnes of waste was generated during 2020. Of this figure 90% was reused or recycled. A significant quantity of the total waste generated, 2,727 tonnes, was generated on Dunlin Alpha with a large proportion of that being generated by Wells Plug & Abandonment activities.

Subsea Infrastructure Decommissioning and PL5 Decommissioning activities generated 11.34 tonnes of waste with 93% of that total being either reused or recycled.

Waste (tonnes)	Reused / Recycled (%)	Landfill (%)
2738.34	90.0	10.0

Table 4.3 – Fate of Waste Generated from Fairfield Operations in 2020

### 4.4. Chemical Use and Discharge

Offshore use and discharge of operational chemicals is regulated by the Offshore Chemical Regulations 2002 (as amended), where the word “chemicals” refers to fully formulated products used offshore, whether these are comprised of one or more distinct chemical substances. Such chemicals must appear on both the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) Definitive Ranked Lists of Registered Products and on the relevant Chemical Permit application.

All chemicals are tested and classified by CEFAS according to their potential to cause harm. The assessment relates to a combination of the rate of biodegradation, toxicity and potential to bio-accumulate. Environmental data are provided below according to those which are:

- Environmentally benign i.e. labelled as **Pose Little Or NO Risk (PLONOR)**;
- Low risk i.e. listed in the CEFAS lowest risk categories ('E' or 'Gold' (excluding PLONOR));
- Higher risk i.e. listed in the CEFAS higher risk categories.

Products identified by CEFAS as containing chemicals marked for substitution with a more environmentally friendly alternative are flagged with a “SUB” warning. Use and discharge of such chemicals is included in the following sections.

As previously stated, production at Dunlin Alpha was ceased in June 2015 which means the use of chemicals relating to production operations has now ceased.

Fairfield continually work with chemical suppliers to evaluate the potential environmental hazards of chemicals used, and to select less hazardous alternatives where practicable.

**4.4.1.Wells Activities (DRA, WIA)  
Chemical Use and Discharge**

In 2020, Fairfield used approximately 831.73 tonnes of chemicals during Wells Activities. This figure represents a significant reduction from 2019 (3,181 tonnes) due to there being no additional subsea well activities and Dunlin well operations moving closer to completion. Of the total amount of chemicals used for wells activities, around 4.4% were discharged to the marine environment, showing a reduction from the previous year.

In terms of environmental performance, 100% of chemicals discharged during 2020 were "E" or "Gold" category chemicals. 100% of chemicals used and discharged during the year were classified "PLONOR". There were no "SUB" chemicals used or discharged during well operations at Dunlin Alpha in 2020.

Products by CEFAS Classification	2020 Chemical Use / Discharge (kg)	
	Use	Discharge
<b>A</b>	0.00	0.00
<b>B</b>	0.00	0.00
<b>C</b>	0.00	0.00
<b>D</b>	0.00	0.00
<b>E</b>	760,849.33	31,461.14
<b>Purple</b>	0.00	0.00
<b>Orange</b>	0.00	0.00
<b>Blue</b>	0.00	0.00
<b>White</b>	0.00	0.00
<b>Silver</b>	0.00	0.00
<b>Gold</b>	70,882.04	5,457.56
<b>Total</b>	<b>831,731.37</b>	<b>36,918.70</b>

Table 4.4 – 2020 Wells Activities Chemical Use / Discharge by CEFAS Classification

Chemical Label Code	2020 Chemical Use / Discharge (kg)	
	Use	Discharge
<b>PLONOR</b>	760,849.33	31,461.14
<b>SUB</b>	0.00	0.00

Table 4.5 – 2020 Wells Activities PLONOR / SUB Chemical Use / Discharge

#### 4.4.2 Decommissioning Activities (DCA) Chemical Use and Discharge

In 2020, Fairfield used approximately 6.56 tonnes of chemicals during Make Safe and Handover (MS&H) activities. This is an increase on the figure for 2019 (0.341 tonnes) with chemical usage in 2019 coming from platform cleaning operations and the bulk of that usage coming from a de-oiling operation in one of the leg ponds. Of the total amount of MS&H chemicals used, 1.2% were discharged to the marine environment.

In terms of environmental performance, 100% of chemicals discharged during 2020 were "Gold" category chemicals. No "SUB" chemicals were used or discharged during make safe and handover operations at Dunlin Alpha in 2020.



Products by CEFAS Classification	2020 Chemical Use / Discharge (kg)	
	Use	Discharge
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00
Purple	0.00	0.00
Orange	0.00	0.00
Blue	0.00	0.00
White	0.00	0.00
Silver	0.00	0.00
Gold	6,558.75	78.75
<b>Total</b>	<b>6,558.75</b>	<b>78.75</b>

Table 4.6 – 2020 Decommissioning Activities Chemical Use / Discharge by CEFAS Classification

	2020 Chemical Use / Discharge (kg)	
	Use	Discharge
PLONOR	0.00	0.00
SUB	0.00	0.00

Table 4.7 – 2020 Decommissioning Activities SUB Chemical Use / Discharge

#### 4.4.3 2020 Chemical Use and Discharge: Aggregated Assessment

Combined, Fairfield operations used around 838.29 mT of chemicals during 2020. Of this figure, around 4.4% of chemicals were discharged to the marine environment.

In terms of overall environmental performance for operational chemical use and discharge, 100% of chemicals used and discharged during 2019 were "E" or "Gold" category chemicals. Furthermore, no "SUB" chemicals were used or discharged during the year. Over 90% of chemicals used and 85% of chemicals discharged during the year were classified "PLONOR".



Products by CEFAS Classification	2020 Chemical Use / Discharge (kg)	
	Use	Discharge
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	760,849.33	31,461.14
Purple	0.00	0.00
Orange	0.00	0.00
Blue	0.00	0.00
White	0.00	0.00
Silver	0.00	0.00
Gold	77,440.79	5,554.31
<b>Total</b>	<b>838,290.12</b>	<b>37,015.45</b>

Table 4.8 – 2020 Aggregated Chemical Use / Discharge by CEFAS Classification

	2020 Chemical Use / Discharge (kg)	
	Use	Discharge
<b>PLONOR</b>	760,849.33	31,461.14
<b>SUB</b>	0.00	0.00

Table 4.9 – 2020 Aggregated PLONOR / SUB Chemical Use / Discharge

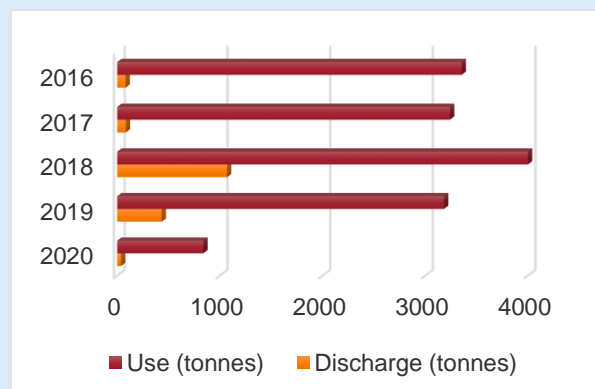


Figure 2 – Annual Chemical Use and Discharge

