

The background of the entire page is a vibrant blue with a pattern of concentric ripples, suggesting water. The ripples are centered and create a sense of depth and movement.

# CERMAQ

SUSTAINABILITY AND GRI REPORT • 2012

*cermaq*

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# GRI reporting profile

## 1. Strategy and analysis

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**FULL**

**1.1 - Statement from the most senior decision-maker of the organisation**

[CEO Message](#)

**FULL**

**1.2 - Description of key impacts, risks, and opportunities**

[GRI Section 1.2](#)

[Corporate Governance, Risk management and internal control](#)

## 2. Organisational profile

---

**FULL**

**2.1 - Name of the organisation**

Cermaq ASA

**FULL**

**2.2 - Primary brands, products, and/or services**

[EWOS](#)

[Mainstream](#)

**FULL**

## 2.3 - Operational structure of the organisation, including main divisions, operating companies, subsidiaries, and joint ventures

[EWOS](#)

[Mainstream](#)

**FULL**

## 2.4 - Location of organisation's headquarters

Grev Wedels Plass 5, P.O. Box 144 Sentrum, 0102 Oslo, Norway

**FULL**

## 2.5 - Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report

[Cermaq - a global leader](#)

**FULL**

## 2.6 - Nature of ownership and legal form

Cermaq ASA is a public company listed on the Oslo Stock Exchange. The Norwegian State is the principal shareholder in Cermaq ASA with a shareholding of 43,5 percent as of 23 April 2013.

[Shareholders Information](#)

**FULL**

## 2.7 - Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)

[EWOS](#)

[Mainstream](#)

**FULL**

## 2.8 - Scale of the reporting organisation

[Key figures](#)

[History and Organization](#)

[Cermaq Annual Accounts 2012, Note 3](#)

**FULL**

## 2.9 - Significant changes during the reporting period regarding size, structure, or ownership

[Main events 2012](#)

[Cermaq Annual Accounts 2012 Note 5](#)

**FULL**

## 2.10 - Awards received in the reporting period

### 3. Report Parameters

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**FULL**

**3.1 - Reporting period (eg, fiscal/calendar year) for information provided**

Cermaq's reporting period follows the calendar year 2012

**FULL**

**3.2 - Date of most recent previous report (if any)**

The previous GRI report is included in Cermaq's Annual Report 2011 published in April 2012.

[Annual Report 2011](#)

**FULL**

**3.3 - Reporting cycle (annual, biannual, etc)**

Cermaq's GRI reporting cycle is annual

**FULL**

**3.4 - Contact point for questions regarding the report or its contents**

Please contact: Lise Bergan, Director Corporate Affairs. Email: [cermaq@cermaq.com](mailto:cermaq@cermaq.com)

**FULL**

**3.5 - Process for defining report content**

[GRI Section 3.5](#)

**FULL**

**3.6 - Boundary of the report (eg, countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)**

[GRI Section 3.6](#)

**FULL**

**3.7 - State any specific limitations on the scope or boundary of the report**

We consider the boundary for our sustainability reporting (see 3.6) to be sufficient to comply with the GRI completeness principle.

**FULL**

**3.8 - Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations,**

## **and other entities that can significantly affect comparability from period to period and/or between organisations**

Cermaq has in 2012 reported sustainability information for its subsidiaries, joint ventures, and leased facilities within the core business areas. Minority shareholdings are not included in our reporting. The operations of Cultivos Marinos Chiloé, acquired in October 2012 are not included in the report for 2012.

### [Organisation](#)

#### **FULL**

**3.9 - Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols**

### [GRI Section 3.9](#)

#### **FULL**

**3.10 - Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (eg, mergers/acquisitions, change of base years/periods, nature of business, measurement methods)**

The following indicators have been adjusted for historical data: SO8 is updated with two new non-compliances for 2011 in Mainstream Chile that were pending last year and made final in 2012. Definitions are changed for LA 7: Lost time frequency rate (F-value) only includes lost time from injuries up to one year and does not include lost time from occupational disease cases. Injury frequency rate (TRI/H2-value) includes significant injuries (with and without absence) and does not include minor injuries where the employee can resume normal work and where only modest first aid treatment is necessary. Total work hours, which is the basis for the above calculations and Lost time injury rate, includes overtime related to workers working on sites (excluding management and administrative employees).

#### **FULL**

**3.11 - Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report**

There are no major changes in scope, boundaries or measurement in the 2012 report. Cultivos Marinos Chiloé, the Chilean company acquired in October 2012 is not included in the report. We have introduced a new way of measuring mortalities in sea. In 2011, we measured mortality as an absolute figure by number and biomass. In 2012 we have introduced a 12 months rolling mortality rate.

#### **FULL**

**3.12 - Table identifying the location of the Standard Disclosures in the report**

The location of standard disclosures is made clear through the links and content in this GRI index.

#### **FULL**

**3.13 - Policy and current practice with regard to seeking external assurance for the report**

Cermaq seeks limited external assurance for its 2012 sustainability reporting. The assurance is carried out in adherence to ISAE3000.

## 4. Governance, Commitments and Engagements

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**FULL**

**4.1 - Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight**

[Corporate Governance, Corporate assembly and Board of directors: composition and independence](#)

**FULL**

**4.2 - Indicate whether the Chair of the highest governance body is also an executive officer**  
The Chairman of the Board of Directors is not also an executive officer of Cermaq ASA.

**FULL**

**4.3 - For organisations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members**

[Corporate governance, Corporate assembly and Board of directors: composition and independence](#)

**FULL**

**4.4 - Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body**

[Corporate Governance, General meetings](#)

**FULL**

**4.5 - Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance)**

[Corporate governance, Remuneration of the Board of directors](#)

[Corporate governance, Remuneration of the executive management](#)

**FULL**

**4.6 - Processes in place for the highest governance body to ensure conflicts of interest are avoided**

[Corporate governance, Equal treatment of shareholders and transactions with close associates](#)  
[Ethical and corporate responsibility guidelines](#)

**FULL**

**4.7 - Process for determining the qualifications and expertise of the members of the highest**



**governance body for guiding the organization's strategy on economic, environmental, and social topics**

[Corporate Governance, The work of the Board of directors](#)

**FULL**

**4.8 - Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation**

The following codes and guidelines have been fully implemented and widely distributed throughout the Cermaq group and are available at Cermaq.com.

[Cermaq sustainability principles](#)

[Ethical and corporate responsibility guidelines](#)

[Whistle blowing guidelines](#)

**FULL**

**4.9 - Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles**

As an output to the internal sustainability reporting cycle (see section 3.9), Cermaq's executive management receive a quarterly sustainability report outlining social and environmental performance for the preceding period and highlighting any emerging issues or concerns. This report is also issued to the Board of Directors on a quarterly basis (semi-annually until H2 2012). In addition, Cermaq's quarterly risk analysis framework periodically includes an assessment of sustainability risk (see section 1.2) for the attention of the Board of Directors. In 2012, some of the most material indicators have been defined as Key Performance Indicators (KPIs) and progress is presented to the BoD on a quarterly basis together with other operational KPIs.

[GRI Section 1.2](#)

[GRI Section 3.9](#)

**FULL**

**4.10 - Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance**

[Corporate Governance, The work of the Board of directors](#)

**FULL**

**4.11 - Explanation of whether and how the precautionary approach or principle is addressed by the organisation**

Cermaq follows a precautionary approach to the management of all risk areas (including sustainability) through its routine risk assessment and reporting model. The model allocates responsibility for risk mitigating activities connected with any identified critical or significant risks (see section 1.2).

Furthermore, the company's guidelines for ethical and corporate responsibility explicitly state that "If doubts arise as to whether an activity is permitted or justifiable on the basis of the ethical and corporate responsibility guidelines, the person in question should seek advice from his/her immediate superior"

## [GRI Section 1.2](#)

### FULL

#### **4.12 - Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses**

Cermaq is a member of UN Global Compact and of Transparency International, Norway. Cermaq complies with OECD guidelines for multinational enterprises. All Cermaq business units are working towards certification under International standards for quality management, environmental management, occupational health and safety and food safety management. An overview of the status is presented in the CEQ 13. In addition, Cermaq has itself voluntarily developed a set of internal Sustainability Principles that are widely distributed both internally and externally to the organisation.

[Board of Directors report](#)

[CEQ 13 - International management standards](#)

### FULL

#### **4.13 - Memberships in associations (such as industry associations) and/or national/international advocacy organisations in which the organisation: \* Has positions in governance bodies**

Norwegian Seafood Federation (FHL) ; British Columbia Salmon Farmers Association (BCSFA) ; Canadian Aquaculture Industry Alliance (CAIA); International Salmon Farmers Association (IFSA); International Fishmeal and Fish Oil Organisation (IFFO) ; UK: Agricultural Industries Confederation (AIC); European Feed Manufacturers' Federation FEFAC etc.

### FULL

#### **4.14 - List of stakeholder groups engaged by the organisation**

[GRI Section 4.16](#)

### FULL

#### **4.15 - Basis for identification and selection of stakeholders with whom to engage**

[GRI Section 4.16](#)

### FULL

#### **4.16 - Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group**

[GRI Section 4.16](#)

[Endorsing global initiatives](#)

#### **4.17 - Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting**

More specifically, Cermaq has responded to the following key concerns during 2010:

[GRI Section 4.17](#)

## 5. Management approach and performance indicators

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**FULL**

Disclosure of Management approach - Disclosure of Management approach

[Management approach](#)

# GRI performance indicators

## Economic

INDICATOR

QUICK LOOK

### FULL

**EC1 - Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments**

Cermaq supports local communities with both financial and in-kind contributions. However, socio-economic benefits are most obviously manifest through payments to suppliers, employees, local authorities and payment of dividends to investors.

The table presented below quantifies the overall economic value generated and distributed through Cermaq's activities:

### EC 1 - Direct Economic Value Generated

NOK 1,000	DESCRIPTION	2012	2011	2010
<b>DIRECT ECONOMIC VALUE GENERATED</b>				
Revenues		11 781 921	11 634 344	9 990 528
<b>ECONOMIC VALUE DISTRIBUTED</b>				
Operating costs	Cost of materials	-8 117 573	-7 447 360	-6 271 245

	Other operating expenses	-1 956 392	-1 672 836	-1 314 649
Employee wages & benefits		-1 013 097	-828 628	-723 195
Payments to providers of capital	Interest expense	-85 512	-48 989	-55 794
	Dividend payment	-92 500	-428 000	-499 500
Payments to government	Income tax expense	-68 422	-211 862	-428 959
Community investments		-4 491	-12 776	-7 247
<b>Sub total</b>		<b>-11 337 987</b>	<b>-10 650 451</b>	<b>-9 300 589</b>
Economic Value Retained		443 934	983 893	689 939

**Note:** Dividend payment for 2012 remains subject to AGM approval. Revenues from company acquired in 2012, Cultivos Marinos Chiloé (CMC), is included. Community investments do not include CMC.

### [EC 1](#)

#### **EC2 - Financial implications and other risks and opportunities for the organization's activities due to climate change**

N/A

### **FULL**

#### **EC3 - Coverage of the organization's defined benefit plan obligations**

Information related to this GRI indicator is presented in [note 8](#) to consolidated financial accounts

### [EC 3](#)

### **FULL**

#### **EC4 - Significant financial assistance received from government**

The Norwegian State is the principal shareholder in Cermaq ASA with a shareholding of 43.5 percent. The company has laid down in its Articles of Association that the Board of Directors shall withhold its consent for any acquisition that would result in the holding of the Norwegian State falling below 34 percent.

Financial assistance from governments totalled NOKM 11.8 in 2012 (13.7 in 2011). Mainstream Chile received the most (43 percent) of this assistance in the form of grants and other financial benefits e.g. government support to businesses that operate in remote areas and supplier training schemes. EWOS Innovation Norway received 36 percent as a result of e.g. research and development grant from the Research Council of Norway.

#### EC 4 - Significant financial assistance received from government

CATEGORY	EWOS	MAINSTREAM	TOTAL
Investment grants, research and development grants, and other relevant types of grants	3 544	3 387	6 932
Subsidies	463	0	463
Tax relief/credits	2 719	1 188	3 907
Financial assistance from Export Credit Agencies (ECAs)	0	247	247
Other financial benefits received or receivable from any government for any operation		235	236
<b>Grand Total</b>	<b>6 726</b>	<b>5 057</b>	<b>11 786</b>

**Note:** The Norwegian State is the principal shareholder in Cermaq ASA with a shareholding of 43.5 percent. The company has laid down in its Articles of Association that the Board of Directors shall withhold its consent for any acquisition that would result in the holding of the Norwegian State falling below 34%.

#### [EC 4](#)

#### FULL

#### EC5 - Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation

Limited to Mainstream Chile.

Wage levels, especially in processing plants in Chile, have historically received attention and concern by some groups of stakeholders.

At year end 2012 the minimum monthly wage was CLP 227,484 for employees working at the processing plant in Mainstream Chile. This is more than the minimum monthly wage in Chile (CLP 193,000).

The entry level wage bracket begins at CLP 227,484 which is 18 percent above the minimum wage. Mainstream Chile has 21 percent of its employees in that category.

#### EC 5 - Mainstream Chile

SALARY BAND (CLP/MONTH)	FROM	TO	% EMPLOYEES
<b>PERMANENT EMPLOYEES - ONLY OPERATIONAL LEVEL</b>			
Rem. Total	227 484	300 000	21
Rem. Total	300 001	400 000	24
Rem. Total	400 001	500 000	31
Rem. Total	500 001	more	24
<b>ALL EMPLOYEES - ONLY OPERATIONAL LEVEL</b>			
Rem. Total	227 484	250 000	1
Rem. Total	250 001	300 000	4
Rem. Total	300 001	350 000	22
Rem. Total	350 001	400 000	31
Rem. Total	400 001	450 000	35
Rem. Total	450 001	more	8

**Note:** The minimum monthly wage in Chile is 193 000 CLP

At year end 2012 minimum monthly wage for operational level employees in EWOS Vietnam was VND 3 000 000 which is more than the minimum monthly wage in Vietnam (VND 2,100,000).

The entry level bracket begins at VND 3,000,000 which is 43 percent above the minimum monthly wage. EWOS Vietnam has 42 percent of its employees in that category.

#### EC 5 - EWOS Vietnam

SALARY BAND (VND/MONTH)	MIN	MAX	% EMPLOYEES
<b>PERMANENT EMPLOYEES - ONLY OPERATIONAL LEVEL</b>			
Salary band	3 000 000	3 999 999	42
Salary band	4 000 000	5 999 999	29

**Note:** The legal minimum wage in Vietnam is 2 100 000 VND per month  
At EWOS Vietnam no employee earn less than 3 000 000 VND/month.

Cermaq will continue offering competitive entry wage levels and value skills, competence and seniority in our wage system.

[Additional information](#)

## [EC 5](#)

### **EC6 - Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation**

N/A

## **FULL**

### **EC7 - Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation**

We base our operations on local recruitment of senior management, and in 2012 the proportion of management hired from local communities averaged 92 percent (91 percent in 2011). Senior management is the management team reporting directly to a Managing Director and people reporting directly to CCMT members.

International assignments are seen as positive for personal development in a multinational organisation like Cermaq, and employees are encouraged to gain international experience to help strengthen knowledge transfer between our operations and to develop our corporate culture.

The proportion of females in management is low at 17 percent in 2012 (15 percent in 2011).

[Additional information](#)



[EC 7](#)

**EC8 - Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement**

N/A

**EC9 - Understanding and describing significant indirect economic impacts, including the extent of impacts**

N/A

**Environmental**

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INDICATOR

QUICK LOOK

**EN1 - Materials used by weight or volume**

N/A

**EN2 - Percentage of materials used that are recycled input materials**

N/A

**FULL**

**EN3 - Direct energy consumption by primary energy source**

Total group energy consumption was GJ 1,822,363 in 2012 (GJ 1,688,930 in 2011). This is a 8 percent increase in group energy use. The figure includes the energy consumption of Cermaq's head office and EWOS Innovation.

The main reason for the increased energy use is increased production both in EWOS and in Mainstream.

### EN 3-4 - Energy consumption by type (GJ)

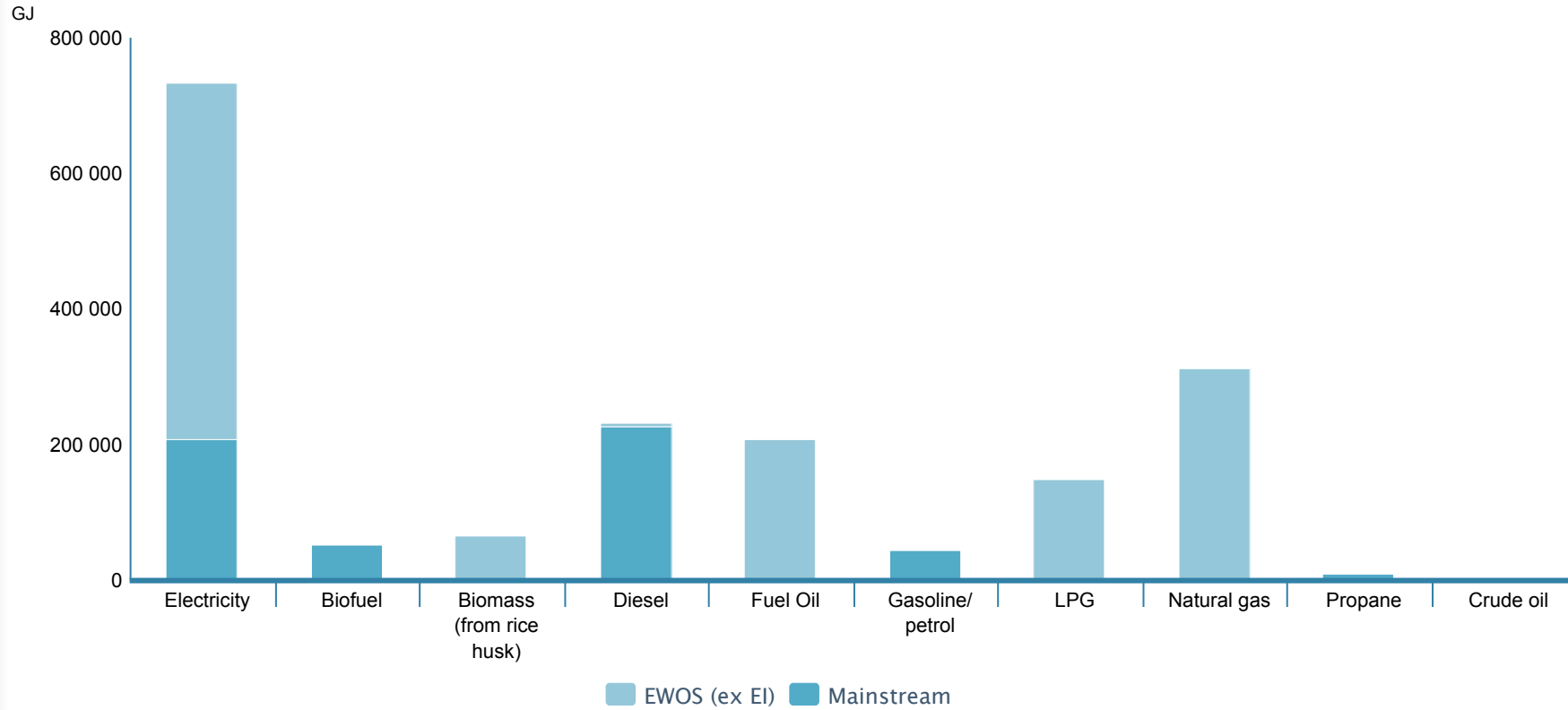
GRI Energy Type	Energy Source	2012	2012	2012	2011	2010
		EWOS (ex EI)	Mainstream	Total*	Total	Total
Indirect	Electricity	524 405.33	208 768.16	748 235.14	622 666.75	540 255.00
Direct	Biofuel	0.00	52 392.09	52 392.09	65 927.00	79 641.00
Direct	Biomass (from rice husk)	66 480.99		66 480.99	76 772.33	
Direct	Diesel	5 460.70	226 213.01	234 134.20	203 016.07	144 141.00
Direct	Fuel Oil	207 178.90	17.00	207 195.80	154 344.62	55 609.00
Direct	Gasoline/ petrol	0.00	44 368.20	44 462.58	46 390.67	43 488.00
Direct	LPG	147 597.90	0.00	147 597.90	67 471.30	60 294.00
Direct	Natural gas	312 291.50	121.70	312 413.20	442 967.36	405 974.00
Direct	Propane	1 080.00	8 050.03	9 164.67	9 374.35	39 081.00
Direct	Crude oil		286.00	286.00		
<b>Total direct + indirect</b>		<b>1 264 495.32</b>	<b>540 216.19</b>	<b>1 822 362.57</b>	<b>1 688 930.46</b>	<b>1 368 483.00</b>
Divisional %		69%	30%			
Δ YoY				8%	23%	9%

**Note:** \* Total includes Cermaq ASA and EWOS Innovation in addition to EWOS and Mainstream. We have not calculated the corresponding primary energy consumed in the production of indirect energy.

EWOS accounted for 69 percent of group energy use, consuming a total of GJ 1,264,495 in 2012 (GJ 1,215,108 in 2011), an increase of four percent. The main energy sources were natural gas, electricity and fuel oil. EWOS Vietnam uses rice-husk burning as primary source of energy.

The average energy use per tonne of feed produced decreased slightly from 1.1 GJ/tonne of feed produced in 2011 to 1.04 GJ in 2012. The main reason is a more energy effective process due to increased production volumes. Mainstream accounted for 30 percent of group energy use, consuming a total of GJ 540,216 (GJ 454,581 in 2011), an increase of 19 percent. The main reason for the increase is increased production. The main energy sources were diesel and electricity. The average energy use per tonne of salmon produced (live weight) increased from 3.29 GJ/t in 2011 to 3.46 GJ/t in 2012. The main reason is increased energy use in Chile as a result of a new hatchery and because Mainstream has been processing for third parties in the processing plant.

### En 3 - Energy consumption



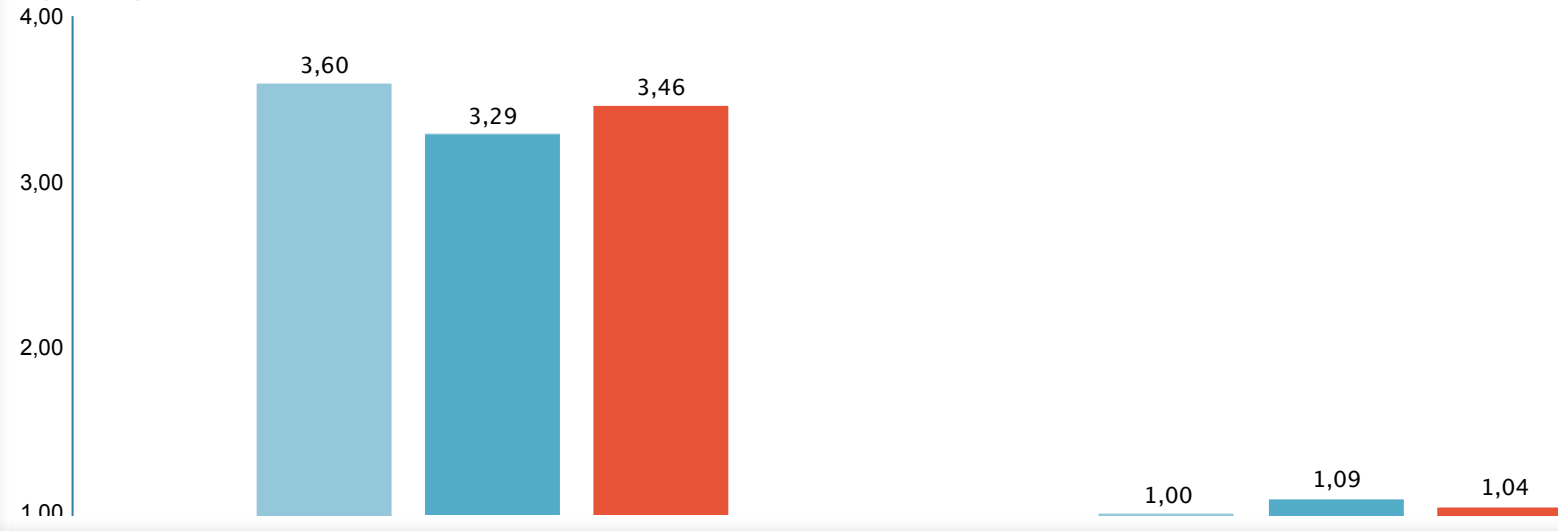
The primary indirect energy source purchased and consumed by EWOS and Mainstream is electricity.

We have not calculated the corresponding primary energy consumed in the production of indirect energy.

Our direct energy consumption (EN3) and indirect energy consumption (EN4) is shown in the table below. Total energy use includes Cermaq head office and EWOS Innovation.

### EN 3 - Energy use ratio

GJ per tonne produced



### EN 3

### FULL

### EN4 - Indirect energy consumption by primary source

Total group energy consumption was GJ 1,822,363 in 2012 (GJ 1,688,930 in 2011). This is a 8 percent increase in group energy use. The figure includes the energy consumption of Cermaq's head office and EWOS Innovation.

The main reason for the increased energy use is increased production both in EWOS and in Mainstream.

### EN 3-4 - Energy consumption by type (GJ)

GRI Energy Type	Energy Source	2012	2012	2012	2011	2010
		EWOS (ex EI)	Mainstream	Total*	Total	Total
Indirect	Electricity	524 405.33	208 768.16	748 235.14	622 666.75	540 255.00
Direct	Biofuel	0.00	52 392.09	52 392.09	65 927.00	79 641.00
Direct	Biomass (from rice husk)	66 480.99		66 480.99	76 772.33	
Direct	Diesel	5 460.70	226 213.01	234 134.20	203 016.07	144 141.00

Direct	Fuel Oil	207 178.90	17.00	207 195.80	154 344.62	55 609.00
Direct	Gasoline/ petrol	0.00	44 368.20	44 462.58	46 390.67	43 488.00
Direct	LPG	147 597.90	0.00	147 597.90	67 471.30	60 294.00
Direct	Natural gas	312 291.50	121.70	312 413.20	442 967.36	405 974.00
Direct	Propane	1 080.00	8 050.03	9 164.67	9 374.35	39 081.00
Direct	Crude oil		286.00	286.00		
<b>Total direct + indirect</b>		<b>1 264 495.32</b>	<b>540 216.19</b>	<b>1 822 362.57</b>	<b>1 688 930.46</b>	<b>1 368 483.00</b>
Divisional %		69%	30%			
Δ YoY				8%	23%	9%

**Note:** \* Total includes Cermaq ASA and EWOS Innovation in addition to EWOS and Mainstream. We have not calculated the corresponding primary energy consumed in the production of indirect energy.

EWOS accounted for 69 percent of group energy use, consuming a total of GJ 1,264,495 in 2012 (GJ 1,215,108 in 2011), an increase of four percent. The main energy sources were natural gas, electricity and fuel oil. EWOS Vietnam uses rice-husk burning as primary source of energy.

The average energy use per tonne of feed produced decreased slightly from 1.1 GJ/tonne of feed produced in 2011 to 1.04 GJ in 2012. The main reason is a more energy effective process due to increased production volumes. Mainstream accounted for 30 percent of group energy use, consuming a total of GJ 540,216 (GJ 454,581 in 2011), an increase of 19 percent. The main reason for the increase is increased production. The main energy sources were diesel and electricity. The average energy use per tonne of salmon produced (live weight) increased from 3.29 GJ/t in 2011 to 3.46 GJ/t in 2012. The main reason is increased energy use in Chile as a result of a new hatchery and because Mainstream has been processing for third parties in the processing plant.

The primary indirect energy source purchased and consumed by EWOS and Mainstream is electricity.

We have not calculated the corresponding primary energy consumed in the production of indirect energy.

Our direct energy consumption (EN3) and indirect energy consumption (EN4) is shown in the table below. Total energy use includes Cermaq head office and EWOS Innovation.

### [EN 3](#)

**EN5 - Energy saved due to conservation and efficiency improvements**

We estimate that in 2012 Cermaq operations have undertaken proactive efforts to save 53,062 GJ of energy per year (GJ 36,041 in 2011). This represents an energy saving of 2.9 percent, based on total energy consumption in 2012.

The initiatives are a mix of retrofitting of equipment, process redesign and changes in personnel behaviour in our production facilities. Brief details of the initiatives are given in the table below.

**EN 5 - Energy saved due to conservation and efficiency improvements**

OPERATING COMPANY	ENERGY SAVING INITIATIVE	ENERGY SAVED (GJ)	STATUS
Mainstream Norway	Installation of new heat pumps and exchange of UV filters	n/a	Savings in 2013
Mainstream Canada	Early rearing building and boiler rooms at Little Bear Bay Hatchery were insulated.	1583	Actual
EWOS Canada	Installation of new 2-boiler system in 2011 has resulted in 20% less use of natural gas in 2012	9000	Actual
EWOS Norway	Heat recovery and more energy efficient cooling process	14567	Actual
EWOS Chile	Energy savings campaign and increased production efficiency	27628	Actual
EWOS Vietnam	A new boiler was built in 2012 and it will be commissioned in 2013	n/a	Savings in 2013
EWOS Innovation Norway	Installation of new cyclones to replace old ones	284	Actual
<b>Total</b>		<b>53062</b>	

[EN 5](#)**EN6 - Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives**

N/A

**EN7 - Initiatives to reduce indirect energy consumption and reductions achieved**

N/A

**EN8 - Total water withdrawal by source**

N/A

**EN9 - Water sources significantly affected by withdrawal of water**

N/A

**EN10 - Percentage and total volume of water recycled and reused**

N/A

**EN11 - Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas**

N/A

**FULL**

**EN12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas**

EN 12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

Cermaq recognises the potential for fish farming operations to impact biodiversity, either directly or indirectly. However, in 2012 we have not identified any specific significant impacts of our activities or our products in the areas where we are operating.

In his 2009 BioScience paper (Aquaculture Production and Biodiversity Conservation), Professor James S. Diana examined the status and trends in seafood production and the positive and negative impacts of aquaculture on biodiversity conservation. Diana's ranking of negative aquaculture impacts included the following top-5 in order of decreasing importance as threats to biodiversity:

Perceived Biodiversity Impact Area (Diana, Connectivity with Cermaq's Reporting 2009)

1. Escapement of aquatic crops and their potential hazard as invasive species.	Escapes are reported under CEQ 07. Mainstream experienced one escape of one fish in 2011. In addition there was an escape of 2761 fish in EWOS innovation.
	Mainstream Canada and Chile farms only Atlantic Salmon in an area where the species is not a natural part of the environment and where breeding with native species of Salmon will not occur nor would escapes result in an invasive colonization by escaped fish
2. The relationships among effluents, eutrophication of water bodies, and changes in the fauna of receiving waters.	All Cermaq operations are expected to comply with local and national environmental regulations related to effluents and waste. Cermaq reports any non-compliances with environmental regulations under EN 28 and is active in Area Management Agreements as described under CEQ 06.
3. Conversion of sensitive land areas such as mangroves and wetlands, as well as water use.	Not applicable to Cermaq and the context of salmon farming.
4. Other resource use, such as fish meal and its concomitant overexploitation of fish stocks.	The use of marine resources for the production of fish feed are covered more specifically under CEQ 08. EWOS has in recent years, through its Marine Independence Program, significantly reduced its proportional use of fishmeal and fish oil in salmon feeds.
	Our operations in EWOS Vietnam currently do not use fishmeal from Vietnamese fisheries as there are concerns about the sustainability. However, in order to develop sustainable fishing practises, EWOS Vietnam is working in a program with IFFO, SFP and also the Prince's Charities (UK) to work with some local suppliers to start to develop more sustainable fishing practices in Vietnam.
5. Disease or parasite transfer from captive to wild stocks.	Mainstream is transparent in its reporting of sea lice counts under CEQ 02. Whilst CEQ 04 connects this with the use of medicines for the control of disease and parasites. Mainstream has specific focus on <u>reducing as much as possible the use of treatments and taking a preventative approach to fish health.</u>
	During 2012 we have controlled the sea lice level within local action levels in all Mainstream operations. In EWOS Innovation, there has been some challenging conditions in Hordaland. To cope with the challenge we have continued with monitoring the sea lice status in each net pen which is reported to the authorities on a weekly basis. Both oral, chemical and biological treatment are implemented in our strategy for handling it.

The table above summarises the linkage between areas of perceived biodiversity impact according to Professor Diana and Cermaq's transparent reporting.

Other impacts of aquaculture on biodiversity conservation, were considered by Diana to be of much lesser importance compared to the above,



including: Genetic alteration of existing stocks from escaped hatchery products; Predator mortality caused by, for example, killing birds near aquaculture facilities; and Antibiotic and hormone use, which may influence aquatic species near aquaculture facilities.

## [EN 12](#)

### **EN13 - Habitats protected or restored**

N/A

### **EN14 - Strategies, current actions, and future plans for managing impacts on biodiversity**

N/A

### **EN15 - Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk**

N/A

## **FULL**

### **EN16 - Total direct and indirect greenhouse gas emissions by weight**

For the reporting period 1st January 2012 to 31st December 2012, Cermaq's global gross GHG emissions totalled 93,000 tonnes of CO<sub>2</sub>e (85,984 tonnes in 2011). The increase is mainly due to increased feed production in EWOS.

EWOS Innovation has developed a supply chain carbon footprint model in cooperation with Delhousie University in Canada. The model measures the CO<sub>2</sub>e emissions from each of the raw materials used in the fish feed. The CO<sub>2</sub> emissions from a tonne of fish feed depends on where the feed is produced and what type of raw materials is used. The supply chain CO<sub>2</sub> emissions are shown in scope 3 in the table below.

More information about this work is available in EWOS SpotLight Sustainable Salmon Feed: Marine Ingredients, available for download at [www.ewos.com](http://www.ewos.com).

## EN 16 - Total direct and indirect greenhouse gas emissions by weight

GLOBAL TONNES OF CO2E	2012	2011	2010	2009	(BASE YEAR) 2008
Natural gas	18 499	26 718	24 264	16 633	21 630
Biomass (from rice husk)	0	0	0	0	0
Diesel	17 057	14 775	10 327	9 782	12 552
Fuel oil	16 064	11 996	4 340	8 611	20 713
Biofuel	3 657	4 602	5 559	5 377	6 918
Propane	566	572	2 539	-	3 750
Lpg	9 406	4 116	3 768	4 345	0
Gasoline/petrol	3 097	3 244	3 035	2 783	3 274
Butane	-	-	-	-	172
Crude oil	21	-	-	18	33
Scope 1 (Direct emissions)	68 366	66 022	53 832	47 550	69 042
Purchased electricity	24 634	19 962	14 618	11 408	12 767
Scope 2 (Energy indirect)	24 634	19 962	14 618	11 408	12 767
Scope 3 (Other indirect)	1 413 320	1 308 519	-	-	-
<b>Total gross emissions (ex sope 3)</b>	<b>93 000</b>	<b>85 984</b>	<b>68 449</b>	<b>58 958</b>	<b>81 809</b>
Intensity: kg of CO2e per tonne of output	69	72	70	74	-
Intensity: tonnes of CO2e per mNOK revenue	8	7	7	7	9

**Note:** Scope 3 includes EWOS (ex Vietnam and EWOS Innovation) supply chain CO2 emissions. It is derived from the EWOS ecological footprint model and calculated as the sum of CO2 emissions generated from each of the raw materials used in the fish feed. The CO2 emissions generated depend on type of raw material, its origin and how it is transported to the mill.

Our reporting is based on the GHG Protocol, the internationally recognised standard for the accounting and reporting of GHG emissions. We have used the financial control approach to define our organisational boundary and the operational scope for our report includes scope 1 (direct), scope 2 (energy indirect) e and scope 3 (other indirect) emissions. Emissions factors for our global operations have been taken from a number of publicly available sources such as: IEA, IPCC, EPA, DEFRA, SSB and BC Ministry of Environment.

The geographic breakdown reveals that our operations in Chile are the largest contributor (58 percent) to our global emissions. Vietnam is the lowest contributor (1.6 percent).

## EN 16 - Emission by Geographic Division

COUNTRY	2012		2011		2010	
	SCOPE 1 (DIRECT CO2 EMISSIONS)	SCOPE 2 (INDIRECT CO2 EMISSIONS)	SCOPE 1 (DIRECT CO2 EMISSIONS)	SCOPE 2 (INDIRECT CO2 EMISSIONS)	SCOPE 1 (DIRECT CO2 EMISSIONS)	SCOPE 2 (INDIRECT CO2 EMISSIONS)
Norway	19 983	815	18 150	682	15 777	614
Chile	35 725	18 402	32 414	13 717	22 317	10 181
Canada	9 000	261	11 137	262	12 076	253
Scotland	3 658	3 656	4 322	3 681	3 662	3 570
Vietnam	0	1 499	0	1 620	n/a	n/a
<b>Total</b>	<b>68 366</b>	<b>24 634</b>	<b>66 022</b>	<b>19 962</b>	<b>53 832</b>	<b>14 618</b>

The divisional breakdown reveals that EWOS (ex EWOS Innovation) is the largest contributor (64 percent) to our global emissions, due to the relatively higher scale of feed production compared to fish production.

## EN 16 - Emission by Business Division

COUNTRY	2012		2011		2010	
	DIRECT CO2 EMISSIONS	INDIRECT CO2 EMISSIONS	DIRECT CO2 EMISSIONS	INDIRECT CO2 EMISSIONS	DIRECT CO2 EMISSIONS	INDIRECT CO2 EMISSIONS
Mainstream	23 751	9 879	22 053	6 174	26 587	5 504
EWOS*	44 432	14 725	43 778	13 723	41 862	9 113
<b>Total</b>	<b>68 183</b>	<b>24 604</b>	<b>65 831</b>	<b>19 897</b>	<b>68 449</b>	<b>14 617</b>

Note: \* Total EWOS is ex EWOS Innovation

Our base year is 2008.

We are reporting an intensity measurement based upon 'tonnes of CO<sub>2</sub>e per tonne of output'. This is a relevant ratio for our industry

## [EN 16](#)

## EN17 - Other relevant indirect greenhouse gas emissions by weight

N/A

**EN18 - Initiatives to reduce greenhouse gas emissions and reductions achieved**

N/A

**EN19 - Emissions of ozone-depleting substances by weight**

N/A

**EN20 - NO<sub>x</sub>, SO<sub>x</sub>, and other significant air emissions by type and weight**

N/A

**EN21 - Total water discharge by quality and destination**

N/A

**EN22 - Total weight of waste by type and disposal method**

N/A

**EN23 - Total number and volume of significant spills**

N/A

**EN24 - Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally**

N/A

**EN25 - Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the**

**FULL**

**EN26 - Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation**

We seek improvements in our business to mitigate the environmental impacts of products and services. Examples of initiatives taken are listed in the table below:

**INITIATIVES TAKEN**

**Materials use** Significant resources used in our production processes are raw material ingredients for feed production, smolt for fish farming and packaging materials (feed-bags, fish boxes, and cardboard). Indicator CEQ08 explains how EWOS manages the use of marine ingredients in fish feed. In 2012, we estimate that EWOS (ex EWOS Vietnam and EWOS Innovation) used only 1.03 times more marine protein than fish farmers produced through using EWOS feed. For marine oil EWOS used less (0.86) marine oil than fish farmers produced. An example of initiatives to reduce the level of material used in 2012 is that EWOS Canada installed a new Hooder for a packaging line. As a result EWOS Canada estimates a 20% reduction in plastic film used (equals 3 tonnes).

**Water use** Cermaq does not have companywide environmental goals related to water use. Salmon farming relies upon the availability of clean water but is generally not a heavily consumptive process. In cases where water is abstracted for farming operations, it is generally discharged back to source within quality parameters agreed with the local authority. An example of an initiative taken in 2012 is the building an installation of a new waste water treatment system in EWOS Vietnam.

**Emissions** Cermaq reports GHG emissions under EN16. EWOS Innovation and Canadian researchers have developed a model to measure the eco-footprints of aqua feeds and assist in sourcing more sustainable feed inputs. Raw materials from marine ecosystems have higher footprints than those from terrestrial systems, especially fish from higher trophic levels used for fishmeal and oil. Other drivers for eco-footprinting include the energy used to produce, process and transport feed inputs, along with feed milling. The carbon generated from raw materials used is also shown under EN16.

**Effluents** All Cermaq operations are expected to comply with local and national environmental regulations related to effluents and waste. Examples of initiatives taken in 2012 is the new installation of a sea water scrubber in EWOS Norway (will lower air emissions). EWOS Vietnam has built a new boiler that will reduce emissions to air. The boiler will be commissioned in 2013.

**Noise** Our operations are not especially noisy and this is confirmed by the fact that we received only one complaint related to noise during 2012 and 0 in 2011. Examples of initiatives in 2012 are an on-going program in EWOS Scotland to reduce electric motors throughout the plant, and two old cyclones that have been replaced in EWOS innovation and led to a noise reduction of 50%.

**Waste** All operating companies follow national regulations for waste handling. The waste handling procedures vary with the local infrastructure in place. In EWOS Norway, the transportation of feed in bulk carriers has replaced the need for plastic packaging over the later years.

Cermaq requires all operations to be accredited to ISO14001 Environmental management standard. This ensures that any local negative environmental impacts are identified and managed, in a systematic way, for continuous improvement.

[EN 26](#)

**EN27 - Percentage of products sold and their packaging materials that are reclaimed by category**

N/A

**FULL**

**EN28 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations**

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

In 2012, there were six environmental non-compliances; one incident of fish escape in EWOS Innovation, one incident in Mainstream Chile because empty feed bags were left at the beach, one in EWOS Chile due to odour from the production plant and three incidents in Mainstream Norway for late reporting of a possible escape and two incidents of late closure of deviations from two regular controls by the authorities.

The non-compliances resulted in a fine of USD 99,312. There are additional four incidents that have been reported in 2012, but have not been concluded or are under appeal. All four relates to Mainstream Chile.

**EN 28 - Incidents of non-compliance with regulations**

REPORTING UNIT	ENVIRONMENTAL REGULATIONS	
	INCIDENTS	FINES (USD)
Mainstream Norway	3	50 653

Mainstream Chile	1	92
Mainstream Canada		
EWOS Norway		
EWOS Chile	1	7 950
EWOS Canada		
EWOS Scotland		
EWOS Vietnam		
EWOS Innovation	1	40 617
<b>2012</b>	<b>6</b>	<b>99 312</b>
2011 Total	2	4 080
2010 Total	1	n/a

[EN 28](#)

**EN29 - Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce**

N/A

**EN30 - Total environmental protection expenditures and investments by type**

N/A

**Social: Labor Practices and Decent Work**

INDICATOR

QUICK LOOK

**FULL**

**LA1 - Total workforce by employment type, employment contract, and region**

Our 4263 employees (ex Cultivos Marinos Chiloé) represent a diverse group both in terms of culture and work conditions.

Still, a common set of core values unite our international and diversified activities.

Recruiting the right people is essential for the future success of our operations. Competent and dynamic human resources management plays a key role in our industry.

Our operations are based on local recruitment of management. In 2012 the proportion of management hired from local communities averaged 92 percent (91 percent in 2011), ranging from 60 to 100 percent.

This is in line with Cermaq's philosophy to trust local employees who best know the local conditions and culture. Possibilities for international assignments contribute to personal development as well as developing our corporate culture.

The proportion of females in management is low and was 17 percent in 2012 (15 percent in 2011). Low female management representation is quite typical for the industry, and Cermaq acknowledges that this represents a challenge as well as an opportunity.

#### LA 1 - Total workforce Cermaq group - Business Unit

	CERMAQ TOTAL		EWOS (INCL EI)		MAINSTREAM	
	NUMBER	%	NUMBER	%	NUMBER	%
Total employees	4 263	95%	1 024	83%	3 187	100%
Total supervised workers	216	5%	211	17%	4	0%
Total Workforce	4 479	100%	1 235	100%	3 191	100%
Total Indefinite or Permanent employees	2 944	69%	948	93%	1 945	61%
Total temporary or fixed term employees	1 319	31%	76	7%	1 242	39%
Total Full time employees	4 006	94%	988	96%	2 966	93%
Total Part time employees	257	6%	36	4%	221	7%
Management and administration employees	402	9%	197	19%	153	5%
Other employees	3 861	90%	827	81%	3 034	95%
Female employees	1 065	25%	181	18%	866	27%
Male employees	3 203	75%	843	82%	2 321	73%

**Note:**The Cultivos Marinos Chiloé (CMC) workforce is not included in the overview

#### LA 1 - Total workforce Cermaq group - Geographic



	CANADA		CHILE		NORWAY		SCOTLAND		VIETNAM	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
Total employees	271	99%	2 905	94%	849	99%	71	95%	168	100%
Total supervised workers	3	1%	198	6%	11	1%	4	5%	0	0%
Total Workforce	274	100%	3 103	100%	860	100%	75	100%	168	100%
Total Indefinite or Permanent employees	261	96%	1 716	59%	734	86%	69	97%	165	98%
Total temporary or fixed term employees	10	4%	1 189	41%	115	14%	2	3%	3	2%
Total Full time employees	267	99%	2 904	100%	602	71%	68	96%	166	99%
Total Part time employees	4	1%	1	0%	247	29%	3	4%	2	1%
Management and administration employees	56	21%	212	7%	101	12%	12	17%	22	13%
Other employees	215	79%	2 693	93%	748	88%	59	83%	146	87%
Female employees	46	17%	773	27%	206	24%	10	14%	29	17%
Male employees	225	83%	2 132	73%	643	76%	61	86%	139	83%

**Note:**The Cultivos Marinos Chiloé (CMC) workforce is not included in the overview

[Additional information](#)

[LA 1](#)

**LA2 - Total number and rate of employee turnover by age group, gender, and region**

N/A

**LA3 - Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations**

N/A

**FULL**

**LA4 - Percentage of employees covered by collective bargaining agreements**

Good and constructive relations with employees and labour unions are essential to Cermaq, and are managed through well-established local management structures and practices. All employees are free to join any labour union.

It is important to note that collective bargains do not necessarily reflect the actual participation in unions.

#### LA 4 - Percentage of employees covered by collective bargaining agreements.

DIVISION	OPCO	2010	2011	2012
Cermaq	CEQ	0%	15%	13%
EWOS	EW Ca	70%	68%	73%
	EW Ch	61%	62%	63%
	EW No	58%	59%	55%
	EW Sc	0%	0%	0%
	EW Vn	n/a	100%	95%
	EI	25%	47%	23%
Mainstream	MS Ca	0%	0%	0%
	MS Ch	18%	19%	25%
	MS No	78%	93%	93%
<b>EWOS Total</b>	<b>EWOS</b>	<b>55%</b>	<b>63%</b>	<b>63%</b>
<b>Mainstream Total</b>	<b>MAINSTREAM</b>	<b>27%</b>	<b>27%</b>	<b>34%</b>
<b>GROUP TOTAL</b>	<b>GROUP</b>	<b>32%</b>	<b>37%</b>	<b>41%</b>

**Note:** Employees covered by collective bargaining is calculated as a percentage of all employees, both temporary and permanent employees. If temporary workers are excluded in Mainstream Chile, which employs a large proportion of seasonal workers, 47% of the employees in Mainstream Chile are covered by collective bargaining agreements.

[Additional information](#)

#### [LA 4](#)

#### LA5 - Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements

N/A

**LA6 - Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs**

N/A

**FULL**

**LA7 - Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region**

Cermaq did not experience any fatal accidents amongst our employees in 2012, or amongst contractors supplying services to our operations.

In 2012, an OHS improvement project was finalised. The aim of the project was to ensure that all companies reported OHS data in the same way throughout the group and to compare ourselves to peers as basis for identifying improvements and set ambitious targets. Increased focus on OHS has resulted in considerable improvements in particular for lost time injuries that decreased by 50% in 2012 compared to 2011.

The absence rate is very low throughout the group and continued to decrease from 3.2 percent in 2011 to 2.4 percent in 2012.

**LA 7 - Rates of injury**

DIVISION	UNITS	2012			2011			2010		
		EWOS GROUP (EX EI)	MAINSTREAM GROUP	TOTAL CERMAQ GROUP	EWOS GROUP (EX EI)	MAINSTREAM GROUP	TOTAL CERMAQ GROUP	EWOS GROUP	MAINSTREAM GROUP	TOTAL CERMAQ GROUP
Fatalities	Number	0	0	0	0	0	0	0	0	0
Injury rate (H2-value)	Injuries per million hours worked	10	35	29	21	36	31	16	37	31
Lost-time injury rate (H1-value/TRI)	Lost-time injuries per million hours worked	4	13	11	11	26	22	11	29	24
Lost time frequency rate (F-value)	Lost time (days) per million working hours	119	243	209	512	511	469	508	527	504

Absence rate	% of total work days	0	0	0	0	0	0	0	0	0
Occupational disease cases	Number	1	8	11	3	1	4	1	6	7

**Notes:**

- We report OHS data using units that are consistent with Cermaq's previous reporting practices, rather than adopting the GRI formulas.
- In 2012, a project was initiated to improve the quality and ensure that OHS data was reported in the same way throughout the company. This has resulted in some changes to existing reporting of indicators described below:
  - \* Lost time frequency rate (F-value) only includes lost time from injuries up to one year and does not include lost time from occupational disease cases which was included in 2010 and 2011
  - \* Injury frequency rate (TRI/H2-value) includes significant injuries (with and without absence) and does not include minor injuries where the employee can resume normal work and where only modest first aid treatment is necessary.
  - \* Total work hours, which is the basis for the above calculations and Lost time injury rate, includes overtime related to workers working on sites (excluding management and administrative employees).
- The above data relates only to our workforce, including employees and supervised workers. Contractors who work on our premises and of which Cermaq is responsible for occupational health and safety are not included in the overview.
- Lost day calculation includes only scheduled work days and starts the day after the accident.
- National laws on practices for recording and reporting accident statistics follows the 'ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases' in the regions where Cermaq operates

[Additional information](#)

[LA 7](#)

**LA8 - Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases**

N/A

**LA9 - Health and safety topics covered in formal agreements with trade unions**

N/A

**FULL**

**LA10 - Average hours of training per year per employee by employee category**

Employees receive systematic training to build competence according to their own and the organisation's needs. In 2012 the training totalled 1.1 percent of total working time on average for all employees.

[Additional information](#)

[LA 10](#)

**LA11 - Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings**

N/A

**LA12 - Percentage of employees receiving regular performance and career development reviews**

N/A

**LA13 - Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity**

N/A

**LA14 - Ratio of basic salary of men to women by employee category**

N/A

**Social: Human rights**

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INDICATOR

QUICK LOOK

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**HR1 - Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening**

N/A

**HR2 - Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken**

N/A

**HR3 - Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained**

N/A

**HR4 - Total number of incidents of discrimination and actions taken**

N/A

**HR5 - Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights**

N/A

**FULL**

**HR6 - Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor**

Overall, we did not see any significant risk for incidents of child labour or young workers being exposed to hazardous work in Mainstream or EWOS operations during 2012.

Although child labour is prohibited by law in Vietnam, EWOS Vietnam checks all staff working permits for ages.

[HR 6](#)

**HR7 - Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor**

N/A

**HR8 - Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations**

N/A

**FULL**

**HR9 - Total number of incidents of violations involving rights of indigenous people and actions taken**

During 2012, there were no reported incidents of violation involving the rights of indigenous people.

[Additional information](#)

**Social: Society**

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INDICATOR

QUICK LOOK

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**SO1 - Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting**

N/A

**SO2 - Percentage and total number of business units analyzed for risks related to corruption**

N/A

**FULL**

**SO3 - Percentage of employees trained in organization's anti-corruption policies and procedures**

Our ethical and corporate responsibility guidelines prohibit any form of corruption.

An e-learning anti-corruption training program was rolled out to management and employees in vulnerable positions in the majority of the operating companies in 2012. The roll-out will continue to the remaining companies in 2013. 50 percent of all managers and administrative employees received anti-corruption training in 2012. 36 percent of other employees have also been reminded or received some kind of training in our anti-corruption policies.

[Additional information](#)

[SO 3](#)



**SO4 - Actions taken in response to incidents of corruption**

N/A

**SO5 - Public policy positions and participation in public policy development and lobbying**

N/A

**SO6 - Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country**

N/A

**SO7 - Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes**

N/A

**FULL**

**SO8 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations**

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

The following two incidents of non-compliance with social regulations occurred in 2012;

One incident was imposed on EWOS Innovation for operating in Mainstream concession and one incident related to Mainstream Chile because the safety committee had not investigated an incident at the processing plant. The two incidents resulted in a total fine of USD 7,599.

There are additional nine incidents that have been reported in 2012, but have not been concluded or are under appeal. All nine relate to Mainstream.

**SO 8 - Incidents with non-compliance with regulations**

REPORTING UNIT	SOCIAL REGULATIONS	
	INCIDENTS	FINES (USD)
Mainstream Norway		
Mainstream Chile	1	3 373
Mainstream Canada		
EWOS Norway		
EWOS Chile		
EWOS Canada		
EWOS Scotland		
EWOS Vietnam		
EWOS Innovation	1	4 226
<b>2012</b>	<b>2</b>	<b>7 599</b>
2011 Total	4	10 226
2010 Total	5	79 291

**Note:** In 2012, two pending non-compliances in Mainstream Chile were made final and 2011 figures are updated accordingly.

[Additional information](#)

[SO 8](#)

## Social: Product Responsibility

INDICATOR

QUICK LOOK

**PR1 - Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures**

N/A

FULL

**PR2 - Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes**

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

In 2012, there were no non-compliances with food safety regulations.

[Additional information](#)

[PR 2](#)

**PR3 - Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements**

N/A

**PR4 - Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes**

N/A

**PR5 - Practices related to customer satisfaction, including results of surveys measuring customer satisfaction**

N/A

**PR6 - Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship**

N/A

**PR7 - Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes**

N/A

**PR8 - Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data**

N/A

**FULL**

**PR9 - Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services**

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

In 2012, there were no non-compliances with product and service regulations.

There is one incident that has been reported in 2012, but has not been concluded.

[Additional information](#)

[PR 9](#)

**PARTIAL**

**FP1 - Percentage of purchased volume from suppliers compliant with company's sourcing Policy/Genetically Modified Organisms (GMO)**

EU regulations require a food producer to apply to the National authorities if a specific GMO ingredient should be used. If approved GMO ingredients are used in feed, the feed must be labelled accordingly, but the final product (e.g. fish, meat or cheese) is not subject to the same labelling requirements.

In Norway and UK, EWOS' customers do not want GMO based feed. To meet the requirements of our customers, EWOS has not been using any GMO ingredients in the feed. This has also been the situation in 2012.

Outside EU, the use of GMO ingredients is common and there are no specific labelling requirements. Both EWOS Canada and EWOS Chile do not require non-GMO ingredients, and would thus use GMO ingredients in their feeds when this would be common in the market for the ingredient in question.

[FP 1](#)

# Cermaq performance indicators

## CEQ indicators

INDICATOR

QUICK LOOK

**FULL**

### CEQ 01 - Fish Mortality

Fish mortality is a key measure to evaluate fish health in production. In 2012, Mainstream introduced a revised indicator which is a 12 months rolling mortality rate followed up on a regular basis by management.

The revised indicator measures mortality in relation to number of fish in sea. In 2011 and backwards, Mainstream reported the total number of mortalities in both freshwater and sea. The revised indicator is thus a better measure of mortality since it measures the total number of mortalities in relation to fish in sea and not as an absolute figure. In addition it adjusts for seasonal variations since it measure mortality over a 12 months period. As a result the revised indicator is a more precise measure and a better “steering wheel” for management.

Reduction in mortality is a key target for Mainstream group and the revised indicator is defined as a Key Performance Indicator. This means that it is followed up on a regular basis with monthly reporting to the Central Management and the Board of Directors.

The 12 months rolling fish mortality was 12.9 per cent of average number of fish in sea in Mainstream and EWOS Innovation at 31st December 2012. The mortality rate is higher in Chile, primarily as a result of the disease SRS, than in Norway and Canada. Norway experienced the lowest mortality

rate within the group as a result of good biological conditions in Nordland in particular. The low rate in Norway (6.3 percent on a 12 months rolling rate), is an inspiration for our work within fish health management.

Cullings, as a result of epidemic diseases, are not included in the 12 months rolling rate. In 2012, there was one PD outbreak in Norway and two IHN outbreaks in Canada. The fish were culled soon after the outbreak to avoid spreading of the disease.

[Additional information](#)

[CEQ 01 - Fish mortality](#)

**FULL**

**CEQ 02 - Sea Lice**

Sea lice are reported regularly in accordance with local regulations, see table of local action levels.

**CEQ 02 - Local Action Levels, mean Level of Lice per Fish**

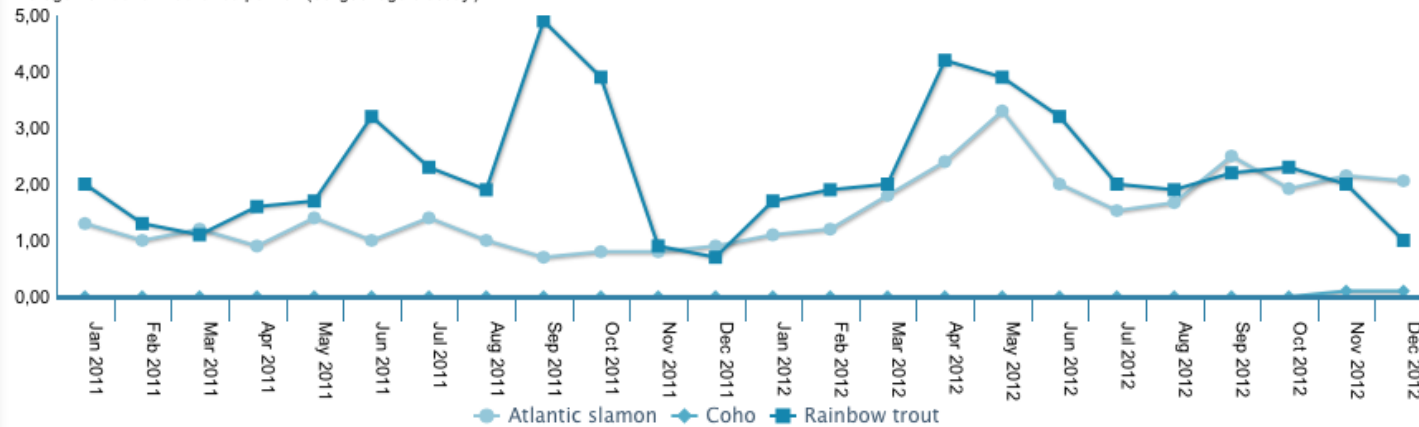
	CHILE	NORWAY	CANADA
	MOBILE	MOBILES	ADULT MOBILE
Jan	6	3	0.5 3
Feb	6	3	0.5 3
Mar	6	3	0.5 3
Apr	6	3	0.5 3
May	6	3	0.5 3
Jun	6	3	0.5 3
Jul	6	3	0.5 3
Aug	6	3	0.5 3
Sep	6	5	1 3
Oct	6	5	1 3
Nov	6	5	1 3
Dec	6	5	1 3

**Note:** In Norway new sea lice regulations are introduced including new action levels. The regulations are valid from 1st January 2013.

Mainstream has experienced a higher level of sea lice in Chile during 2012. However, the level of sea lice has been controlled within local action levels.

### CEQ 02 - Average Sea Lice Counts Mainstream Chile

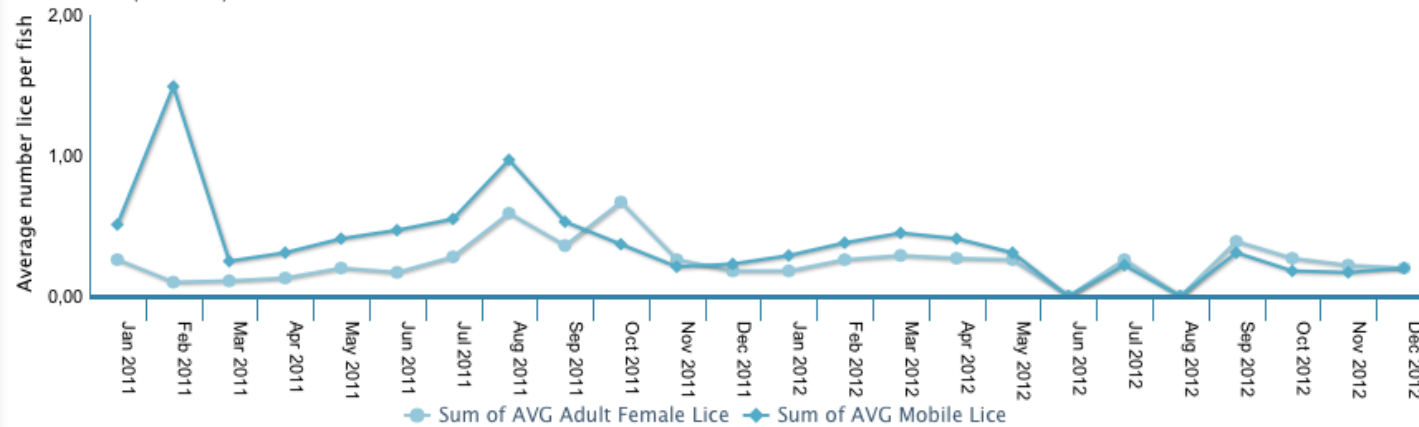
Average number of mobile lice per fish (*Caligus rogercresseyi*)



In Norway and Canada the levels have been kept well below local action levels with the exception of sites operated by EWOS Innovation in Hordaland that has experienced more challenging sea lice levels.

### CEQ 02 - Average Sea Lice Counts Mainstream Canada

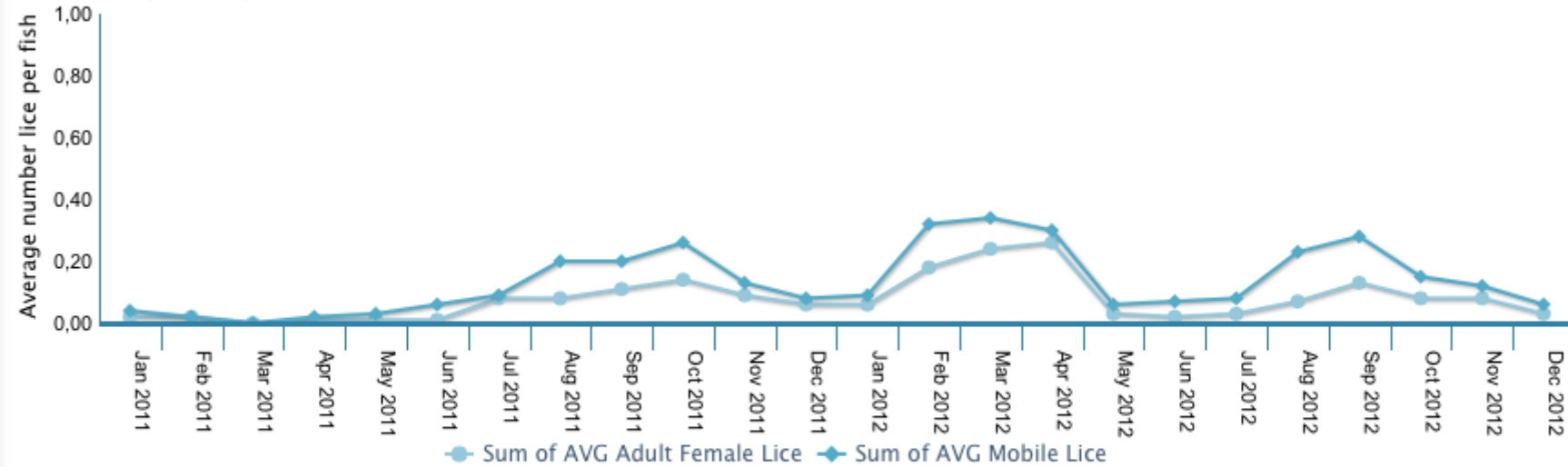
Atlantic Salmon (*L.Salmonis*)





### CEQ 02 - Average Sea Lice Counts Mainstream Norway

Atlantic Salmon (L.Salmonis)



[Additional information](#)

[CEQ 02 - Sea lice](#)

**FULL**

**CEQ 03 - Fallow Time**

All operations fully respected the fallow periods defined in regulations.

**CEQ 03 - Average Achieved Fallow Time Between Production Cycles (weeks)**

WEEKS	MAINSTREAM CANADA	MAINSTREAM CHILE	MAINSTREAM NORWAY
Statutory requirements	-	12	8
Internal target	12		
Results 2012	24	12	17
Results 2011	13	12	17
Results 2010	22	24	29

[Additional information](#)

[CEQ 03 - Fallow time](#)

**FULL**

**CEQ 04 - Medicine Use**

Cermaq works systematically with preventive health measures in all three countries. Screening programs for monitoring relevant pathogens, vaccines, functional feeds, stress mapping, less use of antibiotics, improving water quality, and more knowledge are key elements in our approach to ensure better fish health and welfare.

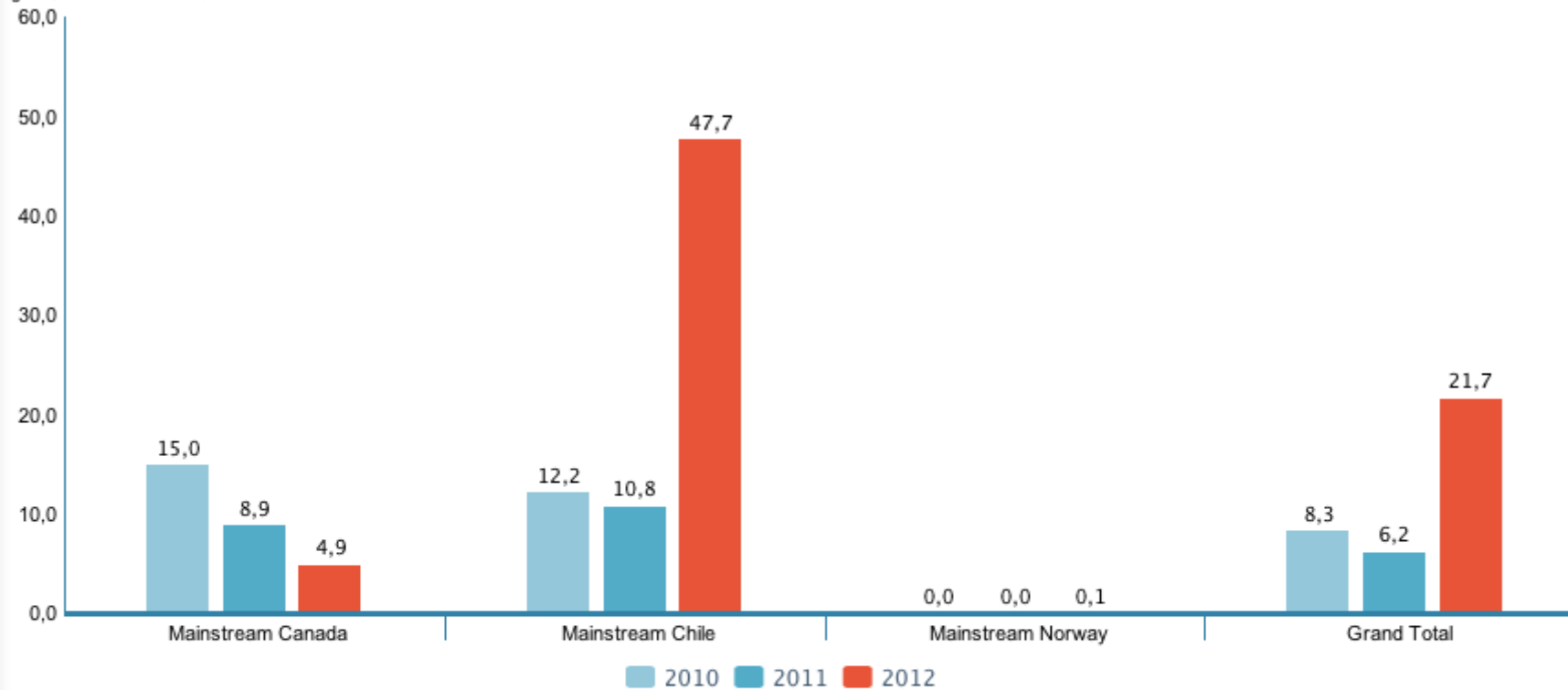
This has given us more tools to better forecast disease events and knowledge to lower the risk of disease outbreaks.

The use of antibiotics increased in 2012 as a result of the increasing number of SRS disease outbreaks in Chile.

In Norway, Mainstream used antibiotics for the first time in many years. The reason was one incident of Mouth rot disease. In Canada, the use of antibiotic decreased considerably.

#### CEQ 04 - Antibiotics used

gAPI/tonne LWE Produced



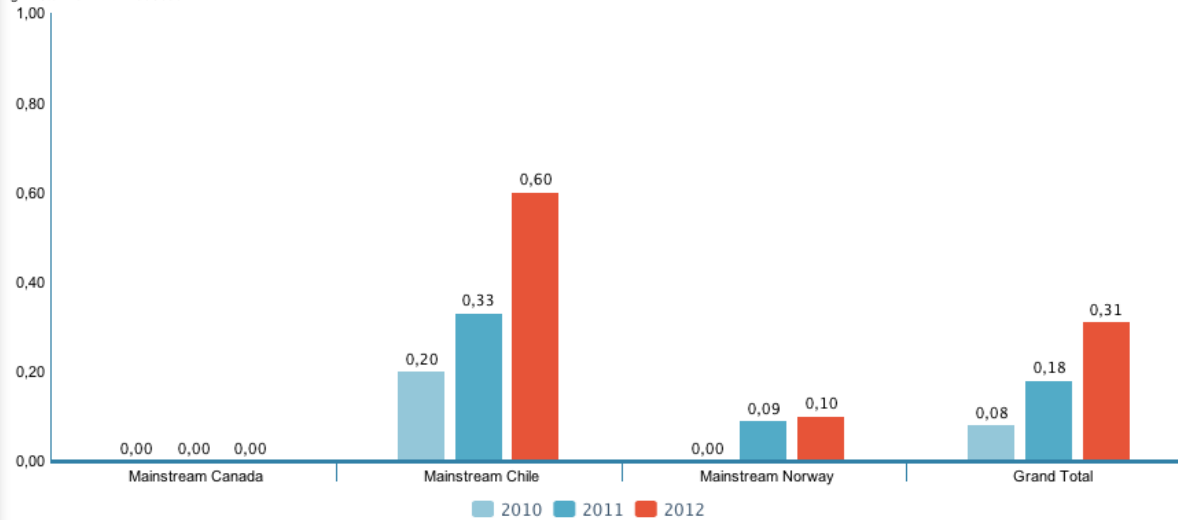
**Note:** EWOS Innovation (EI) is excluded from the overview because there has not been any fish in sea in EI Chile during 2012. In EI Norway, there has been fish in sea, but the production and medicine use is limited and does not affect the total figures noteworthy.

The use of anti-sea lice feed and bath treatments increased in Chile in 2012 as a result of the higher sea lice levels. In Norway the use of medical treatments was at the same low level as in 2011 and in Canada it decreased in 2012, also from equally low levels. The level is measured as active pharmaceutical ingredient, API.

All our treatments were done in accordance with local area management plans and without any resistance issues.

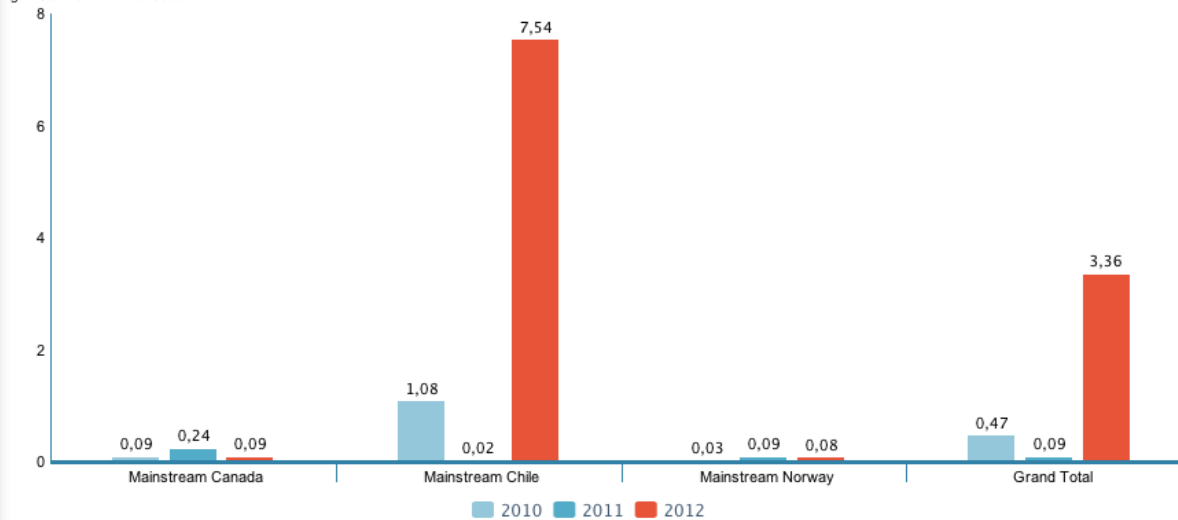
#### CEQ 04 - Sea lice bath treatment

gAPI/tonne LWE Produced



#### CEQ 04 - Sea lice treatment used in feed

gAPI/tonne LWE Produced



Also non-medical treatments are used to combat sea-lice. Examples of non-medical treatments in use are functional feeds supporting fish health. In addition, Mainstream is trying out new preventive tools like e.g. sea lice skirts. Wrasse is not an option in Mainstream Norway since wrasse do not live in areas with lower temperatures like in Nordland and Finnmark. In Canada and Chile wrasse is a non-native specie and therefore not possible to introduce.

[Additional information](#)

## CEQ 05 - Vaccination Program

Experiences from the ISA crisis in Chile have made us work more systematically with preventive fish health measures in all three countries. Screening programs for monitoring relevant pathogens, vaccines, functional feeds, stress mapping, less use of antibiotic, improving water quality and more knowledge are key elements in our approach to ensure better fish health and welfare. This has given us more tools to better forecast disease events and knowledge to lower the risk for disease outbreaks.

Vaccinations are used when assessed effective for the species and in the region as an integral part of our preventive health measures. Examples of diseases the fish are vaccinated against are: IPN, SRS, Vibriosis, ISA, Furunculosis, Mouth rot, IHN and Enteric Red Mouth.

[Additional information](#)

### CEQ 05 - Vaccines component

	CANADA	CHILE	NORWAY
SRS		X	
Furunculosis	X		X
Vibriosis	X	X	X
Coldwater vibriosis	X		X
Winter sore			X
IPN		X	X
ISA		X	
Enteric Red Mouth	X		
Mouth rot	X		
IHN	X		

[CEQ 05 - Vaccination program](#)

**FULL**

## CEQ 06 - Area Management Agreements

An Area Management Agreement is an agreement amongst stakeholders in a defined area. Such agreements are tailored to the local situation and, typically, may include agreement on fallowing and sea lice management strategies, vaccination programmes, containment and contingency plans, catchment management plans and disease control strategies in farmed and wild fisheries.

Area management is crucial for effective, preventive management.

In 2012, 91 percent of Mainstream sites were engaged in Area Management Agreements or located in areas fully controlled by Mainstream. This

includes all sites in Norway and Chile, and 19 of 27 sites in Canada. All EWOS Innovation sites in both Norway and Chile are also engaged in Area Management Agreements.

[More information](#)

[CEQ 06 - Area management agreements](#)

**FULL**

**CEQ 07 - Escapes**

In 2012 there were two escapes; one escape of one fish in Mainstream Canada and one escape of 2761 fish in EWOS Innovation Norway. The escape in EWOS Innovation is also reported as a non-compliance incident (EN 28) and a fine of NOK 226 923 was imposed. The escape in EWOS Innovation was a result of a human error in connection with handling technical equipment that caused a whole in the net pen.

For comparison, we had one escape of two fish in 2011 and zero fish escapes in 2010.

The total number of fish in the sea was more than 50 million at the end of the year.

The good results the last years have been reached through focus on training and technical maintenance on fish farm sites.

In addition to the above incidents, the recently acquired company Cultivos Marions Chiloé (CMC) reported an escape of 16,595 fish in Q4 2012. CMC has not been part of the sustainability reporting in 2012, but will be included from 1st January 2013.

**CEQ 07 - Number of Escaped Fish**

YEAR	EWOS INNOVATION	MAINSTREAM CANADA	MAINSTREAM NORWAY	MAINSTREAM CHILE	GRAND TOTAL
2010	0	0	0	0	0
2011	0	0	2	0	2
2012	2761	1	0	0	2762

[Additional information](#)

**FULL**

**CEQ 08 - Marine Index and Nutrient Ratios**

Forage fishery dependency is a challenge for a growing fish farming industry. In recent years, EWOS has lowered the marine content in its feed and our research into 'marine independence' provides the knowledge for further significant reduction in the future if necessary. The specific content of marine ingredients in EWOS feed varies depending on price and availability of alternative raw materials. In 2012 the marine index for the EWOS group decreased to 31.3 percent (37.5 per cent in 2011 and 42.1 percent in 2010).

**Note:** 2011 and 2012 figures are ex. EWOS Vietnam

However, it is the efficiency in the use of marine ingredients that is really of greater relevance than dependency on marine ingredients. Farmed salmon are well known to be very efficient in their conversion of forage fish and seafood by-products into healthy and nutritious farmed salmon. In 2012, we estimate that EWOS used only 1.03 times more marine protein (1.17 in 2011) than protein produced by salmon farmers. For marine oil, we used less (0.86) than the oil produced by farmers (1.00 in 2011).

**Note:** 2011 and 2012 figures are ex. EWOS Vietnam

Whilst salmon farming is no doubt an efficient use of forage fish that have no established alternative market for human consumption, it is also important to use by-products from seafood processing as a source for feed raw materials. In 2012, EWOS increased its use of marine ingredients derived from seafood trimmings and by-products from 18 percent in 2011 to 24 percent.

The following list indicates the countries of origin for many of the fish species used in fishmeal and fish oil purchased by EWOS:

**CEQ 08 - Overview of fish species used to make fishmeal and fishoil for Ewos feed**

CATEGORY	SPECIES	FISHMEAL AND FISHOIL (TONNES)	CATEGORY %	TOTAL %
Fish trimmings & byproducts	Herring trimmings	65 399	72%	18%
	Various species	24 918	28%	7%
Fish trimmings & byproducts Total		90 317	-	24%
Forage Fish	Anchovy	194 162	69%	52%
	Capelin	32 720	12%	9%

	Sprat	18 388	7%	5%
	Menhaden	13 944	5%	4%
	Sand Eel	8 685	3%	2%
	Various species	13 467	5%	4%
Forage Fish Total		281 366	-	76%
Other Marine Ingredients	Mainly Krill	707	100%	0.2 %
Other Marine Ingredients Total		707	-	0.2 %
Grand Total		372 390	-	-

**NOTE:** Species that individually make up less than 2% of the mix have been grouped together under 'various species'. This subset includes: Blue whiting, Jack Mackrell, Hake (trimmings only), Norway Pout and Sardine.

### CEQ 08 - Countries of origin

FISH SPECIES	COUNTRY
Anchovy	Peru. Chile
Capelin	Norway. Iceland
Sprat	Denmark
Menhaden	USA
Herring	Norway. Denmark. Iceland
Blue Whiting	Norway. Denmark. Iceland
Jack Mackrell	Chile

EWOS prioritises the use of feed ingredients that it judges to be sustainable and the judgement is based upon the best available information. Examples of the sources of information used to judge the sustainability of fisheries include: IMARPE and Sernapesca in South America; ICES in Europe; and National Marine Fisheries Service, Gulf States Marine Fisheries Commission, Atlantic States Marine Fisheries Commission in the USA.

EWOS currently do not purchase meal or oil produced from Atlantic Mackerel caught for the purpose of meal- and oil- production due to disagreement between EU, Norway, Iceland and Greenland on setting a common quota.

[Additional information](#)

[CEQ 08 - Marine index and nutrient ratios](#)



**CEQ 09 - Functional Feeds**

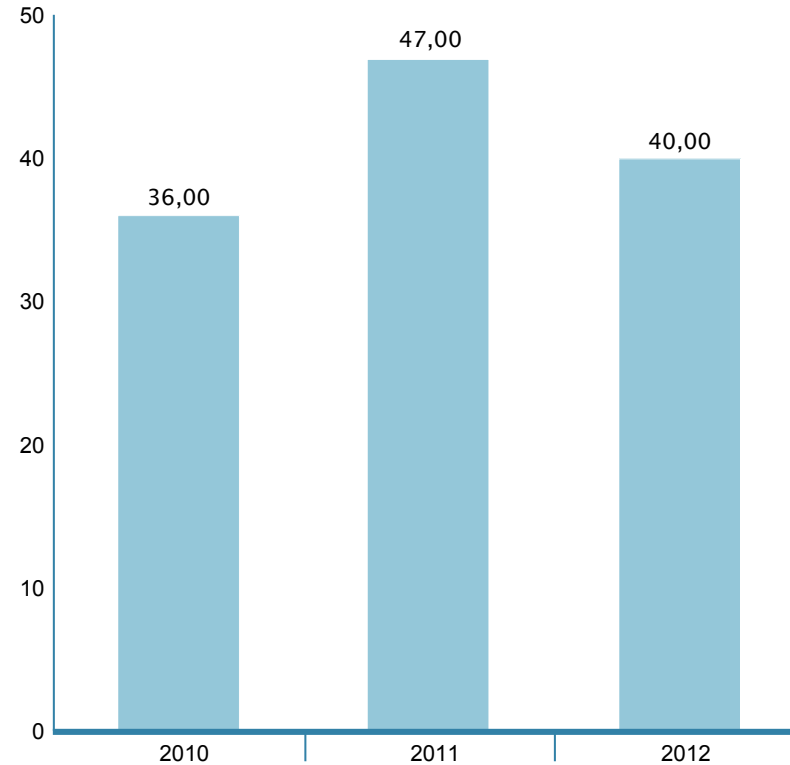
Functional feeds have specialised formulations and/or components which give the feed a positive effect over and above their nutritional value. They are used to support fish well-being and to reduce the risk of disease effects in fish stocks. The EWOS Prebiosa, EWOS Omega HP and EWOS Boost functional feeds are well established in salmon farming regions around the world. In 2012, EWOS launched two new functional feeds, one in Scotland (EWOS Avert) and one in Chile (EWOS Sigma). In addition EWOS Canada introduced the existing EWOS Prebiosa to the Canadian market. EWOS has for many years put efforts into providing well documented functional feeds for its customers, thereby supporting the sustainability of the aquaculture industry. In 2012 EWOS functional feed sales represented 40 percent of total feed sales by volume. This is a reduction from 47 percent in 2011.

EWOS Vietnam started to offer functional feeds to farmers in 2012.

[Additional information](#)

**CEQ 09 - Functional Feed Sales in EWOS**

as % of total feed sales by volume



**Note:** 2011 and 2012 figures are ex. EWOS Vietnam as EWOS Vietnam produces feed for other species than salmonids.

[CEQ 09 - Functional feeds](#)

## CEQ 10 - Supply Chain Auditing

Audits of EWOS's raw material suppliers are planned based upon the results of a risk analysis that considers quality and food safety risks. This indicator is used to measure 'actual' compared to 'planned' supplier audits.

A total of 34 supplier audits were planned in 2012 and 53 audits were completed.

For comparison, a total of 43 supplier audits were planned in 2011 and 31 audits were completed.

EWOS continues to strengthen its program for supply chain diligence through activities that are coordinated by the Quality Management Team and the Sourcing and Purchasing Team. In 2011, new supplier requirements were developed to take into account our Global Compact commitments. In 2012, EWOS has worked on implementing the guidelines throughout the group.

## CEQ 10 - Number of Supplier Audits Planned and Carried out

	EWOS NORWAY	EWOS CHILE	EWOS CANADA	EWOS SCOTLAND	EWOS VIETNAM	TOTAL
<b>2010</b>						
Target	12	6	8	5	n/a	31
Actual	14	6	5	5	n/a	30
%	117%	100%	63%	100%	n/a	97%
<b>2011</b>						
Target	12	6	10	2	13	43
Actual	8	5	4	1	13	31
%	67%	83%	40%	50%	100%	72%
<b>2012</b>						
Target	15	4	8	2	5	34
Actual	15	16	6	3	13	53
%	100%	400%	75%	150%	260%	156%

[Additional information](#)

**FULL**

**CEQ 11 - Local Community Complaints**

We recognise that our operations impact our neighbours and local communities in various ways, and we take care to register all complaints to our operations in order to address the root cause and make improvements.

The total number of community complaints received during 2012 was 10. Of these, 6 complaints were related to smell, two were related to environmental issues, one was a complaint about noise, and one was a complaint about dust.

We did not register any complaints about traffic/transport in 2012.

**CEQ 11 - Summary Local Community Complaints**

OPCO	ENVIRONMENTAL (EMISSIONS TO AIR, WATER ETC)	SMELL	NOISE	TRAFFIC /TRANSPORT	OTHER	TOTAL
<b>2010</b>						
EI	0	0	0	0	0	0
EW Ca	0	1	0	0	0	1
EW Ch	0	0	0	0	0	0
EW No	0	2	0	0	1	3
EW Sc	0	0	0	0	0	0
MS Ca	0	0	0	0	0	0
MS Ch	0	0	0	0	0	0
MS No	0	0	1	0	0	1
<b>2010 Total</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>
<b>2011</b>						
EI	0	0	0	0	0	0
EW Ca	0	0	0	0	0	0
EW Ch	0	0	0	0	0	0
EW No	0	0	0	0	4	4
EW Sc	0	0	0	0	0	0
EW Vn	0	0	0	0	0	0
MS Ca	0	0	0	0	0	0

MS Ch	0	0	0	0	0	0
MS No	0	0	0	0	0	0
<b>2011 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>
<b>2012</b>						
EI	0	0	0	0	0	0
EW Ca	0	2	0	0	0	2
EW Ch	0	1	0	0	0	1
EW No	0	0	1	0	1	2
EW Sc	0	2	0	0	0	2
EW Vn	0	0	0	0	0	0
MS Ca	0	0	0	0	0	0
MS Ch	0	0	0	0	0	0
MS No	2	1	0	0	0	3
<b>2012 Total</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>10</b>

[Additional information](#)

[CEQ 11 - Local community complaints](#)

**FULL**

**CEQ 12 - Whistle Blower Incidents**

In 2012, 4 whistle blowing incidents were reported.

For comparison, there were 0 cases of whistle blowing incidents in 2011 and three cases in 2010.

[Additional information](#)

[CEQ 12 - Whistle blower incidents](#)

**CEQ 13 - International Management Standards**

The aquaculture industry is characterised by a high level of operational risk. The greatest risk exposures include fish health, food safety, production related constraints, effects in connection with changes in the climate, environment, and the health, environment and safety of the group's employees and contracting parties.

The group has a policy stipulating that systematic management of operational risk is to be established through management systems that are certified according to International standards. The standards impose requirements with respect to management responsibility, structure, reporting and allocation of responsibility in the organisation, regular risk assessment and action plans for on-going improvement, internal and external communication, and the establishment of procedures and operational controls.

The group has defined the most important areas as being quality (ISO 9001), environment (ISO 14001), food safety (ISO 22000) and occupational health and safety (OHSAS 18001). All subsidiaries have continued working with this in 2012, and the table below shows the certification status at year end.

EWOS Vietnam was established in 2011 and did not have any of the standards in place. In March 2012, ISO 9001 was obtained, and a plan has been made to get the other standards in place.

Mainstream Norway had been audited for ISO 14001 and 22000 by year-end. However, the final confirmation was received in February 2013.

EWOS Innovation Chile has not had any fish in sea in 2012 and it has therefore not been possible to perform an audit of the remaining ISO 22000 standard.

**CEQ 13 - Management Standards Status at Year End 2011**

BUSINESS AREA	COUNTRY	QUALITY MANAGEMENT STANDARD ISO 9001	FOOD SAFETY MANAGEMENT STANDARD ISO 22000	ENVIRONMENT MANAGEMENT STANDARD ISO 14001	OHSAS 18001
Mainstream	Norway	Yes	Yes auditor confirmation received 1st February 2013	Yes auditor confirmation received 1st February 2013	Yes
Mainstream	Chile	Yes	Yes	Yes	Yes
Mainstream	Canada	Yes	Yes	Yes	Yes

EWOS	Norway	Yes	Yes	Yes	Yes
EWOS	Chile	Yes	Yes	Yes	Yes
EWOS	Canada	Yes	Yes	Yes	Yes
EWOS	Scotland	Yes	Yes	Yes	Yes
EWOS	Vietnam	Yes	No	No	No
EWOS	Norway	Yes	Yes	Yes	Yes
Innovation					
EWOS	Chile	Yes	Pending Q1 2013	Yes	Yes
Innovation					

In addition to the above standards, 3 sites in Mainstream Canada are certified according to Best Aquaculture Practices with 3 more in addition to the Pacific National Processing facility in Tofino planned for 2013. In addition, all sites in the Tofino area are certified to Aboriginal Aquaculture Association - Aboriginal Principles for Sustainable Aquaculture standards

EWOS Norway, Chile and Vietnam are certified according to GLOBAL GAP.

[Additional information](#)

[CEQ 13 - International management standards](#)

# Cermaq Indicators

## CEQ 01 - Fish mortality

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[Additional information](#)

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### CEQ 02 - Local Action Levels, mean Level of Lice per Fish

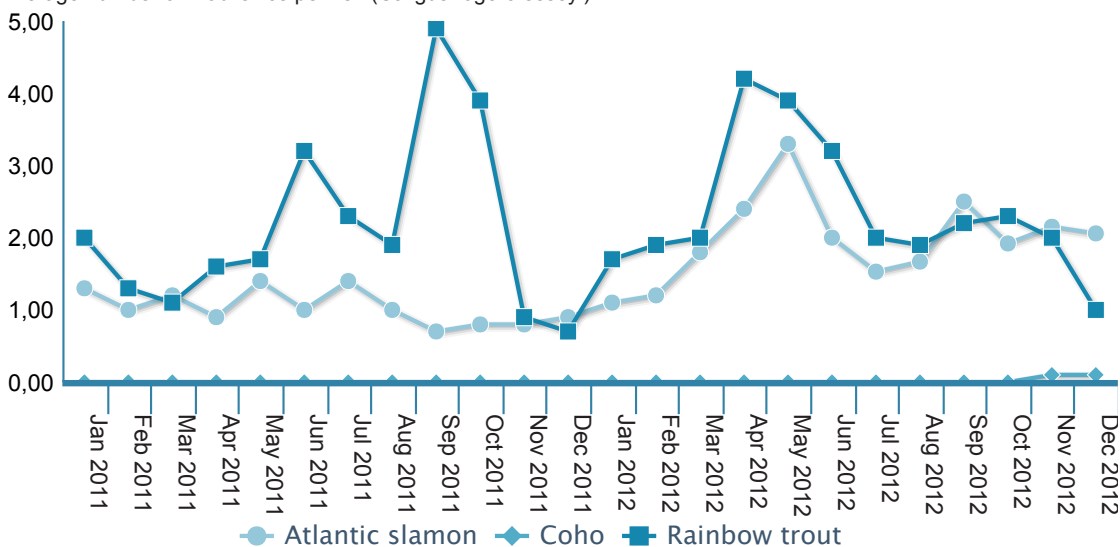
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	MOBILE	MOBILES	ADULT	MOBILE
Jan	6	3	0.5	3
Feb	6	3	0.5	3
Mar	6	3	0.5	3
Apr	6	3	0.5	3
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Jun	6	3	0.5	3
Jul	6	3	0.5	3
Aug	6	3	0.5	3
Sep	6	5	1	3
Oct	6	5	1	3
Nov	6	5	1	3
Dec	6	5	1	3

**Note:** In Norway new sea lice regulations are introduced including new action levels. The regulations are valid from 1st January 2013.

Mainstream has experienced a higher level of sea lice in Chile during 2012. However, the level of sea lice has been controlled within local action levels.

### CEQ 02 - Average Sea Lice Counts Mainstream Chile

Average number of mobile lice per fish (*Caligus rogercresseyi*)

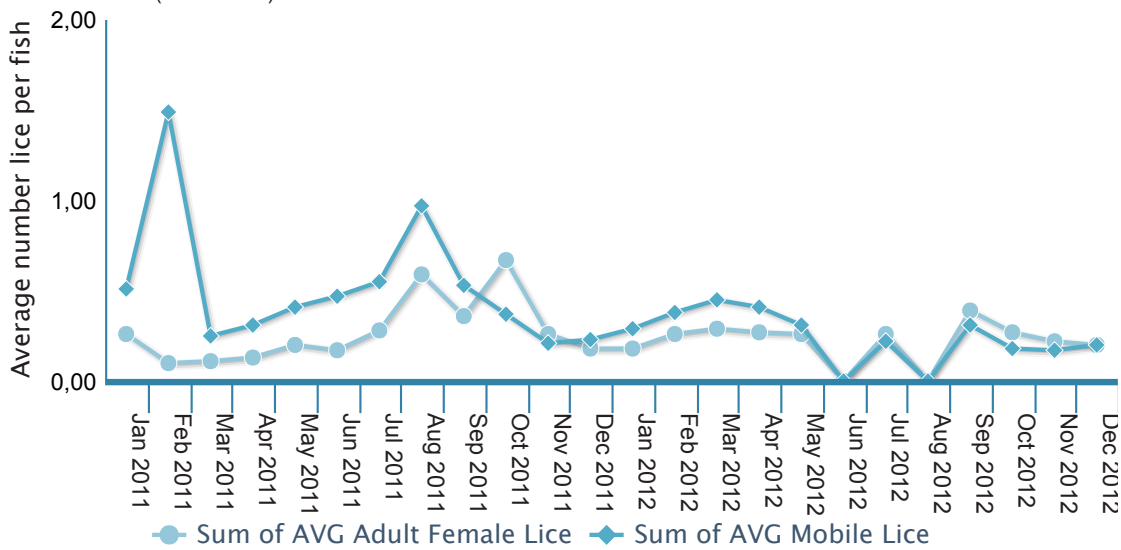




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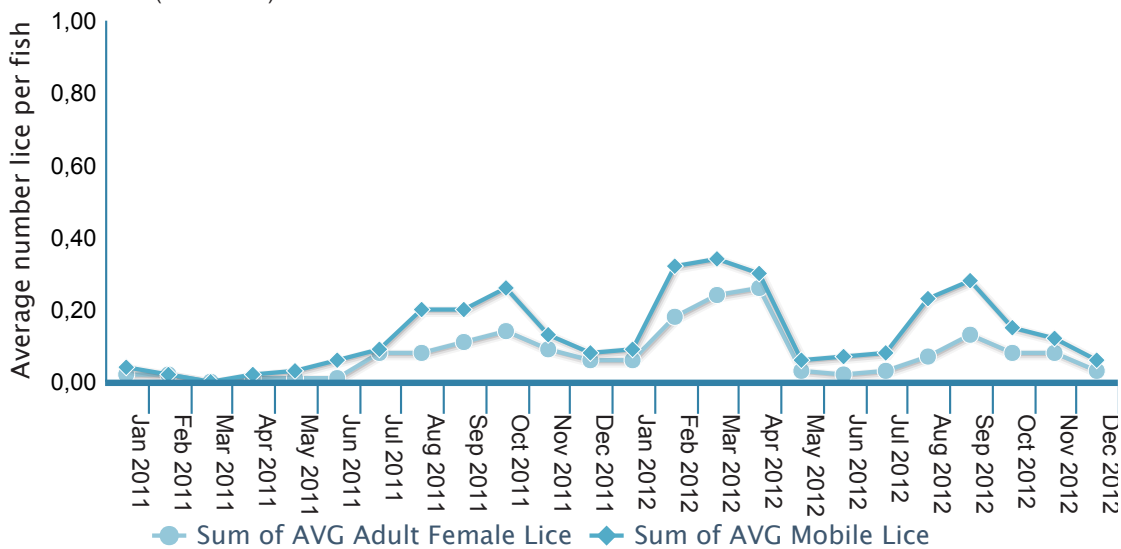
### CEQ 02 - Average Sea Lice Counts Mainstream Canada

Atlantic Salmon (L.Salmonis)



### CEQ 02 - Average Sea Lice Counts Mainstream Norway

Atlantic Salmon (L.Salmonis)



[Additional information](#)

## CEQ 03 - Fallow time

All operations fully respected the fallow periods defined in regulations.

### CEQ 03 - Average Achieved Fallow Time Between Production Cycles (weeks)

WEEKS	MAINSTREAM CANADA	MAINSTREAM CHILE	MAINSTREAM NORWAY
Statutory requirements	-	12	8
Results 2012	24	12	17
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[Additional information](#)

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Cermaq works systematically with preventive health measures in all three countries. Screening programs for monitoring relevant pathogens, vaccines, functional feeds, stress mapping, less use of antibiotics, improving water quality, and more knowledge are key elements in our approach to ensure better fish health and welfare.

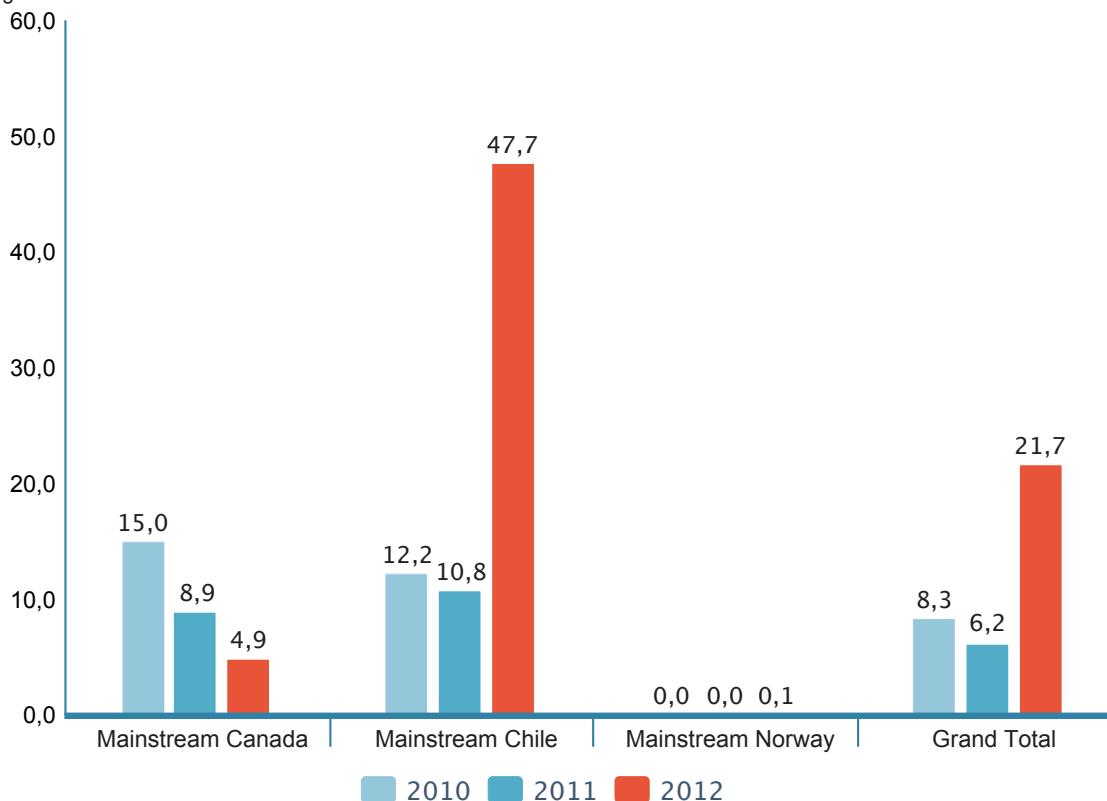
This has given us more tools to better forecast disease events and knowledge to lower the risk of disease outbreaks.

The use of antibiotics increased in 2012 as a result of the increasing number of SRS disease outbreaks in Chile.

In Norway, Mainstream used antibiotics for the first time in many years. The reason was one incident of Mouth rot disease. In Canada, the use of antibiotic decreased considerably.

### CEQ 04 - Antibiotics used

gAPI/tonne LWE Produced



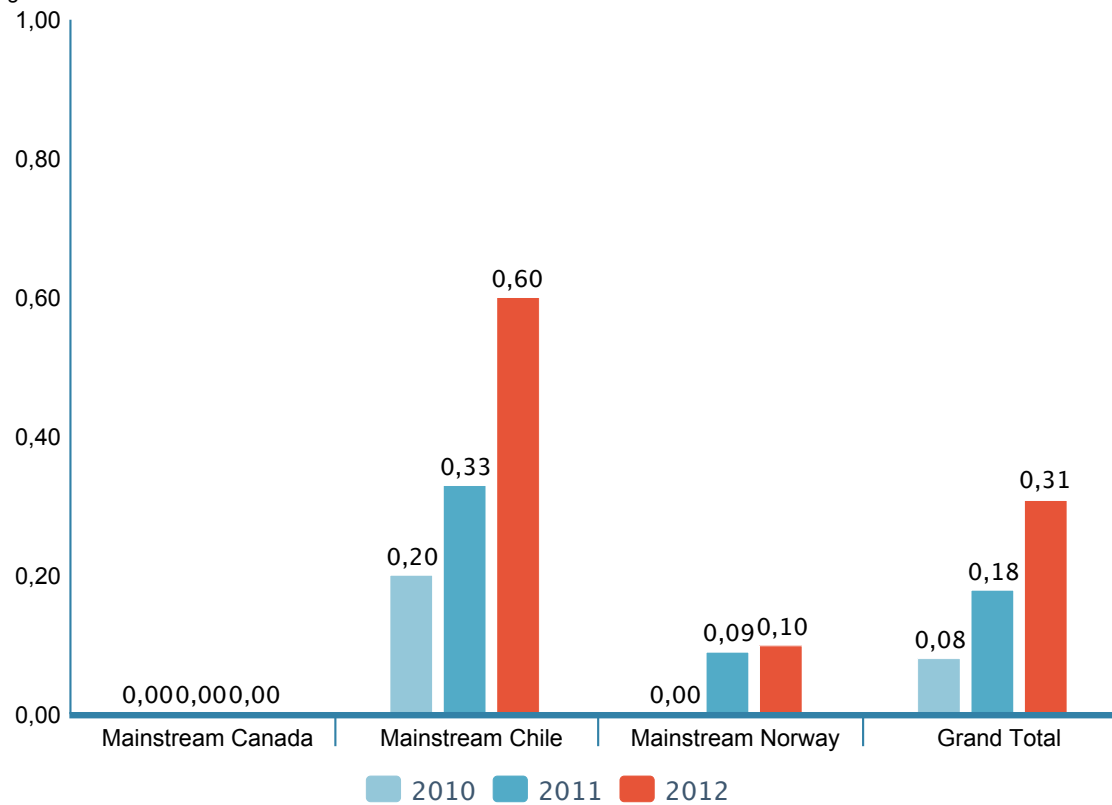
**Note:** EWOS Innovation (EI) is excluded from the overview because there has not been any fish in sea in EI Chile during 2012. In EI Norway, there has been fish in sea, but the production and medicine use is limited and does not affect the total figures noteworthy.

The use of anti-sea lice feed and bath treatments increased in Chile in 2012 as a result of the higher sea lice levels. In Norway the use of medical treatments was at the same low level as in 2011 and in Canada it decreased in 2012, also from equally low levels. The level is measured as active pharmaceutical ingredient, API.

All our treatments were done in accordance with local area management plans and without any resistance issues.

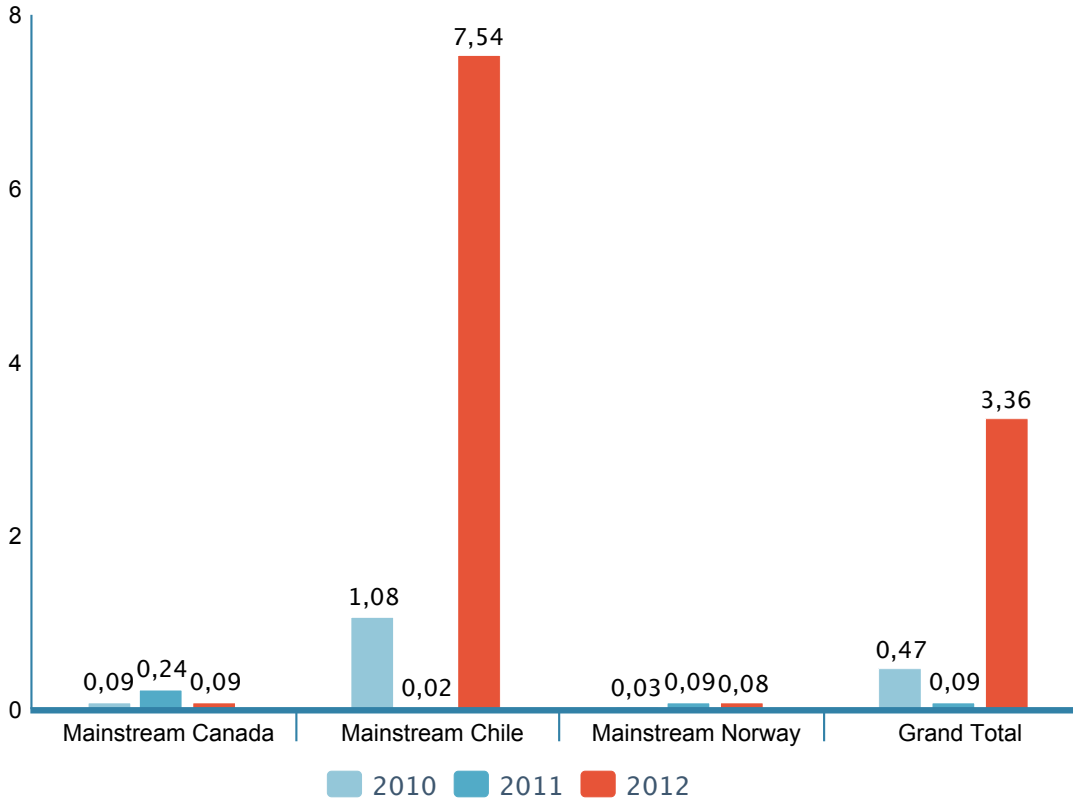
**CEQ 04 - Sea lice bath treatment**

gAPI/tonne LWE Produced



## CEQ 04 - Sea lice treatment used in feed

gAPI/tonne LWE Produced



Also non-medical treatments are used to combat sea-lice. Examples of non-medical treatments in use are functional feeds supporting fish health. In addition, Mainstream is trying out new preventive tools like e.g. sea lice skirts. Wrasse is not an option in Mainstream Norway since wrasse do not live in areas with lower temperatures like in Nordland and Finnmark. In Canada and Chile wrasse is a non-native specie and therefore not possible to introduce.

[Additional information](#)

## CEQ 05 - Vaccination program

Experiences from the ISA crisis in Chile have made us work more systematically with preventive fish health measures in all three countries. Screening programs for monitoring relevant pathogens, vaccines, functional feeds, stress mapping, less use of antibiotic, improving water quality and more knowledge are key elements in our approach to ensure better fish health and welfare. This has given us more tools to better forecast disease events and knowledge to lower the risk for disease outbreaks.

Vaccinations are used when assessed effective for the species and in the region as an integral part of our preventive health measures. Examples of diseases the fish are vaccinated against are: IPN, SRS, Vibriosis, ISA, Furunculosis, Mouth rot, IHN and Enteric Red Mouth.

[Additional information](#)

### CEQ 05 - Vaccines component

	CANADA	CHILE	NORWAY
SRS		X	
Furunculosis	X		X
Vibriosis	X	X	X
Coldwater vibriosis	X		X
Winter sore			X
IPN		X	X
ISA		X	
Enteric Red Mouth	X		
Mouth rot	X		
IHN	X		

## CEQ 06 - Area management agreements

An Area Management Agreement is an agreement amongst stakeholders in a defined area. Such agreements are tailored to the local situation and, typically, may include agreement on fallowing and sea lice management strategies, vaccination programmes, containment and contingency plans, catchment management plans and disease control strategies in farmed and wild fisheries.

Area management is crucial for effective, preventive management.

In 2012, 91 percent of Mainstream sites were engaged in Area Management Agreements or located in areas fully controlled by Mainstream. This includes all sites in Norway and Chile, and 19 of 27 sites in Canada. All EWOS Innovation sites in both Norway and Chile are also engaged in Area Management Agreements.

[More information](#)

## CEQ 07 - Escapes

In 2012 there were two escapes; one escape of one fish in Mainstream Canada and one escape of 2761 fish in EWOS Innovation Norway. The escape in EWOS Innovation is also reported as a non-compliance incident ([EN 28](#)) and a fine of NOK 226 923 was imposed. The escape in EWOS Innovation was a result of a human error in connection with handling technical equipment that caused a whole in the net pen.

For comparison, we had one escape of two fish in 2011 and zero fish escapes in 2010.

The total number of fish in the sea was more than 50 million at the end of the year.

The good results the last years have been reached through focus on training and technical maintenance on fish farm sites.

In addition to the above incidents, the recently acquired company Cultivos Marinos Chiloé (CMC) reported an escape of 16,595 fish in Q4 2012. CMC has not been part of the sustainability reporting in 2012, but will be included from 1st January 2013.

### CEQ 07 - Number of Escaped Fish

YEAR	EWOS INNOVATION	MAINSTREAM CANADA	MAINSTREAM NORWAY	MAINSTREAM CHILE	GRAND TOTAL
2010	0	0	0	0	0
2011	0	0	2	0	2
2012	2761	1	0	0	2762

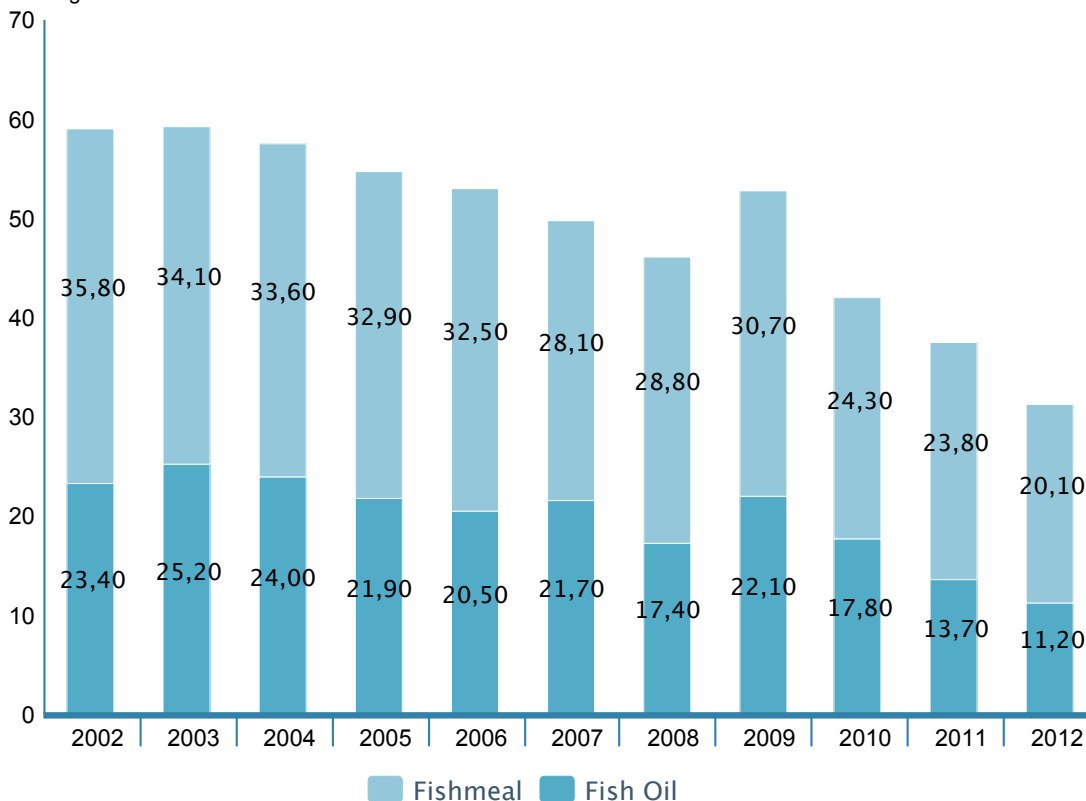
[Additional information](#)

## CEQ 08 - Marine index and nutrient ratios

Forage fishery dependency is a challenge for a growing fish farming industry. In recent years, EWOS has lowered the marine content in its feed and our research into 'marine independence' provides the knowledge for further significant reduction in the future if necessary. The specific content of marine ingredients in EWOS feed varies depending on price and availability of alternative raw materials. In 2012 the marine index for the EWOS group decreased to 31.3 percent (37.5 per cent in 2011 and 42.1 percent in 2010).

### CEQ 08 - Ewos group Marine ingredient index

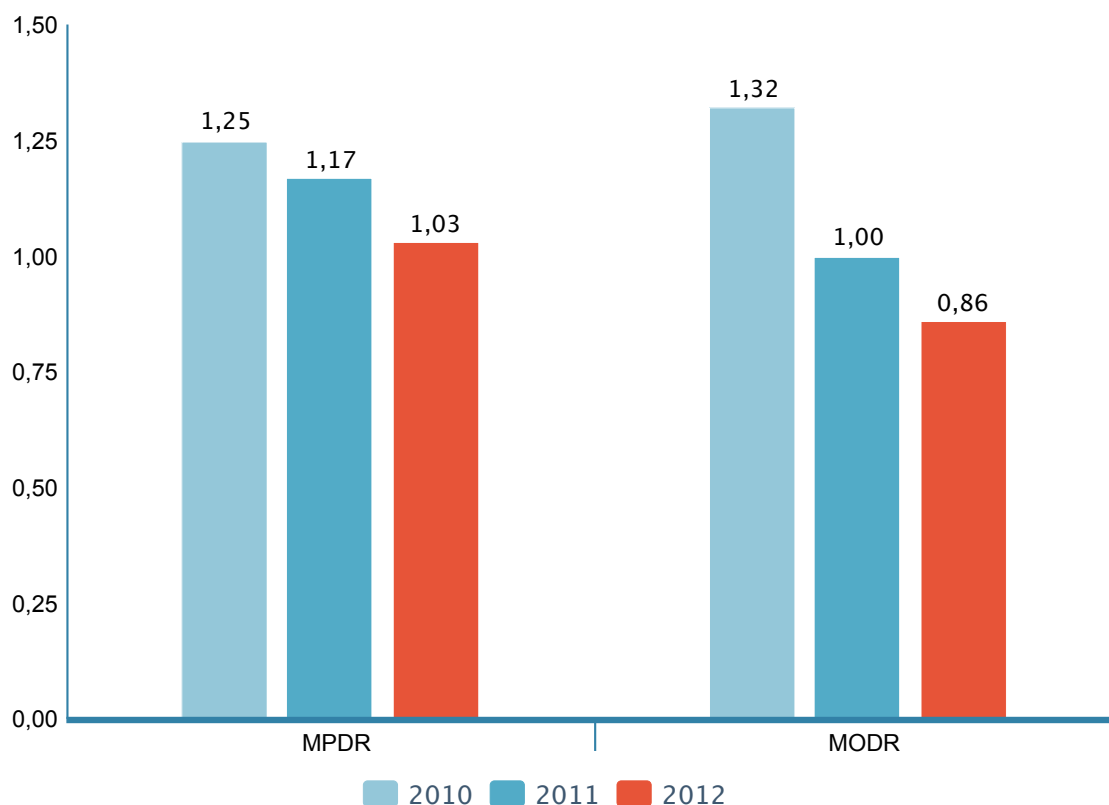
Marine ingredients in feed %



**Note:** 2011 and 2012 figures are ex. EWOS Vietnam

However, it is the efficiency in the use of marine ingredients that is really of greater relevance than dependency on marine ingredients. Farmed salmon are well known to be very efficient in their conversion of forage fish and seafood by-products into healthy and nutritious farmed salmon. In 2012, we estimate that EWOS used only 1.03 times more marine protein (1.17 in 2011) than protein produced by salmon farmers. For marine oil, we used less (0.86) than the oil produced by farmers (1.00 in 2011).

### CEQ 08 - Ewos group estimated marine nutrients ratios



**Note:** 2011 and 2012 figures are ex. EWOS Vietnam

Whilst salmon farming is no doubt an efficient use of forage fish that have no established alternative market for human consumption, it is also important to use by-products from seafood processing as a source for feed raw materials. In 2012, EWOS increased its use of marine ingredients derived from seafood trimmings and by-products from 18 percent in 2011 to 24 percent.

The following list indicates the countries of origin for many of the fish species used in fishmeal and fish oil purchased by EWOS:

### CEQ 08 - Overview of fish species used to make fishmeal and fishoil for Ewos feed

CATEGORY	SPECIES	FISHMEAL AND FISHOIL (TONNES)	CATEGORY %	TOTAL %
Fish trimmings & byproducts	Herring trimmings	65 399	72%	18%
	Various species	24 918	28%	7%
Fish trimmings & byproducts		90 317	-	24%
<b>Total</b>				
Forage Fish	Anchovy	194 162	69%	52%

	Capelin	32 720	12%	9%
	Sprat	18 388	7%	5%
	Menhaden	13 944	5%	4%
	Sand Eel	8 685	3%	2%
	Various species	13 467	5%	4%
Forage Fish Total		281 366	-	76%
Other Marine Ingredients	Mainly Krill	707	100%	0.2 %
Other Marine Ingredients Total		707	-	0.2 %
Grand Total		372 390	-	-

**NOTE:** Species that individually make up less than 2% of the mix have been grouped together under 'various species'. This subset includes: Blue whiting, Jack Mackrell, Hake (trimmings only), Norway Pout and Sardine.

## CEQ 08 - Countries of origin

FISH SPECIES	COUNTRY
Anchovy	Peru. Chile
Capelin	Norway. Iceland
Sprat	Denmark
Menhaden	USA
Herring	Norway. Denmark. Iceland
Blue Whiting	Norway. Denmark. Iceland
Jack Mackrell	Chile

EWOS prioritises the use of feed ingredients that it judges to be sustainable and the judgement is based upon the best available information. Examples of the sources of information used to judge the sustainability of fisheries include: IMARPE and Sernapesca in South America; ICES in Europe; and National Marine Fisheries Service, Gulf States Marine Fisheries Commission, Atlantic States Marine Fisheries Commission in the USA.

EWOS currently do not purchase meal or oil produced from Atlantic Mackerel caught for the purpose of meal- and oil- production due to disagreement between EU, Norway, Iceland and Greenland on setting a common quota.

[Additional information](#)

## CEQ 09 - Functional feeds

Functional feeds have specialised formulations and/or components which give the feed a positive effect over and above their nutritional value. They are used to support fish well-being and to reduce the risk of disease effects in fish stocks. The EWOS Prebiosa, EWOS Omega HP and EWOS Boost functional feeds are well established in salmon farming regions around the world. In 2012, EWOS launched two new functional feeds, one in Scotland (EWOS Avert) and one in Chile (EWOS Sigma). In addition EWOS Canada introduced the



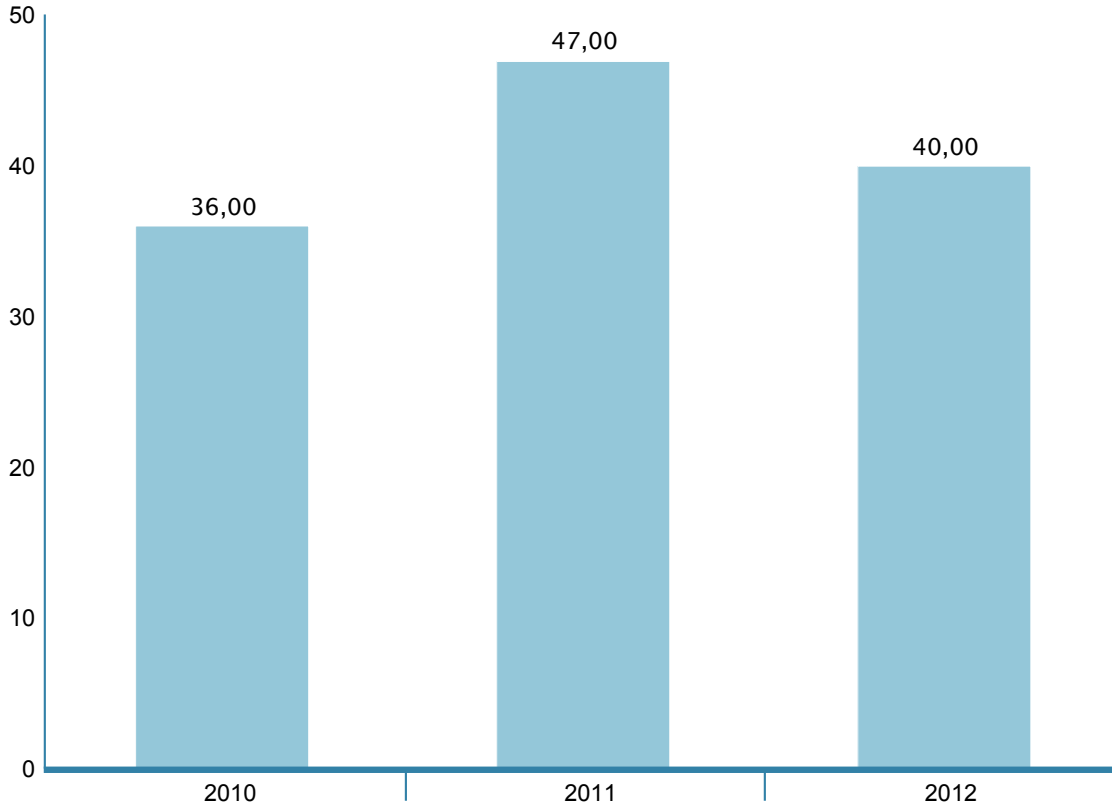
existing EWOS Prebosial to the Candian market EWOS has for many years put efforts into providing well documented functional feeds for its customers, thereby supporting the sustainability of the aquaculture industry. In 2012 EWOS functional feed sales represented 40 percent of total feed sales by volume. This is a reduction from 47 percent in 2011.

EWOS Vietnam started to offer functional feeds to farmers in 2012.

### [Additional information](#)

#### CEQ 09 - Functional Feed Sales in EWOS

as % of total feed sales by volume



**Note:** 2011 and 2012 figures are ex. EWOS Vietnam as EWOS Vietnam produces feed for other species than salmonids.

## CEQ 10 - Supply chain auditing

Audits of EWOS's raw material suppliers are planned based upon the results of a risk analysis that considers quality and food safety risks. This indicator is used to measure 'actual' compared to 'planned' supplier audits.

A total of 34 supplier audits were planned in 2012 and 53 audits were completed.

For comparison, a total of 43 supplier audits were planned in 2011 and 31 audits were completed.

EWOS continues to strengthen its program for supply chain diligence through activities that are coordinated by the Quality Management Team and the Sourcing and Purchasing Team. In 2011, new supplier requirements were developed to take into account our Global Compact commitments. In 2012, EWOS has worked on implementing the guidelines throughout the group.

## CEQ 10 - Number of Supplier Audits Planned and Carried out

	EWOS NORWAY	EWOS CHILE	EWOS CANADA	EWOS SCOTLAND	EWOS VIETNAM	TOTAL
<b>2010</b>						
Target	12	6	8	5	n/a	31
Actual	14	6	5	5	n/a	30
%	117%	100%	63%	100%	n/a	97%
<b>2011</b>						
Target	12	6	10	2	13	43
Actual	8	5	4	1	13	31
%	67%	83%	40%	50%	100%	72%
<b>2012</b>						
Target	15	4	8	2	5	34
Actual	15	16	6	3	13	53
%	100%	400%	75%	150%	260%	156%

### [Additional information](#)

## CEQ 11 - Local community complaints

We recognise that our operations impact our neighbours and local communities in various ways, and we take care to register all complaints to our operations in order to address the root cause and make improvements.

The total number of community complaints received during 2012 was 10. Of these, 6 complaints were related to smell, two were related to environmental issues, one was a complaint about noise, and one was a complaint about dust.

We did not register any complaints about traffic/transport in 2012.

## CEQ 11 - Summary Local Community Complaints

OPCO	ENVIRONMENTAL (EMISSIONS TO AIR, WATER ETC)	SMELL	NOISE	TRAFFIC /TRANSPORT	OTHER	TOTAL
<b>2010</b>						
EI	0	0	0	0	0	0
EW Ca	0	1	0	0	0	1
EW Ch	0	0	0	0	0	0
EW No	0	2	0	0	1	3
EW Sc	0	0	0	0	0	0
MS Ca	0	0	0	0	0	0
MS Ch	0	0	0	0	0	0
MS No	0	0	1	0	0	1
<b>2010</b>						
<b>Total</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>
<b>2011</b>						
EI	0	0	0	0	0	0
EW Ca	0	0	0	0	0	0
EW Ch	0	0	0	0	0	0
EW No	0	0	0	0	4	4
EW Sc	0	0	0	0	0	0
EW Vn	0	0	0	0	0	0
MS Ca	0	0	0	0	0	0
MS Ch	0	0	0	0	0	0
MS No	0	0	0	0	0	0
<b>2011</b>						
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>
<b>2012</b>						
EI	0	0	0	0	0	0
EW Ca	0	2	0	0	0	2
EW Ch	0	1	0	0	0	1
EW No	0	0	1	0	1	2
EW Sc	0	2	0	0	0	2
EW Vn	0	0	0	0	0	0
MS Ca	0	0	0	0	0	0
MS Ch	0	0	0	0	0	0
MS No	2	1	0	0	0	3
<b>2012</b>						
<b>Total</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>10</b>

## CEQ 12 - Whistle blower incidents

In 2012, 4 whistle blowing incidents were reported.

For comparison, there were 0 cases of whistle blowing incidents in 2011 and three cases in 2010.

[Additional information](#)

## CEQ 13 - International management standards

The aquaculture industry is characterised by a high level of operational risk. The greatest risk exposures include fish health, food safety, production related constraints, effects in connection with changes in the climate, environment, and the health, environment and safety of the group's employees and contracting parties.

The group has a policy stipulating that systematic management of operational risk is to be established through management systems that are certified according to International standards. The standards impose requirements with respect to management responsibility, structure, reporting and allocation of responsibility in the organisation, regular risk assessment and action plans for on-going improvement, internal and external communication, and the establishment of procedures and operational controls.

The group has defined the most important areas as being quality (ISO 9001), environment (ISO 14001), food safety (ISO 22000) and occupational health and safety (OHSAS 18001). All subsidiaries have continued working with this in 2012, and the table below shows the certification status at year end.

EWOS Vietnam was established in 2011 and did not have any of the standards in place. In March 2012, ISO 9001 was obtained, and a plan has been made to get the other standards in place.

Mainstream Norway had been audited for ISO 14001 and 22000 by year-end. However, the final confirmation was received in February 2013.

EWOS Innovation Chile has not had any fish in sea in 2012 and it has therefore not been possible to perform an audit of the remaining ISO 22000 standard.

## CEQ 13 - Management Standards Status at Year End 2011

BUSINESS AREA	COUNTRY	QUALITY MANAGEMENT STANDARD ISO 9001	FOOD SAFETY MANAGEMENT STANDARD ISO 22000	ENVIRONMENT MANAGEMENT STANDARD ISO 14001	OHSAS 18001
Mainstream	Norway	Yes	Yes auditor confirmation received 1st February 2013	Yes auditor confirmation received 1st February 2013	Yes
Mainstream	Chile	Yes	Yes	Yes	Yes
Mainstream	Canada	Yes	Yes	Yes	Yes
EWOS	Norway	Yes	Yes	Yes	Yes
EWOS	Chile	Yes	Yes	Yes	Yes
EWOS	Canada	Yes	Yes	Yes	Yes
EWOS	Scotland	Yes	Yes	Yes	Yes
EWOS	Vietnam	Yes	No	No	No
EWOS Innovation	Norway	Yes	Yes	Yes	Yes
EWOS Innovation	Chile	Yes	Pending Q1 2013	Yes	Yes

In addition to the above standards, 3 sites in Mainstream Canada are certified according to Best Aquaculture Practices with 3 more in addition to the Pacific National Processing facility in Tofino planned for 2013. In addition, all sites in the Tofino area are certified to Aboriginal Aquaculture Association - Aboriginal Principles for Sustainable Aquaculture standards

EWOS Norway, Chile and Vietnam are certified according to GLOBAL GAP.

[Additional information](#)

# GRI performance indicators

EC 1 - Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.

Cermaq supports local communities with both financial and in-kind contributions. However, socio-economic benefits are most obviously manifest through payments to suppliers, employees, local authorities and payment of dividends to investors.

The table presented below quantifies the overall economic value generated and distributed through Cermaq's activities:

## EC 1 - Direct Economic Value Generated

NOK 1,000	DESCRIPTION	2012	2011	2010
<b>DIRECT ECONOMIC VALUE GENERATED</b>				
Revenues		11 781 921	11 634 344	9 990 528
<b>ECONOMIC VALUE DISTRIBUTED</b>				
Operating costs	Cost of materials	-8 117 573	-7 447 360	-6 271 245
	Other operating expenses	-1 956 392	-1 672 836	-1 314 649
Employee wages & benefits		-1 013 097	-828 628	-723 195
Payments to providers of capital	Interest expense	-85 512	-48 989	-55 794
	Dividend payment	-92 500	-428 000	-499 500

Payments to government	Income tax expense	-68 422	-211 862	-428 959
Community investments		-4 491	-12 776	-7 247
<b>Sub total</b>		<b>-11 337 987</b>	<b>-10 650 451</b>	<b>-9 300 589</b>
Economic Value Retained		443 934	983 893	689 939

**Note:** Dividend payment for 2012 remains subject to AGM approval. Revenues from company acquired in 2012, Cultivos Marinos Chiloé (CMC), is included. Community investments do not include CMC.

## EC 3 - Coverage of the Organisations Defined Benefit Plan Obligations

Information related to this GRI indicator is presented in [note 8](#) to consolidated financial accounts

## EC 4 - Significant financial assistance received from government

The Norwegian State is the principal shareholder in Cermaq ASA with a shareholding of 43.5 percent. The company has laid down in its Articles of Association that the Board of Directors shall withhold its consent for any acquisition that would result in the holding of the Norwegian State falling below 34 percent.

Financial assistance from governments totalled NOKM 11.8 in 2012 (13.7 in 2011). Mainstream Chile received the most (43 percent) of this assistance in the form of grants and other financial benefits e.g. government support to businesses that operate in remote areas and supplier training schemes. EWOS Innovation Norway received 36 percent as a result of e.g. research and development grant from the Research Council of Norway.

### EC 4 - Significant financial assistance received from government

CATEGORY	EWOS	MAINSTREAM	TOTAL
Investment grants, research and development grants, and other relevant types of grants	3 544	3 387	6 932
Subsidies	463	0	463
Tax relief/credits	2 719	1 188	3 907
Financial assistance from Export Credit Agencies (ECAs)	0	247	247
Other financial benefits received or receivable from any government for any operation		235	236
<b>Grand Total</b>	<b>6 726</b>	<b>5 057</b>	<b>11 786</b>

**Note:** The Norwegian State is the principal shareholder in Cermaq ASA with a shareholding of 43.5 percent. The company has laid down in its Articles of Association that the Board of Directors shall withhold its consent for any acquisition that would result in the holding of the Norwegian State falling below 34%.

## EC 5 - Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.

Wage levels, especially in processing plants in Chile, have historically received attention and concern by some groups of stakeholders.

At year end 2012 the minimum monthly wage was CLP 227,484 for employees working at the processing plant in Mainstream Chile. This is more than the minimum monthly wage in Chile (CLP 193,000).

The entry level wage bracket begins at CLP 227,484 which is 18 percent above the minimum wage. Mainstream Chile has 21 percent of its employees in that category.

### EC 5 - Mainstream Chile

SALARY BAND (CLP/MONTH)	FROM	TO	% EMPLOYEES
<b>PERMANENT EMPLOYEES - ONLY OPERATIONAL LEVEL</b>			
Rem. Total	227 484	300 000	21
Rem. Total	300 001	400 000	24
Rem. Total	400 001	500 000	31
Rem. Total	500 001	more	24
<b>ALL EMPLOYEES - ONLY OPERATIONAL LEVEL</b>			
Rem. Total	227 484	250 000	1
Rem. Total	250 001	300 000	4
Rem. Total	300 001	350 000	22
Rem. Total	350 001	400 000	31
Rem. Total	400 001	450 000	35
Rem. Total	450 001	more	8

**Note:** The minimum monthly wage in Chile is 193 000 CLP

At year end 2012 minimum monthly wage for operational level employees in EWOS Vietnam was VND 3 000 000 which is more than the minimum monthly wage in Vietnam (VND 2,100,000).

The entry level bracket begins at VND 3,000,000 which is 43 percent above the minimum monthly wage. EWOS Vietnam has 42 percent of its employees in that category.



## EC 5 - EWOS Vietnam

SALARY BAND (VND/MONTH)	MIN	MAX	% EMPLOYEES
<b>PERMANENT EMPLOYEES - ONLY OPERATIONAL LEVEL</b>			
Salary band	3 000 000	3 999 999	42
Salary band	4 000 000	5 999 999	29
Salary band	6 000 000	-	29

**Note:** The legal minimum wage in Vietnam is 2 100 000 VND per month  
At EWOS Vietnam no employee earn less than 3 000 000 VND/month.

Cermaq will continue offering competitive entry wage levels and value skills, competence and seniority in our wage system.

[Additional information](#)

## EC 7 - Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.

We base our operations on local recruitment of senior management, and in 2012 the proportion of management hired from local communities averaged 92 percent (91 percent in 2011). Senior management is the management team reporting directly to a Managing Director and people reporting directly to CCMT members.

International assignments are seen as positive for personal development in a multinational organisation like Cermaq, and employees are encouraged to gain international experience to help strengthen knowledge transfer between our operations and to develop our corporate culture.

The proportion of females in management is low at 17 percent in 2012 (15 percent in 2011).

[Additional information](#)

## EN 3 - Direct energy consumption by primary energy source. EN 4 - Indirect energy consumption by primary source.

Total group energy consumption was GJ 1,822,363 in 2012 (GJ 1,688,930 in 2011). This is a 8 percent increase in group energy use. The figure includes the energy consumption of Cermaq's head office and

The main reason for the increased energy use is increased production both in EWOS and in Mainstream.

### EN 3-4 - Energy consumption by type (GJ)

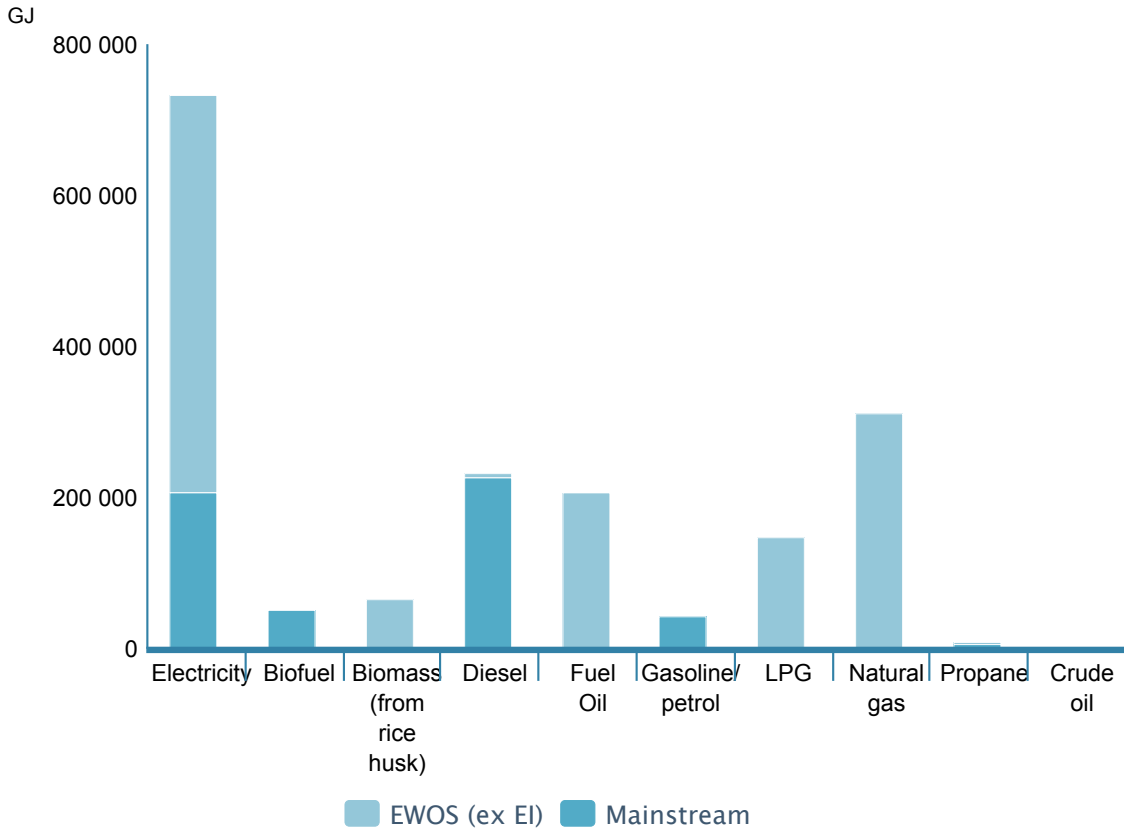
GRI Energy Type	Energy Source	2012	2012	2012	2011	2010
		EWOS (ex EI)	Mainstream	Total*	Total	Total
Indirect	Electricity	524 405.33	208 768.16	748 235.14	622 666.75	540 255.00
Direct	Biofuel	0.00	52 392.09	52 392.09	65 927.00	79 641.00
Direct	Biomass (from rice husk)	66 480.99		66 480.99	76 772.33	
Direct	Diesel	5 460.70	226 213.01	234 134.20	203 016.07	144 141.00
Direct	Fuel Oil	207 178.90	17.00	207 195.80	154 344.62	55 609.00
Direct	Gasoline/ petrol	0.00	44 368.20	44 462.58	46 390.67	43 488.00
Direct	LPG	147 597.90	0.00	147 597.90	67 471.30	60 294.00
Direct	Natural gas	312 291.50	121.70	312 413.20	442 967.36	405 974.00
Direct	Propane	1 080.00	8 050.03	9 164.67	9 374.35	39 081.00
Direct	Crude oil		286.00	286.00		
<b>Total direct + indirect</b>		<b>1 264 495.32</b>	<b>540 216.19</b>	<b>1 822 362.57</b>	<b>1 688 930.46</b>	<b>1 368 483.00</b>
Divisional %		69%	30%			
Δ YoY				8%	23%	9%

**Note:** \* Total includes Cermaq ASA and EWOS Innovation in addition to EWOS and Mainstream. We have not calculated the corresponding primary energy consumed in the production of indirect energy.

EWOS accounted for 69 percent of group energy use, consuming a total of GJ 1,264,495 in 2012 (GJ 1,215,108 in 2011), an increase of four percent. The main energy sources were natural gas, electricity and fuel oil. EWOS Vietnam uses rice-husk burning as primary source of energy.

The average energy use per tonne of feed produced decreased slightly from 1.1 GJ/tonne of feed produced in 2011 to 1.04 GJ in 2012. The main reason is a more energy effective process due to increased production volumes. Mainstream accounted for 30 percent of group energy use, consuming a total of GJ 540,216 (GJ 454,581 in 2011), an increase of 19 percent. The main reason for the increase is increased production. The main energy sources were diesel and electricity. The average energy use per tonne of salmon produced (live weight) increased from 3.29 GJ/t in 2011 to 3.46 GJ/t in 2012. The main reason is increased energy use in Chile as a result of a new hatchery and because Mainstream has been processing for third parties in the processing plant.

### En 3 - Energy consumption



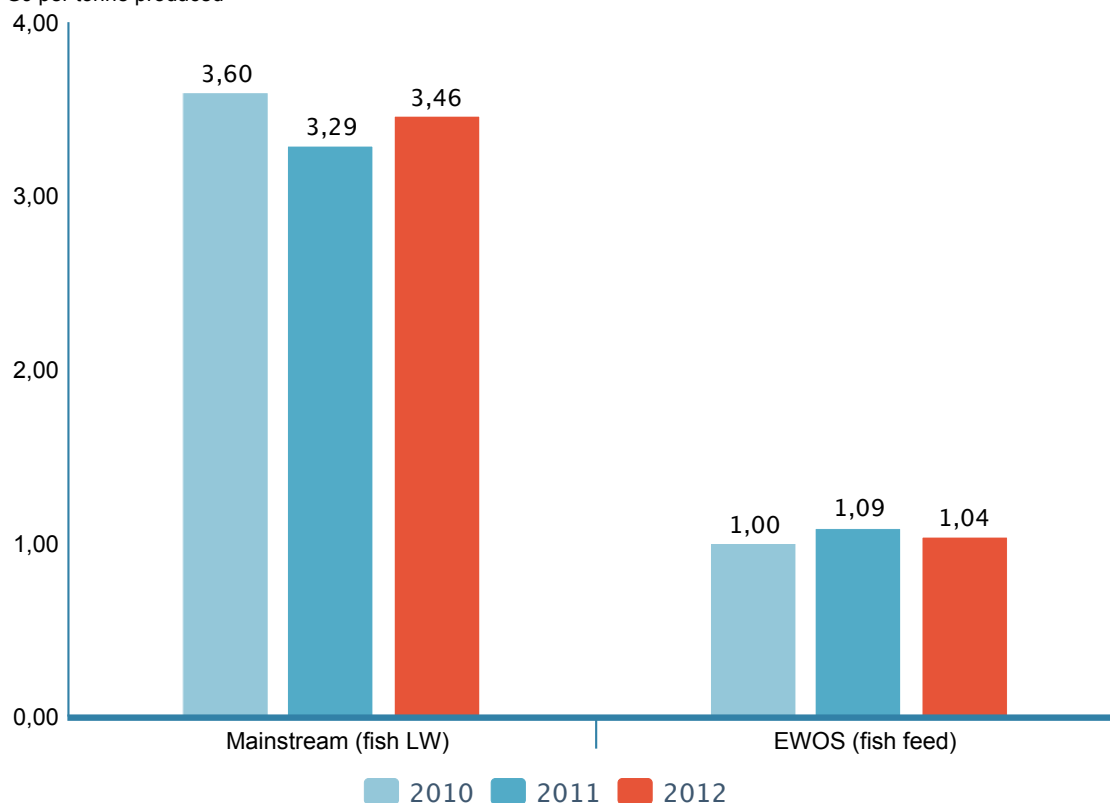
The primary indirect energy source purchased and consumed by EWOS and Mainstream is electricity.

We have not calculated the corresponding primary energy consumed in the production of indirect energy.

Our direct energy consumption ([EN3](#)) and indirect energy consumption ([EN4](#)) is shown in the table below. Total energy use includes Cermaq head office and EWOS Innovation.

### EN 3 - Energy use ratio

GJ per tonne produced



### EN 5 - Energy saved due to conservation and efficiency improvements.

We estimate that in 2012 Cermaq operations have undertaken proactive efforts to save 53,062 GJ of energy per year (GJ 36,041 in 2011). This represents an energy saving of 2.9 percent, based on total energy consumption in 2012.

The initiatives are a mix of retrofitting of equipment, process redesign and changes in personnel behaviour in our production facilities. Brief details of the initiatives are given in the table below.

#### EN 5 - Energy saved due to conservation and efficiency improvements

OPERATING COMPANY	ENERGY SAVING INITIATIVE	ENERGY SAVED (GJ)	STATUS
Mainstream Norway	Installation of new heat pumps and exchange of UV filters	n/a	Savings in 2013
Mainstream Canada	Early rearing building and boiler rooms at Little Bear Bay Hatchery were insulated.	1583	Actual
EWOS Canada	Installation of new 2-boiler system in 2011 has resulted in 20% less use of natural gas in 2012	9000	Actual
EWOS Norway	Heat recovery and more energy efficient cooling process	14567	Actual

EWOS Chile	Energy savings campaign and increased production efficiency	27628	Actual
EWOS Vietnam	A new boiler was built in 2012 and it will be commissioned in 2013	n/a	Savings in 2013
EWOS Innovation Norway	Installation of new cyclones to replace old ones	284	Actual
<b>Total</b>		<b>53062</b>	

## EN 12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

[EN 12](#) - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

Cermaq recognises the potential for fish farming operations to impact biodiversity, either directly or indirectly. However, in 2012 we have not identified any specific significant impacts of our activities or our products in the areas where we are operating.

In his 2009 BioScience paper (Aquaculture Production and Biodiversity Conservation), Professor James S. Diana examined the status and trends in seafood production and the positive and negative impacts of aquaculture on biodiversity conservation. Diana's ranking of negative aquaculture impacts included the following top-5 in order of decreasing importance as threats to biodiversity:

Perceived Biodiversity Impact Area (Diana, 2009)	Connectivity with Cermaq's Reporting Area
1. Escapement of aquatic crops and their potential hazard as invasive species.	Escapes are reported under <a href="#">CEQ 07</a> . Mainstream experienced one escape of one fish in 2011. In addition there was an escape of 2761 fish in EWOS innovation.  Mainstream Canada and Chile farms only Atlantic Salmon in an area where the species is not a natural part of the environment and where breeding with native species of Salmon will not occur nor would escapes result in an invasive colonization by escaped fish
2. The relationships among effluents, eutrophication of water bodies, and changes in the fauna of receiving waters.	All Cermaq operations are expected to comply with local and national environmental regulations related to effluents and waste. Cermaq reports any non-compliances with environmental regulations under <a href="#">EN 28</a> and is active in Area Management Agreements as described under <a href="#">CEQ 06</a> .
3. Conversion of sensitive land areas such as mangroves and wetlands, as	Not applicable to Cermaq and the context of salmon farming.

well as water use.

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4. Other resource use, such as fish meal and its concomitant overexploitation of fish stocks.	The use of marine resources for the production of fish feed are covered more specifically under <a href="#">CEQ 08</a> .
	EWOS has in recent years, through its Marine Independence Program, significantly reduced its proportional use of fishmeal and fish oil in salmon feeds.
	Our operations in EWOS Vietnam currently do not use fishmeal from Vietnamese fisheries as there are concerns about the sustainability. However, in order to develop sustainable fishing practises, EWOS Vietnam is working in a program with IFFO, SFP and also the Prince's Charities (UK) to work with some local suppliers to start to develop more sustainable fishing practices in Vietnam.
5. Disease or parasite transfer from captive to wild stocks.	Mainstream is transparent in its reporting of sea lice counts under <a href="#">CEQ 02</a> . Whilst <a href="#">CEQ 04</a> connects this with the use of medicines for the control of disease and parasites. Mainstream has specific focus on reducing as much as possible the use of treatments and taking a preventative approach to fish health.
	During 2012 we have controlled the sea lice level within local action levels in all Mainstream operations. In EWOS Innovation, there has been some challenging conditions in Hordaland. To cope with the challenge we have continued with monitoring the sea lice status in each net pen which is reported to the authorities on a weekly basis. Both oral, chemical and biological treatment are implemented in our strategy for handling it.

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The table above summarises the linkage between areas of perceived biodiversity impact according to Professor Diana and Cermaq's transparent reporting.

Other impacts of aquaculture on biodiversity conservation, were considered by Diana to be of much lesser importance compared to the above, including: Genetic alteration of existing stocks from escaped hatchery products; Predator mortality caused by, for example, killing birds near aquaculture facilities; and Antibiotic and hormone use, which may influence aquatic species near aquaculture facilities.

## EN 16 - Total direct and indirect greenhouse gas emissions by weight.

For the reporting period 1st January 2012 to 31st December 2012, Cermaq's global gross GHG emissions totalled 93,000 tonnes of CO<sub>2</sub>e (85,984 tonnes in 2011). The increase is mainly due to increased feed production in EWOS.

EWOS Innovation has developed a supply chain carbon footprint model in cooperation with Delhousie University in Canada. The model measures the CO<sub>2</sub>e missions from each of the raw materials used in the fish

feed. The CO<sub>2</sub> emissions from a tonne of fish feed depends on where the feed is produced and what type of raw materials is used. The supply chain CO<sub>2</sub> emissions are shown in scope 3 in the table below.

More information about this work is available in EWOS SpotLight Sustainable Salmon Feed: Marine Ingredients, available for download at [www.ewos.com](http://www.ewos.com).

#### EN 16 - Total direct and indirect greenhouse gas emissions by weight

GLOBAL TONNES OF CO <sub>2</sub> E	2012	2011	2010	2009	(BASE YEAR) 2008
Natural gas	18 499	26 718	24 264	16 633	21 630
Biomass (from rice husk)	0	0	0	0	0
Diesel	17 057	14 775	10 327	9 782	12 552
Fuel oil	16 064	11 996	4 340	8 611	20 713
Biofuel	3 657	4 602	5 559	5 377	6 918
Propane	566	572	2 539	-	3 750
Lpg	9 406	4 116	3 768	4 345	0
Gasoline/petrol	3 097	3 244	3 035	2 783	3 274
Butane	-	-	-	-	172
Crude oil	21	-	-	18	33
Scope 1 (Direct emissions)	68 366	66 022	53 832	47 550	69 042
Purchased electricity	24 634	19 962	14 618	11 408	12 767
Scope 2 (Energy indirect)	24 634	19 962	14 618	11 408	12 767
Scope 3 (Other indirect)	1 413 320	1 308 519	-	-	-
<b>Total gross emissions (ex sope 3)</b>	<b>93 000</b>	<b>85 984</b>	<b>68 449</b>	<b>58 958</b>	<b>81 809</b>
Intensity: kg of CO <sub>2</sub> e per tonne of output	69	72	70	74	-
Intensity: tonnes of CO <sub>2</sub> e per mNOK revenue	8	7	7	7	9

**Note:** Scope 3 includes EWOS (ex Vietnam and EWOS Innovation) supply chain CO<sub>2</sub> emissions. It is derived from the EWOS ecological footprint model and calculated as the sum of CO<sub>2</sub> emissions generated from each of the raw materials used in the fish feed. The CO<sub>2</sub> emissions generated depend on type of raw material, its origin and how it is transported to the mill.

Our reporting is based on the GHG Protocol, the internationally recognised standard for the accounting and reporting of GHG emissions. We have used the financial control approach to define our organisational boundary and the operational scope for our report includes scope 1 (direct), scope 2 (energy indirect) e and scope 3 (other indirect) emissions. Emissions factors for our global operations have been taken from a number of publicly available sources such as: IEA, IPCC, EPA, DEFRA, SSB and BC Ministry of Environment.

The geographic breakdown reveals that our operations in Chile are the largest contributor (58 percent) to our global emissions. Vietnam is the lowest contributor (1.6 percent).

## EN 16 - Emission by Geographic Division

COUNTRY	2012		2011		2010	
	SCOPE 1 (DIRECT CO2 EMISSIONS)	SCOPE 2 (INDIRECT CO2 EMISSIONS)	SCOPE 1 (DIRECT CO2 EMISSIONS)	SCOPE 2 (INDIRECT CO2 EMISSIONS)	SCOPE 1 (DIRECT CO2 EMISSIONS)	SCOPE 2 (INDIRECT CO2 EMISSIONS)
Norway	19 983	815	18 150	682	15 777	614
Chile	35 725	18 402	32 414	13 717	22 317	10 181
Canada	9 000	261	11 137	262	12 076	253
Scotland	3 658	3 656	4 322	3 681	3 662	3 570
Vietnam	0	1 499	0	1 620	n/a	n/a
<b>Total</b>	<b>68 366</b>	<b>24 634</b>	<b>66 022</b>	<b>19 962</b>	<b>53 832</b>	<b>14 618</b>

The divisional breakdown reveals that EWOS (ex EWOS Innovation) is the largest contributor (64 percent) to our global emissions, due to the relatively higher scale of feed production compared to fish production.

## EN 16 - Emission by Business Division

COUNTRY	2012		2011		2010	
	DIRECT CO2 EMISSIONS	INDIRECT CO2 EMISSIONS	DIRECT CO2 EMISSIONS	INDIRECT CO2 EMISSIONS	DIRECT CO2 EMISSIONS	INDIRECT CO2 EMISSIONS
Mainstream	23 751	9 879	22 053	6 174	26 587	5 504
EWOS*	44 432	14 725	43 778	13 723	41 862	9 113
<b>Total</b>	<b>68 183</b>	<b>24 604</b>	<b>65 831</b>	<b>19 897</b>	<b>68 449</b>	<b>14 617</b>

Note: \* Total EWOS is ex EWOS Innovation

Our base year is 2008.

We are reporting an intensity measurement based upon 'tonnes of CO<sub>2</sub>e per tonne of output'. This is a relevant ratio for our industry

## EN 26 - Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.

We seek improvements in our business to mitigate the environmental impacts of products and services. Examples of initiatives taken are listed in the table below:

### INITIATIVES TAKEN

Materials use	Significant resources used in our production processes are raw material ingredients for feed production, smolt for fish farming and packaging materials (feed-bags, fish boxes, and cardboard). Indicator <a href="#">CEQ08</a> explains how EWOS manages the use of marine ingredients in fish feed. In 2012, we estimate that EWOS (ex EWOS Vietnam and EWOS Innovation) used only 1.03 times more marine protein than fish farmers produced through using EWOS feed. For
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marine oil EWOS used less (0.86) marine oil than fish farmers produced.

An example of initiatives to reduce the level of material used in 2012 is that EWOS Canada installed a new Hooder for a packaging line. As a result EWOS Canada estimates a 20% reduction in plastic film used (equals 3 tonnes).

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**Water use** Cermaq does not have companywide environmental goals related to water use. Salmon farming relies upon the availability of clean water but is generally not a heavily consumptive process. In cases where water is abstracted for farming operations, it is generally discharged back to source within quality parameters agreed with the local authority.

An example of an initiative taken in 2012 is the building an installation of a new waste water treatment system in EWOS Vietnam.

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**Emissions** Cermaq reports GHG emissions under [EN16](#).

EWOS Innovation and Canadian researchers have developed a model to measure the eco-footprints of aqua feeds and assist in sourcing more sustainable feed inputs. Raw materials from marine ecosystems have higher footprints than those from terrestrial systems, especially fish from higher trophic levels used for fishmeal and oil. Other drivers for eco-footprinting include the energy used to produce, process and transport feed inputs, along with feed milling. The carbon generated from raw materials used is also shown under [EN16](#).

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**Effluents** All Cermaq operations are expected to comply with local and national environmental regulations related to effluents and waste.

Examples of initiatives taken in 2012 is the new installation of a sea water scrubber in EWOS Norway (will lower air emissions). EWOS Vietnam has built a new boiler that will reduce emissions to air. The boiler will be commissioned in 2013.

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**Noise** Our operations are not especially noisy and this is confirmed by the fact that we received only one complaint related to noise during 2012 and 0 in 2011. Examples of initiatives in 2012 are an on-going program in EWOS Scotland to reduce electric motors throughout the plant, and two old cyclones that have been replaced in EWOS innovation and led to a noise reduction of 50%.

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**Waste** All operating companies follow national regulations for waste handling. The waste handling procedures vary with the local infrastructure in place. In EWOS Norway, the transportation of feed in bulk carriers has replaced the need for plastic packaging over the later years.

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Cermaq requires all operations to be accredited to ISO14001 Environmental management standard. This ensures that any local negative environmental impacts are identified and managed, in a systematic way, for continuous improvement.

## EN 28 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level

before measures are taken to mitigate the risk of reoccurrence.

In 2012, there were six environmental non-compliances; one incident of fish escape in EWOS Innovation, one incident in Mainstream Chile because empty feed bags were left at the beach, one in EWOS Chile due to odour from the production plant and three incidents in Mainstream Norway for late reporting of a possible escape and two incidents of late closure of deviations from two regular controls by the authorities.

The non-compliances resulted in a fine of USD 99,312. There are additional four incidents that have been reported in 2012, but have not been concluded or are under appeal. All four relates to Mainstream Chile.

## EN 28 - Incidents of non-compliance with regulations

ENVIRONMENTAL REGULATIONS		
REPORTING UNIT	INCIDENTS	FINES (USD)
Mainstream Norway	3	50 653
Mainstream Chile	1	92
Mainstream Canada		
EWOS Norway		
EWOS Chile	1	7 950
EWOS Canada		
EWOS Scotland		
EWOS Vietnam		
EWOS Innovation	1	40 617
<b>2012</b>	<b>6</b>	<b>99 312</b>
2011 Total	2	4 080
2010 Total	1	n/a

## LA 1 - Total workforce by employment type, employment contract, and region.

Our 4263 employees (ex Cultivos Marions Chiloé) represent a diverse group both in terms of culture and work conditions.

Still, a common set of core values unite our international and diversified activities.

Recruiting the right people is essential for the future success of our operations. Competent and dynamic human resources management plays a key role in our industry.

Our operations are based on local recruitment of management. In 2012 the proportion of management hired from local communities averaged 92 percent (91 percent in 2011), ranging from 60 to 100 percent.

This is in line with Cermaq's philosophy to trust local employees who best know the local conditions and culture. Possibilities for international assignments contribute to personal development as well as developing our corporate culture.

The proportion of females in management is low and was 17 percent in 2012 (15 percent in 2011). Low female management representation is quite typical for the industry, and Cermaq acknowledges that this represents a challenge as well as an opportunity.

### LA 1 - Total workforce Cermaq group - Business Unit

	CERMAQ TOTAL		EWOS (INCL EI)		MAINSTREAM	
	NUMBER	%	NUMBER	%	NUMBER	%
Total employees	4 263	95%	1 024	83%	3 187	100%
Total supervised workers	216	5%	211	17%	4	0%
Total Workforce	4 479	100%	1 235	100%	3 191	100%
Total Indefinite or Permanent employees	2 944	69%	948	93%	1 945	61%
Total temporary or fixed term employees	1 319	31%	76	7%	1 242	39%
Total Full time employees	4 006	94%	988	96%	2 966	93%
Total Part time employees	257	6%	36	4%	221	7%
Management and administration employees	402	9%	197	19%	153	5%
Other employees	3 861	90%	827	81%	3 034	95%
Female employees	1 065	25%	181	18%	866	27%
Male employees	3 203	75%	843	82%	2 321	73%

**Note:**The Cultivos Marinos Chiloé (CMC) workforce is not included in the overview

### LA 1 - Total workforce Cermaq group - Geographic

	CANADA		CHILE		NORWAY		SCOTLAND		VIETNAM	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
Total employees	271	99%	2 905	94%	849	99%	71	95%	168	100%
Total supervised workers	3	1%	198	6%	11	1%	4	5%	0	0%
Total Workforce	274	100%	3 103	100%	860	100%	75	100%	168	100%
Total Indefinite or Permanent employees	261	96%	1 716	59%	734	86%	69	97%	165	98%
Total temporary or fixed term employees	10	4%	1 189	41%	115	14%	2	3%	3	2%
Total Full time employees	267	99%	2 904	100%	602	71%	68	96%	166	99%
Total Part time employees	4	1%	1	0%	247	29%	3	4%	2	1%
Management and administration employees	56	21%	212	7%	101	12%	12	17%	22	13%
Other employees	215	79%	2 693	93%	748	88%	59	83%	146	87%

Female employees	46	17%	773	27%	206	24%	10	14%	29	17%
Male employees	225	83%	2 132	73%	643	76%	61	86%	139	83%

**Note:**The Cultivos Marinos Chiloé (CMC) workforce is not included in the overview

[Additional information](#)

## LA 4 - Percentage of employees covered by collective bargaining agreements.

Good and constructive relations with employees and labour unions are essential to Cermaq, and are managed through well-established local management structures and practices. All employees are free to join any labour union.

It is important to note that collective bargains do not necessarily reflect the actual participation in unions.

### LA 4 - Percentage of employees covered by collective bargaining agreements.

DIVISION	OPCO	2010	2011	2012
Cermaq	CEQ	0%	15%	13%
EWOS	EW Ca	70%	68%	73%
	EW Ch	61%	62%	63%
	EW No	58%	59%	55%
	EW Sc	0%	0%	0%
	EW Vn	n/a	100%	95%
	EI	25%	47%	23%
Mainstream	MS Ca	0%	0%	0%
	MS Ch	18%	19%	25%
	MS No	78%	93%	93%
<b>EWOS Total</b>	<b>EWOS</b>	<b>55%</b>	<b>63%</b>	<b>63%</b>
<b>Mainstream Total</b>	<b>MAINSTREAM</b>	<b>27%</b>	<b>27%</b>	<b>34%</b>
<b>GROUP TOTAL</b>	<b>GROUP</b>	<b>32%</b>	<b>37%</b>	<b>41%</b>

**Note:** Employees covered by collective bargaining is calculated as a percentage of all employees, both temporary and permanent employees. If temporary workers are excluded in Mainstream Chile, which employs a large proportion of seasonal workers, 47% of the employees in Mainstream Chile are covered by collective bargaining agreements.

[Additional information](#)

## LA 7 - Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region.

Cermaq did not experience any fatal accidents amongst our employees in 2012, or amongst contractors supplying services to our operations.

In 2012, an OHS improvement project was finalised. The aim of the project was to ensure that all companies reported OHS data in the same way throughout the group and to compare ourselves to peers as basis for identifying improvements and set ambitious targets. Increased focus on OHS has resulted in considerable improvements in particular for lost time injuries that decreased by 50% in 2012 compared to 2011.

The absence rate is very low throughout the group and continued to decrease from 3.2 percent in 2011 to 2.4 percent in 2012.

### LA 7 - Rates of injury

DIVISION	UNITS	2012			2011			2010		
		EWOS GROUP (EX EI)	MAINSTREAM GROUP	TOTAL CERMAQ GROUP	EWOS GROUP (EX EI)	MAINSTREAM GROUP	TOTAL CERMAQ GROUP	EWOS GROUP	MAINSTREAM GROUP	TOTAL CERMAQ GROUP
Fatalities	Number	0	0	0	0	0	0	0	0	0
Injury rate (H2-value)	Injuries per million hours worked	10	35	29	21	36	31	16	37	31
Lost-time injury rate (H1-value/TRI)	Lost-time injuries per million hours worked	4	13	11	11	26	22	11	29	24
Lost time frequency rate (F-value)	Lost time (days) per million working hours	119	243	209	512	511	469	508	527	504
Absence rate	% of total work days	0	0	0	0	0	0	0	0	0
Occupational disease cases	Number	1	8	11	3	1	4	1	6	7

## Notes:

- We report OHS data using units that are consistent with Cermaq's previous reporting practices, rather than adopting the GRI formulas.

- In 2012, a project was initiated to improve the quality and ensure that OHS data was reported in the same way throughout the company. This has resulted in some changes to existing reporting of indicators described below:

\* Lost time frequency rate (F-value) only includes lost time from injuries up to one year and does not include lost time from occupational disease cases which was included in 2010 and 2011

\* Injury frequency rate (TRI/H2-value) includes significant injuries (with and without absence) and does not include minor injuries where the employee can resume normal work and where only modest first aid treatment is necessary.

\* Total work hours, which is the basis for the above calculations and Lost time injury rate, includes overtime related to workers working on sites (excluding management and administrative employees).

- The above data relates only to our workforce, including employees and supervised workers. Contractors who work on our premises and of which Cermaq is responsible for occupational health and safety are not included in the overview.

- Lost day calculation includes only scheduled work days and starts the day after the accident.

- National laws on practices for recording and reporting accident statistics follows the 'ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases' in the regions where Cermaq operates

### [Additional information](#)

## LA 10 -Average hours of training per year per employee by employee category.

Employees receive systematic training to build competence according to their own and the organisation's needs. In 2012 the training totalled 1.1 percent of total working time on average for all employees.

### [Additional information](#)

## HR 6 - Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.

Overall, we did not see any significant risk for incidents of child labour or young workers being exposed to hazardous work in Mainstream or EWOS operations during 2012.

Although child labour is prohibited by law in Vietnam, EWOS Vietnam checks all staff working permits for ages.

## HR 9 - Total number of incidents of violations involving rights of indigenous people and actions taken

During 2012, there were no reported incidents of violation involving the rights of indigenous people.

[Additional information](#)

## SO 3 - Percentage of employees trained in organization's anti-corruption policies and procedures.

Our ethical and corporate responsibility guidelines prohibit any form of corruption.

An e-learning anti-corruption training program was rolled out to management and employees in vulnerable positions in the majority of the operating companies in 2012. The roll-out will continue to the remaining companies in 2013. 50 percent of all managers and administrative employees received anti-corruption training in 2012. 36 percent of other employees have also been reminded or received some kind of training in our anti-corruption policies.

[Additional information](#)

## SO 8 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

The following two incidents of non-compliance with social regulations occurred in 2012;

One incident was imposed on EWOS Innovation for operating in Mainstream concession and one incident related to Mainstream Chile because the safety committee had not investigated an incident at the processing plant. The two incidents resulted in a total fine of USD 7,599.

There are additional nine incidents that have been reported in 2012, but have not been concluded or are under appeal. All nine relate to Mainstream.

## SO 8 - Incidents with non-compliance with regulations

REPORTING UNIT	SOCIAL REGULATIONS	
	INCIDENTS	FINES (USD)
Mainstream Norway		
Mainstream Chile	1	3 373
Mainstream Canada		
EWOS Norway		
EWOS Chile		
EWOS Canada		
EWOS Scotland		
EWOS Vietnam		
EWOS Innovation	1	4 226
<b>2012</b>	<b>2</b>	<b>7 599</b>
2011 Total	4	10 226
2010 Total	5	79 291

**Note:** In 2012, two pending non-compliances in Mainstream Chile were made final and 2011 figures are updated accordingly.

### [Additional information](#)

## PR 2 - Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes.

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

In 2012, there were no non-compliances with food safety regulations.

### [Additional information](#)



## PR 9 - Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

Cermaq's point of entry to social and environmental responsibility is to ensure that our operations respect and are compliant with local, national and international laws.

Where breaches do occur, for whatever reason, we take it seriously and investigate at the appropriate level before measures are taken to mitigate the risk of reoccurrence.

In 2012, there were no non-compliances with product and service regulations.

There is one incident that has been reported in 2012, but has not been concluded.

[Additional information](#)

## FP1 - Percentage of purchased volume from suppliers compliant with company's sourcing Policy/Genetically Modified Organisms (GMO)

EU regulations require a food producer to apply to the National authorities if a specific GMO ingredient should be used. If approved GMO ingredients are used in feed, the feed must be labelled accordingly, but the final product (e.g. fish, meat or cheese) is not subject to the same labelling requirements.

In Norway and UK, EWOS' customers do not want GMO based feed. To meet the requirements of our customers, EWOS has not been using any GMO ingredients in the feed. This has also been the situation in 2012.

Outside EU, the use of GMO ingredients is common and there are no specific labelling requirements. Both EWOS Canada and EWOS Chile do not require non-GMO ingredients, and would thus use GMO ingredients in their feeds when this would be common in the market for the ingredient in question.

# Management Approach

## Environmental Approach

Cermaq's feed and food production is based on renewable resources and the farming is located in a marine environment. Cermaq's value chain depends on sustainable operations where resources are not over exploited. This is the only way Cermaq can continue to produce feed and to farm fish in a sustainable way. The interest, and also the need for good long term solutions, underpins the company's approach to environmental aspects.

## Policy

Cermaq's approach to the environment, in which the Group operates and upon which it depend, is set out in the published set of Cermaq Sustainability Principles.

Cermaq's policy is to establish a systematic management of operational risk through management systems which are certified according to ISO standards or equivalent. The individual operating companies are responsible for implementing an Environmental Management System based upon the ISO 14001 standard. The updated status with regard to attainment of this is presented in [CEQ 13](#).

## Aspects

Cermaq include the following material environmental aspects in its sustainability reporting: Biodiversity; Emissions, Effluents and waste; Energy; Compliance with environmental regulations and Product and Services;. Additional material aspects from the food processing sector supplement are; Protecting natural resources, GMOs, Animal husbandry, Transportation handling and slaughter and in addition; Fish health and Medicines.

## BIODIVERSITY

Cermaq recognizes the potential for fish farming operations to impact biodiversity, either directly or indirectly. However, in 2012, the Group has not identified any specific significant impacts of its activities or its products on biodiversity in the areas where the company are operating.

In 2009, Professor James S. Diana (BioScience paper - Aquaculture Production and Biodiversity Conservation) examined the status and trends in seafood production and the positive and negative impacts of aquaculture on biodiversity conservation. Diana's ranking of negative aquaculture impacts included the following four areas that Cermaq agrees to be of high relevance for salmon feed or farming operations: Escapes; Effluents; Resource use; and Diseases or parasites. Cermaq's performance in these areas is presented under the feed and farming sections of this report and in more detail on [www.cermaq.com](http://www.cermaq.com).

Cermaq believes that present technology for open net pens allows for sustainable aquaculture, and Cermaq aims at demonstrating this in its operations.

As stated in the report by the Norwegian Board of Technology in 2012, current closed-containment technology does not represent a viable alternative. The report states: *There is uncertainty associated with energy*

*requirements, fish welfare and system reliability, and the extent to which the problems with lice and escapes will be solved, among other things. So far, the lack of empirical evidence on production in closed containment in the ocean has led to an oversimplified and not very informed public debate.*

However, managing environmental impact is essential for a sustainable future for fish farming and Cermaq will always try to contribute to development of new methods and technology. Therefore, Cermaq through its R&D company, EWOS Innovation, has been testing closed containment in cooperation with the producer of the equipment. EWOS Innovation and Mainstream is also testing other new types of technology and equipment.

## **EMISSIONS**

Cermaq acknowledges the need for reducing global Green House Gas (GHG) emissions and has been measuring ecological footprint (EF) and carbon footprint on EWOS feeds using an EWOS model developed by external experts in the field. The EWOS EF model output shows that the choice of raw materials has a significant impact on the CO<sub>2</sub>e/tonne feed produced for example, and by comparison the contribution from feed milling is much smaller.

Cermaq established GHG emissions reporting in 2009 and submitted a disclosure to the Carbon Disclosure Project annually since then. This exercise has confirmed that Cermaq's operations are not carbon intensive compared to other marine and land based food productions. This was also substantiated by a SINTEF report in 2009 and further confirmed by NOFIMA in 2011. Cermaq will continue reporting to Carbon Disclosure Project.

## **EFFLUENTS AND WASTE**

All Cermaq operations are expected to comply with local and national environmental regulations related to effluents and waste handling. Waste from Cermaq's operations is reused or recycled when possible. EWOS is transporting feed in bulk carriers when possible which reduces the packaging material use.

## **ENERGY**

Goals for the management of energy use per unit of production are set locally by each operating company. All operating companies in the Group have material initiatives in place to improve energy usage per unit of production.

## **COMPLIANCE**

Cermaq's target is to at all times comply with existing laws and regulations related to environmental regulations.

All major acquisitions are subject to due diligence processes, ensuring that investments fulfil The company's requirements to compliance, ethical standards and other criteria.

## **PRODUCT AND SERVICES**

EWOS has defined a model for ecological footprint for feed, which enables the company to integrate this information in its planning. All companies set annual objectives for environmental improvements based on the local condition and situation. Such projects may include emissions, energy use, transport, water usage, raw material optimisation etc.

## **PROTECTING NATURAL RESOURCES**

Like all industry activities, aquaculture has an ecological footprint. The footprint must remain within limits that are ecologically acceptable. After on-growing sites have completed a cycle, they will undergo a fallowing period in order to ensure that temporary changes are reversed and safeguard the basis for satisfactory fish health.

## **GMO**

Cermaq is not engaged in GMO-salmon and does currently not see this as a realistic scenario. GMO-ingredients in feed are used in Canada and Chile according to local legislation. In EU/EEA GMO-ingredients are not used in Cermaq's fish feed in line with customer or consumer preferences.

## **ANIMAL HUSBANDRY AND FISH HEALTH**

Good animal husbandry is basis for Cermaq's operation. Only through good husbandry practices fish health can be well maintained and thus secure good operational results. Key element in Cermaq's husbandry practices is preventive fish health work which is based on knowledge, not limited to the fish, but concerning all aspects of the conditions under which the fish is farmed. Cermaq is carrying out research within fish health and fish welfare.

## **TRANSPORTATION, HANDLING AND SLAUGHTER**

Transportation can be stressful to the fish, especially the smolt. Cermaq therefore seeks to ensure careful transportation and handling to avoid increasing the stress level in the fish. Ensuring good fish health through the entire production cycle is essential to reduce the need for handling of the fish. Cermaq uses humane, quick and efficient methods to make sure that all fish experience as little pain and stress as possible during harvest.

## **MEDICINES**

Good animal health with no medicine is the optimal situation. Preventive fish health is Cermaq's main tool. Antibiotics are used only when strictly needed. When needed, treatment against sea lice is done after protocol and with an evaluation of the efficiency of the treatment. Bath treatments can pose a risk situation and the company trains on empty pens to ensure that such operations can be managed successfully. Cermaq is engaged in developing vaccines against SRS, the bacterial disease that is the main reason for use of antibiotic in Chilean fish farming.

## **ADDITIONAL INFORMATION**

All food production has a footprint. Fish farming has a small footprint compared to other animal production. Cermaq welcomes authorities' clear definitions of acceptable footprints from fish farming, and thus clarifying the frame conditions for the industry and the companies involved, and as a result enabling a possible responsible growth to the best for society and for global food production.

Cermaq does not have organisation-wide environmental goals related to water. Salmon farming relies upon the availability of clean water; but is generally not consuming water. In cases where water is abstracted for farming operations, it is generally discharged back to source within quality parameters agreed with the local authority.

Feed production needs 0.3-0.9 l of water for each kg feed produced. Because water use is the most energy intensive part of the production, Cermaq's research is continuously seeking reduction in water usage. It should be noted that water usage is imperative given current available technology to ensure maximum nutrient utilization and thus minimize discharge to farm recipient.

## **Social Approach - Labour practices and decent work**

Cermaq is a large employer providing job opportunities often in non-urban areas. Cermaq's approach is to be a responsible employer and contractor of workforce in the regions in which the company operates. Cermaq respects the four fundamental principles and associated rights that are considered fundamental to social justice by the International Labour Organisation (ILO) and included in Global Compact. Furthermore Cermaq also adheres to the OECD's Guidelines for Multinational Enterprises. Cermaq joined UN Global Compact in February 2011.

### **Policy**

Cermaq has defined policies and standards that apply for the entire group, including: ethical and corporate responsibility guidelines; whistle blowing guidelines; and sustainability principles directly related to labour practices and decent work. These policies are available for download on [www.cermaq.com](http://www.cermaq.com).

Cermaq's policy is to establish a systematic management of operational risk through management systems which are certified according to ISO standards or equivalent, as OHS Management System based upon the OHSAS 18001 standard. The updated status with regard to attainment for the operating companies is presented in [CEQ 13](#).

### **Aspects**

Cermaq includes the following material aspects in its reporting on labour practices and decent work: Occupational health & safety; Employment; Labour/Management relations; and Training and education;

### **OCCUPATIONAL HEALTH & SAFETY**

Cermaq shall ensure high level of occupational safety for its employees. The company aims to have all operating companies certified according to the OHSAS 18001 standard for occupational health and safety.

### **EMPLOYMENT, TRAINING AND EDUCATION**

Employees shall receive systematic training. Cermaq shall facilitate personal and professional development of each employee.

### **LABOUR/MANAGEMENT RELATIONS**

Cermaq employees are free to join any trade union. The companies in the group shall facilitate good relations between the management and the employees and unions.

### **ADDITIONAL INFORMATION**

Cermaq expects its suppliers to have responsible standards, and will work with its suppliers to seek improvements. Cermaq's requirements to suppliers are defined in the company's ethical and corporate responsibility guidelines, and EWOS has developed a supplier policy and code of conduct for its suppliers.

Cermaq wishes to have an inclusive working environment. Discrimination based on ethnic background, nationality, language, gender, sexual orientation or religious belief is not tolerated. The companies in the

group shall promote equal opportunities and fair treatment of all employees.

## **Social Approach - Society**

As a large employer and a food and feed producer Cermaq impacts society in various ways. The company contributes to employment, often in non-urban areas. Cermaq's approach is to be a reliable partner in the local communities as well as in the larger society.

### **Policy**

Cermaq's policies and standards apply for the entire group, including: ethical and corporate responsibility guidelines and sustainability principles directly related to society and local communities stating that;

- Cermaq trains key employees to avoid corruption in its business.
- Cermaq takes steps to minimise any problems related to discharge from its feed plants, fish farms and processing plants.

Mainstream Canada has defined its basis for relations with local First Nations communities which have special titles and rights in the regions in which the company operates in British Columbia.

### **Aspects**

Cermaq includes the following material social aspects in its reporting: Compliance, Community and Corruption.

## **COMPLIANCE**

Cermaq's target is to at all times comply with existing laws and regulations related to social regulations.

All major acquisitions are subject to due diligence processes, ensuring that investments can fulfil Cermaq's requirements to compliance, ethical standards and other criteria. EWOS has a pre-approval process for suppliers including a self-assessment form addressing the material aspects of human rights. Human right issues are also included in EWOS supplier policy and code of conduct for suppliers.

## **COMMUNITY**

Cermaq will contribute to local activity and employment and will be a reliable partner for the local communities in which the Group operates. Any material complaint related to the Group's operations is taken seriously and receive management attention.

## **CORRUPTION**

Cermaq's ethical and social responsibility guidelines prohibit any form of corruption.

Awareness training on corruption given to all management teams in 2010 and 2011 was continued by individual e-learning to selected employees in 2012. In Vietnam, Cermaq's zero-tolerance of corruption has been implemented and is well received. Here Cermaq has cooperated with NORAD as well as with other companies in addressing this issue.

## **ADDITIONAL INFORMATION**

There are strong and diverse views on salmon farming, and some parts of local communities and some groups in society are advocating against Cermaq's operations. Cermaq recognizes that the Group must

demonstrate its respect for the communities and the environment in which it operates. Dialogue, transparency and public sustainability reporting are some of the Group's tools to demonstrate the quality of its operations.

Mainstream Canada operates within the traditional territories of several First Nations on the British Columbia coast. Cermaq's relationship with these communities is important to the Group's vision of sustainable aquaculture and Cermaq strives to develop social, economic, and cultural relationships that are mutually beneficial. Cermaq's ambition is to have mutual advantageous agreements with First Nations in all the territories in which the company operates in British Columbia.

Within the area of scientific knowledge there are strong and diverse views. Cermaq believes that fact and knowledge must be the basis for the Group's decisions and its operations. Cermaq invests in research and development in Mainstream and in the research company, EWOS Innovation, while also supporting external research.

## **Social Approach - Human rights**

Cermaq is a member of UN Global Compact and of Transparency International Norway. Cermaq respects the four fundamental principles and associated rights that are considered fundamental to social justice by the International Labour Organisation (ILO). Furthermore Cermaq also adheres to the OECD's Guidelines for Multinational Enterprises.

### **Policy**

Cermaq has defined policies and standards that apply for the entire group, including: ethical and corporate responsibility guidelines, whistle blowing guidelines and sustainability principles directly related to social aspects. Cermaq's ethical and corporate responsibility guidelines state equal work opportunities, just treatment and a working environment free of discrimination.

### **Aspects**

Cermaq includes the following material human rights aspects in its reporting: Abolition of child labour and Indigenous rights.

#### **ABOLITION OF CHILD LABOUR**

Cermaq will not accept child labour or young workers exposure to hazardous work in any of the regions in which the company operates or in its business partners. In relation to the establishment of new operations in Vietnam, the risk of child labour has been evaluated as part of the risk analysis. Workers ID cards are checked against birth date. Zero-tolerance for child labour has been communicated to suppliers at risk.

#### **INDIGENOUS RIGHTS**

Cermaq has a clear goal of no violation of indigenous rights.

Cermaq emphasizes consultations with First Nations in British Columbia Canada where the rights and titles of First Nations constitute the basis for its operations in the region. Cermaq's ambition is to have mutual advantageous agreements with First Nations in all the territories in which the Group operates in British Columbia.

Mainstream Canada has identified its basis for relations with First Nation communities, see more:

<http://www.mainstreamcanada.com/sustainability/social-sustainability.php>

In Chile, Cermaq is seeking better clarification of the safeguarding of indigenous peoples rights in the areas in

which the Group operates.

## **ADDITIONAL INFORMATION**

All major acquisitions are subject to due diligence processes, ensuring that investments fulfil Cermaq's requirements to compliance, ethical standards and other criteria. EWOS has a pre-approval process for suppliers including a self-assessment form addressing the material aspects of human rights. Human right issues are also included in EWOS supplier policy and code of conduct for suppliers.

The company wide objective is clearly stated as no incidents of discrimination related to race, colour, sex, religion, political opinion, national extraction, or social origin. Cermaq respects and adheres to the freedom of association and collective bargain.

Cermaq will not accept forced and compulsory labour in any of its operations or in those of its business partners.

### **Social Approach - Product Responsibility**

Although Cermaq's business areas do not sell branded products directly to consumers, Cermaq is producing farmed salmon for direct human consumption. As a player in the food industry value chain, Cermaq is subjected to strict laws and regulations in the countries of operation. Due to the complexities related to product responsibility, a set of management tools have been implemented.

#### **Policy**

Cermaq relies on the ISO 22000 food safety management standard as a tool to develop methods and procedures in order to achieve the goals the Group sets. All operating companies in the Cermaq group are either certified ISO 22000 or working towards certification. The updated status with regard to attainment of this is presented in [CEQ 13](#).

The EWOS feed operations also rely upon various industry standards for good practice, such as the Universal Feed Assurance Scheme in UK and the Global GAP Compound Feed Manufacturing (CFM) Standard.

#### **Aspects**

The following material aspects are included in Cermaq's reporting on product responsibility: Customer health and Safety and Compliance. Additional material aspect included in the reporting are; minimizing toxicity and traceability.

## **CUSTOMERS' HEALTH AND SAFETY**

All operating companies are to be certified according to ISO 22000 where hazard analysis and critical control points (HAACP) is an integral part. Cermaq aims to comply with food safety regulations and to supply safe, healthy and nutritious feed and food products to consumers.

## **COMPLIANCE**

Cermaq's target is to at all times comply with existing laws and regulations related to product and services.

## **TOXICITY**

Food and feed safety has the highest priority. Whereas the food authorities are defining regulations to ensure food and feed safety, Cermaq's operating companies have incorporated management systems to ensure that



all regulations are adhered to.

## **TRACEABILITY**

Cermaq companies have modern traceability systems in place to cover first tier traceability. For feed raw materials to feed Cermaq require its suppliers to have traceability systems in place.

## **ADDITIONAL INFORMATION**

As Cermaq is engaged in food production, the Group recognises significant risk arising from any potential incidents impacting consumer health and safety. Cermaq believes that it have sufficient procedures in place to mitigate this risk, through the policy that is described above.

## **Economic Approach**

Cermaq is committed, through its 'Sustainable Aquaculture' mission, to bring sustainable socio-economic benefits to the regions in which the Group operates. Organization wide goals relating to this include those described in the Board's Report on Corporate Governance:

- Cermaq's objective is to create value for its owners, employees and society in general through sustainable aquaculture.
- Long term dividend level should be in the range of 30-50 percent of the Company's adjusted profit after taxes.

## **Policy**

Cermaq has set out its strategy for creating value through sustainable aquaculture. Cermaq's Core Values constitute guidelines for desired attitudes as individuals, companies and group, to achieve long term value creation. The company's ethical and corporate responsibility guidelines further ensure that any person acting on behalf of Cermaq acts in an ethically sound way.

## **Aspects**

The following material economic aspect is included in Cermaq's reporting:

## **ECONOMIC PERFORMANCE AND MARKET PRESENCE**

Socio-economic benefits are most obviously manifested through payments to suppliers, employees, local authorities and payment of dividends to investors. However, Cermaq also supports local communities with both financial and in-kind contributions.

Cermaq will offer competitive entry wage levels above minimum wage limits. Cermaq values skills, competence and seniority in its wage systems.

Mainstream Chile operates in a region and sector where NGOs and other stakeholders have shown specific interest related to conditions for employees in the industry. Cermaq will not accept forced and compulsory labour in any of its operations or in those of its business partners.

Cermaq discloses detailed information about the wage conditions in the Chilean and Vietnamese operations.

## **ADDITIONAL INFORMATION**

In terms of risk profile, the fish farming industry is characterized by a high level of risk. Cermaq must be able

to sustain considerable cyclical fluctuations in profitability as a result of price volatility as well as lower results due to production related challenges. It is also recognized that the salmon industry is a young industry, still in a strong growth phase, and with significant potential for consolidation.

Overview of indicators applied to report on the aspects presented in the management approach

ASPECT	GRI INDICATOR	CEQ INDICATORS
<b>Environment</b>		
Compliance	<a href="#">EN 28</a>	<a href="#">CEQ 13</a>
Biodiversity	<a href="#">EN 12</a>	<a href="#">CEQ 2</a> , <a href="#">CEQ 6</a> , <a href="#">CEQ 7</a> , <a href="#">CEQ 8</a>
Emission, effluent and waste	<a href="#">EN 16</a> ,	<a href="#">CEQ 3</a>
Energy	<a href="#">EN 3</a> , <a href="#">EN 4</a> , <a href="#">EN 5</a>	
Product and services	<a href="#">EN 26</a>	
Protecting natural resources		<a href="#">CEQ 3</a> , <a href="#">CEQ 6</a> , <a href="#">CEQ 7</a> , <a href="#">CEQ 8</a>
Company sourcing policy/GMOs	<a href="#">FP 1</a>	
Animal husbandry		<a href="#">CEQ 1</a> , <a href="#">CEQ 2</a> , <a href="#">CEQ 3</a> , <a href="#">CEQ 4</a> , <a href="#">CEQ 5</a> , <a href="#">CEQ 6</a> , <a href="#">CEQ 7</a>
Transportation, handling and slaughtering		<a href="#">CEQ 1</a>
Fish health		<a href="#">CEQ 1</a> , <a href="#">CEQ 2</a> , <a href="#">CEQ 3</a> , <a href="#">CEQ 4</a> , <a href="#">CEQ 5</a> , <a href="#">CEQ 6</a> , <a href="#">CEQ 7</a> , <a href="#">CEQ 9</a>
Medicines		<a href="#">CEQ 4</a> , <a href="#">CEQ 5</a> , <a href="#">CEQ 9</a>
<b>Social - Labour practice and decent work</b>		
Compliance	<a href="#">SO 8</a>	
Occupational health and safety	<a href="#">LA 7</a>	
Employment	<a href="#">LA 1</a>	
Labour/management relations	<a href="#">LA 4</a>	<a href="#">CEQ 12</a>
Training and education	<a href="#">LA 10</a>	
<b>Social - Society</b>		
Compliance	<a href="#">SO 8</a>	
Community	<a href="#">EN 26</a>	<a href="#">CEQ 11</a>
Corruption	<a href="#">SO 3</a>	
<b>Social - Human rights</b>		
Abolition of child labour	<a href="#">HR 6</a>	
Indigenous rights	<a href="#">HR 9</a>	

## Social - Product responsibility

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Compliance	<a href="#">PR 2</a> , <a href="#">PR 9</a>	<a href="#">CEQ 13</a>
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Customer health and safety	<a href="#">PR 2</a> , <a href="#">FP5</a>
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Minimising toxicity	<a href="#">CEQ 10</a>
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Traceability	<a href="#">CEQ 10</a>
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## Economy

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Economic performance	<a href="#">EC 1</a> , <a href="#">EC 3</a> , <a href="#">EC 4</a>
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Market presence	<a href="#">EC5</a> , <a href="#">EC 7</a>
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# Sustainability governance

Below are key GRI documents about sustainability governance in Cermaq.

These documents outline Cermaq's definitions and process for risk assessment, materiality analyses, scope of the report, data measuring, and stakeholder dialogues including key topics and concerns that have been raised through stakeholder engagement.

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## GRI 1.2: Description of Key Impacts, Risks and Opportunities

Key impacts on sustainability and effects on stakeholder.

Cermaq's [materiality analysis](#) identifies the sustainability aspects that management consider to be of greatest impact to the organisation and of greatest concern to stakeholders.

These aspects are taken into the Group's annual risk assessment and reporting model. Cermaq's approach is based upon a risk assessment matrix, where management judge the probability of a risk to occur and the consequence of a potential risk (reputational and thus financial impact) for each material sustainability aspect. The perceived sustainability risk exposure is then categorised into critical, significant, and insignificant risk areas. The outcome is described below including a description of how these risk areas are being addressed:

RISK AREAS	PROGRESS IN ADDRESSING THESE AREAS
<b>Fish health and animal welfare</b> - critical risk to Mainstream	Risk of diseases (IHN Canada, SRS ILA and IPN Chile, PD and IPN Norway), parasites, policies and practices related to animal welfare. Mainstream has an on-going vaccination programme and all fish in sea are vaccinated towards different diseases where vaccines are available, see <a href="#">CEQ 5</a> . In addition, Mainstream is cooperating with other actors to develop new vaccines to combat diseases such as SRS, Mouth rot etc. Other measures to reduce the risk include screening of fish, use of functional feeds ( <a href="#">CEQ 9</a> ), sea lice treatments ( <a href="#">CEQ 4</a> ) and use of antibiotic (only when necessary), see <a href="#">CEQ 4</a> . Lastly Mainstream has entered into Area Management Agreements with other farmers in the regions of which they operate. Such agreements are tailored to the local situation and typically may include agreement on fallowing and sea lice management strategies, vaccination programmes, containment and contingency plans, catchments management plans and disease control strategies in farmed and wild fisheries, see <a href="#">CEQ 6</a>
<b>Occupational Health &amp; Safety</b>	All Cermaq operations are working towards OHSAS 18001 Occupational Health & Safety Management Standard. At year-end 2012, all Cermaq's operations had

<p><b>(OHS)</b> - Significant risk for Mainstream and EWOS</p>	<p>attained this standard, with the exception of EWOS Vietnam. In 2012, the OHS project to improve the quality and results of the OHS figures was completed. This has generated new measures and the number of lost time injuries has decreased substantially. The results and details of Cermaq's OHS performance are presented under GRI indicator <a href="#">LA 7</a>.</p>
<p><b>Sourcing</b> - Significant risk for EWOS</p>	<p>EWOS is in the process of implementing a new supplier sourcing policy. EWOS has made a new Self-assessment form based on e.g. the Global Compact commitments. In addition suppliers are asked to confirm acceptance of EWOS group sourcing policy. EWOS is performing regular supplier audits and details of the performance are presented under <a href="#">CEQ 10</a> (customised indicator )</p>
<p><b>Escapes</b> - Significant risk to Mainstream</p>	<p>External conditions like climate change can cause extreme weather conditions. Sites can be exposed to rough storms etc. Risk of damaged equipment and difficult working conditions that increase the risk of escapes. To reduce the risk Mainstream emphasises investments in equipment, preventive routines and procedures, training and maintenance. After acquiring Cultivos Marinos Chiloé, Mainstream has made investment proposal for upgrading CMC farming equipment (nets, anchoring, etc.). See indicator <a href="#">CEQ 7</a> for information about escapes.</p>
<p><b>Consumer Health &amp; Safety</b> - Significant risk for EWOS and Mainstream</p>	<p>All Cermaq operations are working towards ISO 22000 Food Safety Management Standard, see <a href="#">CEQ 13</a>. At year-end 2012, most EWOS feed operations (except EWOS Vietnam and EWOS Innovation Chile) had attained this standard. At year end most Mainstream operations had this in place with the exception of Mainstream Norway. In February 2013, This was in place also for Mainstream Norway. Details of non-compliances with food safety regulations are described in GRI indicator <a href="#">PR 2</a>.</p>
<p><b>Corruption</b> - Significant risk EWOS and Mainstream</p>	<p>Cermaq has a zero-tolerance policy for corruption and has defined ethical guidelines on corruption and procedures for whistle blowing. Cermaq is a member of Transparency International to support anti-corruption work. A new web-based e-learning tool was rolled out to the whole organization in 2012. Details of training for anti-corruption are given in GRI indicator <a href="#">SO 3</a>.</p>
<p><b>Non-compliance with environmental, societal, product and service and food quality regulations</b> - Insignificant risk for EWOS and Mainstream</p>	<p>In their sustainability principles and management approach (ISO and OHSAS standards) EWOS and Mainstream are committed to compliance. At year-end 2012, most of the operations had attained this standard except for EWOS Vietnam, Mainstream Norway and EWOS Innovation Chile. Details of non-compliances with regulations are described in GRI indicator <a href="#">EN 28</a>, <a href="#">SO 8</a>, <a href="#">PR 2</a> and <a href="#">PR 9</a>.</p>

Cermaq's [management approach](#) towards sustainability reflects a growing interest amongst stakeholders towards the group's social and environmental impacts. In order to manage the long term influence of this on the organisation, sustainability risks and opportunities are systematically managed, as described above.

Cermaq's [targets](#) for managing sustainability risks in the coming year are presented in Cermaq's annual report for 2012.

## GRI 3.5: Process for defining report content

Cermaq's vision is to be one of the global leaders in the aquaculture industry, and is committed to creating value for its shareholders through sustainable aquaculture. This implies practices that do not compromise needs and possibilities for future generations. A successful future for the industry is thus dependent on sustainable conduct from all players engaged in the aquaculture industry.

### **Targets and disclosure**

Cermaq has defined its social and environmental sustainability principles (available at [www.cermaq.com](http://www.cermaq.com)) and has introduced robust systems to manage, improve and report its performance. Careful measurement of the sustainability performance is critical to enable meaningful benchmarking and the setting of appropriate improvement targets within each of Cermaq's business units.

The 2012 report is a GRI level B+, the same level as 2011 and 2010. In 2012, Cermaq worked on further improvement of data quality. The external review of this report addressed in particular the indicators that are also used as Key Performance Indicators (KPIs).

### **Responsibility**

The operational responsibility for ensuring sustainable business practice ultimately lies with the Managing Director for each of the operations owned by Cermaq. The Board of Directors holds the overall responsibility to ensure that necessary systems and procedures are in place.

Cermaq also recognizes the importance of responsible behaviour from each and every employee, encouraging employees to do their best to ensure that all live up to Cermaq's standards at all times. This is also integrated in the company's guidelines for ethical and corporate responsibility.

### **Internal Systems**

Monitoring and follow-up of sustainability performance is approached at both local and corporate levels.

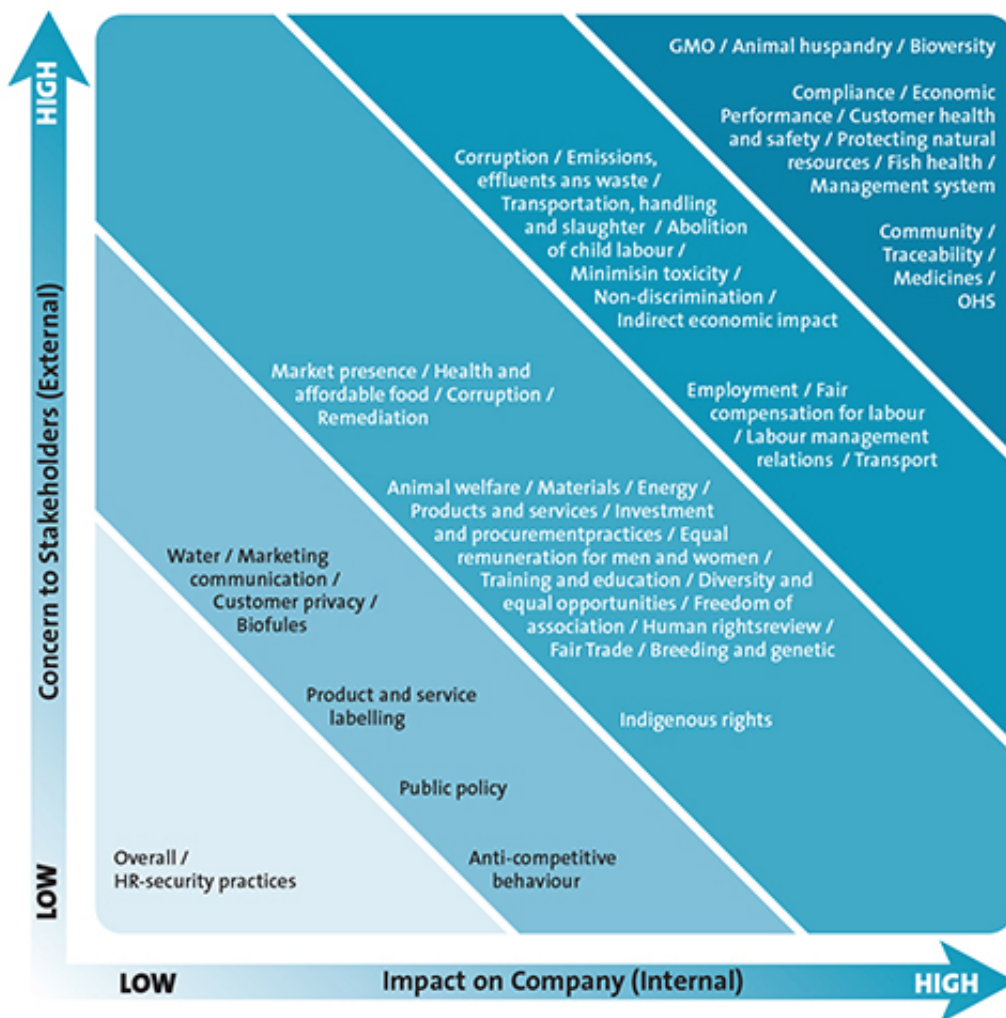
At the local level, operating companies use international management standards which ensure that key sustainability impacts are addressed through a system of procedures, audits and continuous improvement.

At the corporate level, Cermaq's executive management receive a quarterly sustainability report outlining social and environmental performance for the preceding period and highlighting any emerging issue or concern. This report is also issued to the Board of Directors on a quarterly basis.

A summary of the performance results are communicated to all employees semi-annually.

### **DETERMINING MATERIALITY**

Defining what is of material interest when it comes to sustainability in the company's operations is the fundament for the reporting. In defining material interests, Cermaq identifies the aspects with highest potential impact to the sustainability of its operations and also includes additional aspects which are of high concern to external stakeholders.



In 2012, all business units were involved in a revisit to the analysis of what are the most material sustainability areas to the operations. In addition, a project was established to amend and introduce new indicators to support the most material aspects to Cermaq's business. Further, Cermaq has also in 2012 reviewed the interest and information requests from external stakeholders based on several meeting, contacts, public debate and public reports in the regions in which the Group operates, see figure above.

The main changes in the materiality analyses compared to last year are:

- Community relations is considered as one of the most material aspects
- Indirect investments in communities are considered more material
- Traceability throughout the supply chain is perceived more material: Transportation in the supply chain is considered increasingly important in line with the ambition to minimize the ecological footprint of Cermaq's operations
- Energy and CO<sub>2</sub> emissions are seen as less material because fish farming and feed production is not perceived as a high energy emitter
- Labour/management relations are perceived increasingly material and important to stakeholders
- Investment and procurement processes related to Human Rights are perceived less material after the launch and continuous implementation of a new supplier policy and Supplier Code of conduct available on

### Identifying stakeholders and prioritising topics in the report

Many stakeholders, NGOs, investors and authorities, show interest in Cermaq's sustainability performance. Cermaq engages with each of these identified stakeholder groups at varying levels of intensity. It is these on-going dialogue with each group that enables Cermaq to be sure that the company is responding to all reasonable expectations and interests.

It is Cermaq's hope that its GRI report will facilitate more transparent and constructive dialogues between Cermaq and its stakeholders. As such, Cermaq reports on social and environmental topics that the company knows to be of external interest, like medicine use, sea lice, fish escapes and feed materials, for example. Cermaq is well placed to make this judgement based upon the experience of management and through its on-going engagement with industry dialogues and involvement in industry conferences

## GRI 3.6: Scope and boundary of the sustainability report

Cermaq sustainability reporting covers the fish feed and farming activities where Cermaq has financial control and is therefore positioned to manage any significant sustainability impacts. As several of Cermaq's indicators are customised, not all indicators apply for all parts of the operations.

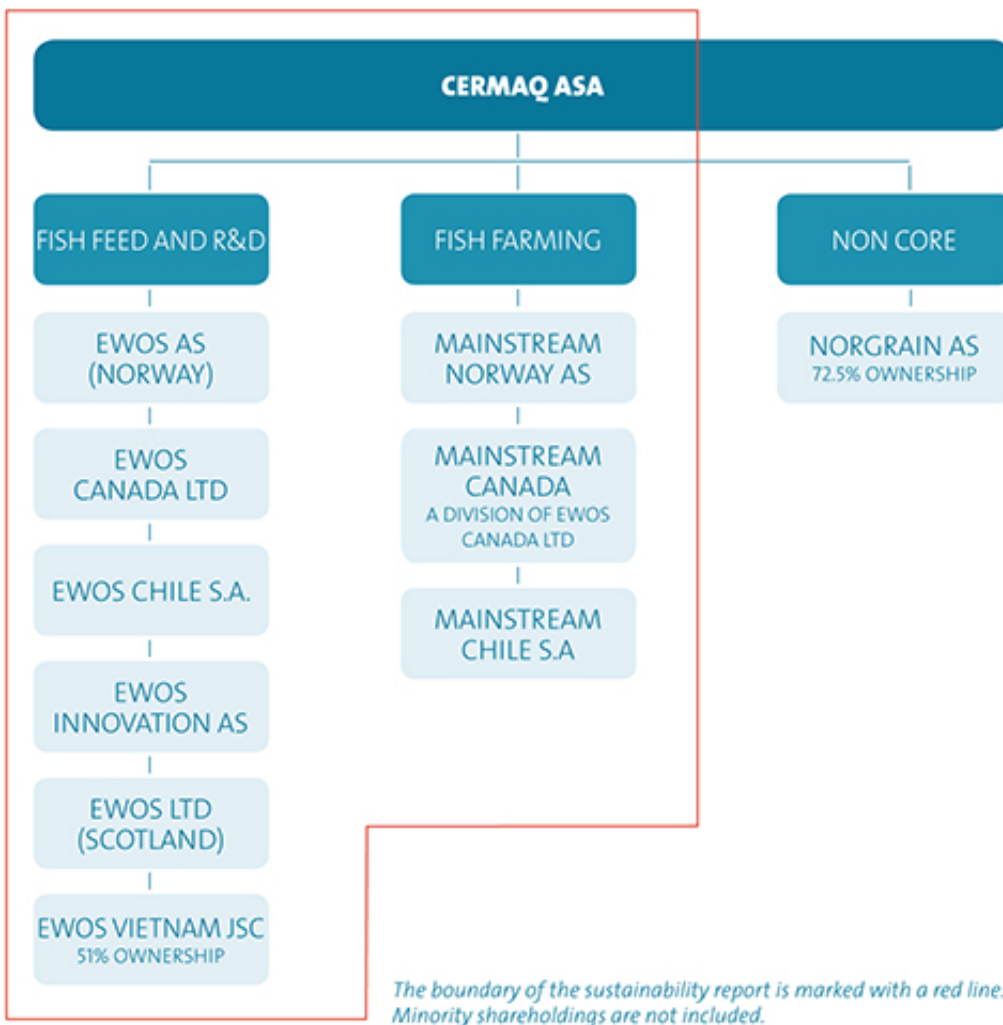
This sustainability reporting concentrates on EWOS feed and R&D operations and Mainstream fish farming operations. Cermaq head office is included in reporting on certain sustainability indicators like workforce, energy use and OHS.

Cermaq's non-core businesses, such as Norgrain, will be disposed of when the conditions are favourable. Therefore Cermaq does not include its non-core business interests in the sustainability reporting. In October 2012, Cermaq acquired the Chilean company Cultivos Marinos Chiloé (CMC). The CMC operations are not included in the 2012 sustainability reporting, but will be fully included from 2013.

This report has been prepared in line with the GRI G3 guidelines. All together Cermaq believes this is a B+ report, which has been confirmed by Ernst & Young.

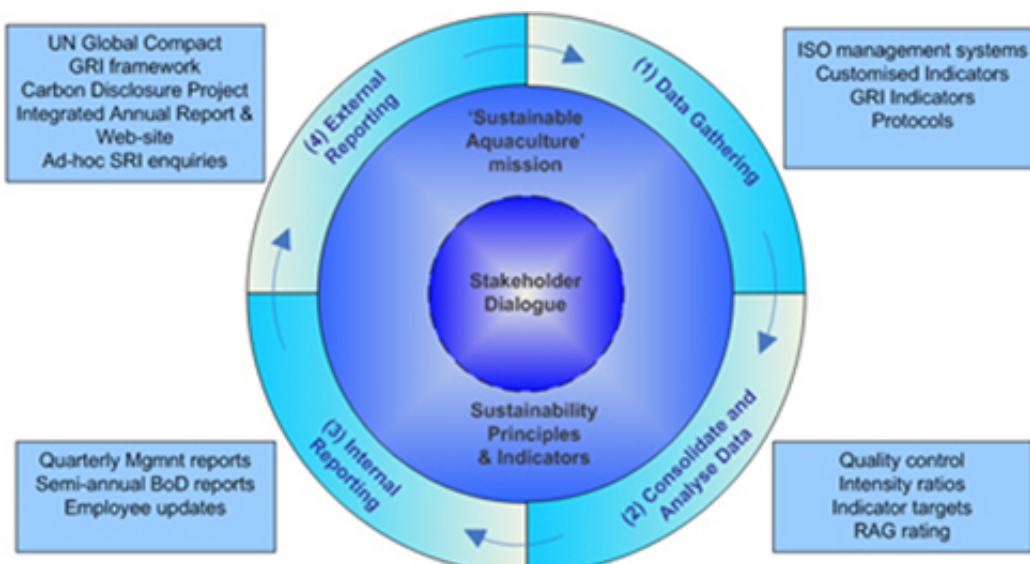
Cermaq has appointed Ernst & Young to provide a [limited assurance](#) of this report. Cermaq's ambition going forward is to continue the external auditing of its sustainability reporting and to further adapt the reporting on individual indicators to address emerging sustainability concerns.





## GRI 3.9: Data Measurement Techniques

Cermaq has established a system for gathering, consolidating, analysing and reporting non-financial data. This sustainability management system has become critical to the production of regular internal sustainability reports for group management and the Board of Directors. It is also critical to the production of the annual integrated report, including GRI Index, and Cermaq's disclosure to the Carbon Disclosure Project.



## An overview of the Cermaq sustainability reporting cycle

The reporting cycle is fundamentally based upon our insights from years of continuous dialogue with [stakeholders](#) like owners, customers, suppliers, employees and NGOs. These insights have been compiled into a set of [sustainability principles](#) at corporate level and also into management standards at local operating level. Surrounding this, Cermaq's reporting cycle has four distinct phases:

- First, sustainability indicators are routinely and consistently applied to measure local sustainability performance on a quarterly basis through a systematic data gathering process (1). The reporting process is well developed with handbooks, definitions and documented audit trails.
- The resulting data is then consolidated, analysed and measured towards targets (2) at the corporate level, providing detailed information about sustainability performance throughout the group.
- These performance insights are then reporting internally (3) to group management, using a simple traffic light analysis to identify areas of concern and any specific issues that may require remedial measures. From 2013, the internal sustainability management report is presented to the Board of Directors every quarter; previously it was every half year. All employees are also updated every half-year with key outputs from the reporting cycle, through presentations, email or newsletters.
- The cycle is concluded with external sustainability reporting (4) which is structured according to the GRI Framework and distributed via channels such as the Cermaq annual sustainability report or our submission to the Carbon Disclosure Project, Global Compact and other ad-hoc stakeholder enquiries.

Feedback from internal and external sustainability reports is used to inform improvements to the reporting cycle in future, closing the loop between stages (4) and (1).

The non-financial reporting system has been continuously improved and is now well established.

### Bases of Calculations

Cermaq has applied the following key calculations in our sustainability reporting:

PERFORMANCE INDICATOR	UNITS	CALCULATION
Mortality rate	12 months rolling mortality rate	Total number of mortalities in sea the last 12 months/average number of fish in stock + mortalities
Medicine use	g API / tonne fish produced	Grams of active pharmaceutical ingredient (API) / Tonnes of fish production (Live Weight)
Marine index	% marine ingredients in feed produced % fish trimmings and by-products of marine ingredients	(Tonnes of fishmeal + Tonnes of fish oil) / Tonnes of fish feed produced * 100 (Tonnes of fish trimmings and by-products fish oil + fish meal) / tonnes of marine ingredients*100
Marine nutrient ratio	-	Nutrient Ratio = Marine nutrients consumed by salmon / Marine nutrients produced in salmon
Energy consumption	GJ / tonne produced	GJ energy consumed / Tonnes of material produced (feed or fish (Live Weight))

GHG emissions by weight	kgCO <sub>2</sub> e	GJ energy consumed by source * GHG emission factors
OHS	Injury frequency rate (H2)	Number of injuries / million working hours
OHS	Lost time injury frequency rate (H1)	Number of lost time injuries / million working hours
OHS	Lost time frequency rate (F-value)	Number of lost days/million working hours
OHS	Absentee days	Absentee days as a % of total work days

### Divergences from GRI Indicator Protocols

In reporting performance data for GRI indicator [LA 7](#), Cermaq has chosen to continue reporting using the OHS formulas listed above, instead of adopting the GRI formulas. This is to ensure consistency in the annual report, compared to previous years, for such an important sustainability indicator. In addition, the rates Cermaq uses are widely used by peers and large Norwegian industrial companies.

In reporting performance data for GRI indicator [EN 4](#), Cermaq has reported intermediate energy purchased and consumed from non-renewable energy sources but has not yet calculated the corresponding primary energy consumed in the production of indirect energy.

## GRI 4.16: Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.

Cermaq's approach to stakeholder engagement is to concentrate on entities or individuals that can reasonably be expected to be significantly affected by the organization's activities, products, and/or services; and whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives.

Stakeholders may have rights under national laws as well as under international conventions. Important international conventions related to indigenous rights are ILO Convention 169 and the UN Declaration of Indigenous Peoples (UNDRIP). Other central conventions include the eight ILO core conventions of the "Declaration of Fundamental Principles and Rights at Work" and the International Bill of Human Rights, including the right to freedom of association, collective bargaining and human rights.

Dialogue with **employees** is continuous, through well-established local management structures and practices. Employee relations are comprehensively regulated by law and agreement in most countries. Cermaq applies one set of standards and values across its operations. The competence, engagement and efforts of all employees are crucial to the success of Cermaq's business. Cermaq's relations with its employees and unions are described in more detail in the [Employee chapter](#).

**Shareholders, analysts and providers of capital** are key stakeholders, and continuous contact with them is important to ensure accurate assessment of Cermaq's business. During 2012, Cermaq arranged a Capital Markets Day with comprehensive presentation of key topics, also visiting sea water and fresh water facilities in Steigen, Nordland. As in previous years, Cermaq submitted a report to the Carbon Disclosure Project

(CDP), providing information on Cermaq's carbon emissions and the assessment of climate change risks and opportunities. (CDP is an investor initiative which collects and publicizes information on enterprises' emissions of greenhouse gases and other climate challenge related information.) Cermaq meets regularly with investors and analyst in the period following quarterly presentations. The Stockman price from The Norwegian Society for Financial Analysts was especially recognising the accessibility of Cermaq's management. Financial institutions, investors etc. also approach Cermaq on topics related to specific sustainability concerns, and Cermaq strives to meet the needs for information and clarification.

**Suppliers** of feed raw materials are of utmost importance to EWOS. A particular priority has been on suppliers of marine ingredients where quality, safety and nutrition, as well as sustainability aspects, are addressed. In 2012 implementation of EWOS' supplier policy and Code of Conduct for its suppliers have been prioritised. The Code of Conduct expects that EWOS' suppliers have standards for ethics and corporate social responsibility and follow the UN Global Compact principles. If suppliers are not compliant with material standards for ethics and corporate social responsibilities, EWOS will as a first step work with the supplier to obtain improvements based on a Supplier Development Plan. EWOS is participating in meetings and conferences with supplier communities, e.g. fish oil and fish meal producers, to further enhance the sustainability in the value chain and with a special attention on efficient use of by-products. As a large purchaser of raw materials EWOS recognise its position and participate in round table conferences and other processes where relevant topics are addressed.

**Customers** of EWOS are local fish farmers, and all EWOS companies prioritise direct relations with and providing advice to their customers. EWOS also arranges local and regional customer conferences. For Cermaq's farming operations the key supplier of feed is EWOS. Mainstream's customers include seafood wholesalers, processors and retailers in the main salmon markets. Transparent reporting is a useful instrument in Mainstream customer relations. Dialogue with customers is based in Cermaq's ambition to be preferred supplier for its customer.

**Authorities and politicians** are stakeholders at the local, regional and national levels who define the framework conditions for the industry. Cermaq believes transparent dialogue is a prerequisite for arriving at good and balanced decisions. Cermaq actively reach out to authorities and is always meeting requests for dialogue or information. The company will continue to prioritise the dialogue with authorities and politicians, in all the countries Cermaq operates, describing the performance of and challenges to the industry.

**The NGO community** is diverse and Cermaq is selectively concentrating on those NGOs that seek constructive improvements in the industry. This includes wide groups of environmental organisations, labour organisation and NGOs dedicated to other relevant topics. Cermaq reaches out to these groups when arranging sustainability seminars, take direct contact for regular updates and when specific topics occur. In 2012 the Cermaq's CEO has invited several NGOs to discuss topics of common interest. Examples from the operating companies include Mainstream Chile's cooperation with the NGO NomoGaia in relation to human right, and EWOS Scotland's engagement with River Carron Improvement Association ("RCIA") on a restoration of one of the West coast's most prominent salmon and sea trout rivers.

**Indigenous people** have special rights in some of the areas in which Cermaq operates. The First Nations of British Columbia, Canada, have special titles and rights under Canadian laws and legislation. It is important for the Group to be aware of potential challenges its operations might represent, and Cermaq therefore acknowledge First Nations as important stakeholders. Cermaq has participated in several conferences on First Nation relations. The main priority has been Ahousesath First Nation with whom Mainstream has a protocol agreement and also dialogue with other First Nations in the territories in which the company operates. Cermaq also participate in more general forums where various First Nations in the BC farming areas are represented. In Chile Cermaq is seeking more in-depth information about the status in Chile. The company has mutually beneficial agreements with indigenous people in BC, Canada and sees this as strong foundation

for its operations in areas where indigenous peoples rights are affected by Cermaq's operations One example of projects in Chile is the Chaullín Island Indigenous Community, a community of thirty members of huilliche origin (Spanish for "people of the south"). This consists of thirty community members of various ages. The main activities of this organization are concentrated in agriculture and fishing. They regularly travel to the urban areas of the municipality of Quellón to sell their products. Mainstream is engaged in docks facilities for the local community, supporting the strong commitment Mainstream Chile has to the security of the maritime industries.

Cermaq sees **industry associations** necessary for ensuring the framework conditions for the aquaculture industry. Thus, Cermaq is actively participating in the industry association, normally represented by senior executives in the board of the association. In 2012 Cermaq has representation in the board of Salmon Chile, BCSFA (Canada), and CAIA (Canada). Cermaq also participates in FHL (Norway), AIC (UK), FEFAC (The European Animal Feed Industry Association) and IFSA (International Salmon Farmers Association).

**Local communities** are important to ensure acceptance for Cermaq's local operations, support for future growth and recruitment of employees. Cermaq contributes to local activity and employment and is a reliable partner for the local communities in which it operates. Dialogues with local communities are addressed mainly through the local stakeholder groups described above.

The **general public** is important for defining the framework conditions and support for aquaculture. Dialogue and transparent reporting are key elements for Cermaq's engagement with the general public. Cermaq seeks to be proactive in being the source of information about its operations and to correct misinformation.

## GRI 4.17: Key topics and concerns that have been raised through stakeholder engagement and how the organisation has responded to those topics and concerns, including through its reporting.

Cermaq remains open to dialogue with stakeholders who are directly involved with or impacted by our industry or who constructively engage in seeking industry improvements. Stakeholder engagement is carried out at a local and a corporate level and our aim is to engage constructively based on respect and transparency.

The table below provides some examples of how Cermaq responded to specific stakeholder concerns during 2012:

STAKEHOLDERS	CONCERNS	CERMAQ'S RESPONSES
OECD, Norwegian Federation of industries, National Contact point in Chile, World Legal Forum	Interest in how Cermaq concluded on a joint statement with ForUM and the Norwegian branch of Friends of the Earth as a result of a formal complaint against Cermaq under the OECD's Guidelines for Multinational Enterprises.	Cermaq presented the process leading up to a joint statement, the commitment and engagement at top level in Cermaq and the constructive mediation conducted by the Norwegian National Contact Point. Cermaq is pleased that this process concluded with constructive dialogue which all parties are set to continue.
Various stakeholders,	Uncertainty of Cermaq's follow up of the Joint	Cermaq has met with stakeholders who are interested in various topics of Cermaq's follow up of the joint

mostly NGOs in Norway and Chile	Statement from 2011 concluding the complaint to the OECD national Contact point	statement. In the sustainability reporting Cermaq seeks to address the company's follow up of topics raised in the joint statement.
Various stakeholders	Labour standards and business practices in Cermaq's operations in Vietnam	In the annual sustainability seminar, arranged 24 May one section was addressing challenges when establishing in new, emerging markets and Cermaq's practices in Vietnam.
Retailers and NGOs in Norway	Uncertainty to which extent fish meal and fish oil producers in Peru have improved environmental standards	Cermaq has participated in a workgroup arranged by the Ethical Trade Initiative in Norway to gather information and documentation on the implementation of new standards and other initiatives relevant for fish meal and fish oil production in Peru.
Various stakeholders, analysts, authorities, NGOs etc	Limited availability of fish oil is a growing concern for salmon farming	In the annual sustainability seminar, arranged 24 May one section was addressing micro algae as source for marine omega3 acid and how this production of micro algae can use CO <sub>2</sub> from petroleum industry as raw material.
Nomo Gaia a British NGO	Approached Cermaq with the wish to make a study of the impact of operations in the Magallanes and Chilean Antarctica (Punta Arenas) regions may have on human rights	Mainstream Chile cooperates with Nomo Gaia to do the suggested study. In 2012 the first phase of the methodology called HRIA (Human Rights Impact Assessment) had been developed. It is a systematic process that seeks to identify, predict and respond to the potential impact of human rights in connection with business operations, investment, government policy or commercial agreements. The process continues into 2013.
Local communities in Narvik region, Norway	Many groups were concerned about Mainstream starting salmon farming close to Narvik.	As the site was to open Mainstream arranged events in the new barge at the harbor in Narvik and also brought people out to the site to see. Local newspaper was invited to oversee the regular counting of sea lice. No lice were found.
The Canadian Cohen Commission, formally named the Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River	Since 2009, the Commission has been reviewing concerns about the decline of Fraser River sockeye salmon during the 2009 spawning season. Aquaculture was one of several factors the Commission investigated as possible contributors to the decline.	Mainstream Canada engaged with the inquiry through 2011 and 2012, providing information as requested. The final report was released in late 2012 and outlines several recommendations the Commission believes salmon farms in B.C. needs to take. Mainstream Canada is working with the BC Salmon Farmers Association and Fisheries and Oceans Canada to review these recommendations.
Customers and the general public, Canada and US	Customers are becoming more interested in sustainable seafood certification, and some	Mainstream Canada has been actively pursuing the Global Aquaculture Alliance's Best Aquaculture Practices certifications, and was the first salmon farm certified in the world in 2011. In 2012, Mainstream Canada had



grocery chains in North America are moving towards selling only seafood which comes from a certified sustainable source.

another first, when the company became the first salmon farming company in B.C. to achieve two-star certification, for having farms as well as their processing plant certified. The company's ability to achieve such certification shows its commitment to sustainable aquaculture.

West Coast First Nations and municipal governments, Canada

In May 2012, Mainstream Canada had IHN infections at two farms on the West Coast of Vancouver Island. Some First Nations and municipal governments were concerned about what possible risk the transport and disposal of those fish might pose to wild fish.

Mainstream Canada maintained a strong proactive presence in the media, explaining what was happening, educating the public about the scientific facts about the IHN virus and its risks and keeping an open dialogue with First Nations and governments who expressed concerns.

President and selected members of the Norwegian Parliament

As part of a visit to Canada, the delegation visited Campbell River to address concerns raised from stakeholders in BC, Canada related to Norwegian owned farming operations and especially relations to First Nations.

Mainstream together with other industry partners arranged a program where several First Nation Chiefs presented their views on farming activities in their territory and experiences from contacts and cooperation with the Norwegian owned farming companies. Representatives from both critical and supportive First Nations presented their views.

Investors

There is a growing expectation upon companies all over the world to measure, manage, disclose and ultimately reduce their greenhouse gas emissions.

Cermaq submitted a disclosure to the Carbon Disclosure Project annually since 2010. This exercise has confirmed that Cermaq's operations are not carbon intensive compared to other marine and land based food productions. This was also substantiated by a SINTEF report in 2009 and further confirmed by NOFIMA in 2011. Cermaq will continue reporting to Carbon Disclosure Project.

The network for GMO free food, other NGOs and some members of general public

EWOS Norway has been contacted with concerned that EWOS' feed includes GMO plant based materials.

EWOS Norway does not use GMO materials in its feed.

The Norwegian NGO Future in our Hands

Concern about EWOS' use of soy in its feed.

EWOS and Cermaq responded with comprehensive information on quantities of soy consumed, from where and how it is sourced.

## Endorsing Global Initiatives

**Cermaq is committed to support global initiatives aiming at improving environmental, social and economic conditions worldwide. Global initiatives contribute to creating a sustainable global environment on which the company is dependent. Global initiatives Cermaq endorses are:**

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### **United Nations Global Compact (UN GC)**

Through the membership in UN GC, Cermaq is committed to aligning its operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption.

In 2011, Cermaq became a member of UN GC and joined the Nordic UN GC network.

#### **The ten principles:**

1. Businesses should support and respect the protection of internationally proclaimed human rights; and
2. make sure that they are not complicit in human rights abuses.
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
4. the elimination of all forms of forced and compulsory labour;
5. the effective abolition of child labour; and
6. the elimination of discrimination in respect of employment and occupation.
7. Businesses should support a precautionary approach to environmental challenges;
8. undertake initiatives to promote greater environmental responsibility; and
9. encourage the development and diffusion of environmentally friendly technologies.
10. Businesses should work against corruption in all its forms, including extortion and bribery

Below is Cermaq's Communication on Progress (COP) on implementing the ten principles. More detailed information can be found in the many parts of the integrated sustainability and annual report.

Information in the various parts of this report is tagged according to Global Compact's ten Principles. The ambition is that the symbols will guide and assist the reader finding the most relevant information.



**GC Principles1-2  
HUMAN RIGHTS**

**GC Principles3-6**





LABOUR STANDARDS



GC Principles7-9  
FISH HEALTH



GC Principles7-9  
ENVIRONMENTAL IMPACT



GC Principles10  
ANTICORRUPTION



COMMUNITY ENGAGEMENT

The 10 principles, Cermaq’s approach and response are summarized in the table below:

PRINCIPLE	APPROACH	RESPONSE
<b>Human rights</b>		
1. Businesses should support and respect the protection of internationally proclaimed human rights.	Cermaq supports the UN Declaration of Human Rights and has made a commitment to respecting human rights throughout its operations, including in the supply chain.	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• <a href="#">Supplier code of conduct</a></li> <li>• Human rights performance; <a href="#">LA 4</a>, <a href="#">LA 7</a>, <a href="#">HR 6</a></li> </ul>
2. Businesses should ensure that they are not complicit in human rights abuses.	<p>Cermaq has increased awareness in its operations where Human Rights are most at risk. In 2012, Cermaq has been seeking more in-depth information about the status about indigenous people in Chile.</p> <p>The company has mutually beneficial agreements with indigenous people in BC, Canada and sees this as strong foundation for its operations in areas where indigenous peoples rights are affected by Cermaq's operations. In addition, Cermaq has been working on understanding how the UN guiding principles on Human rights affect the organization. The work will continue in 2013.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• <a href="#">Supplier code of conduct</a></li> <li>• Human rights performance; <a href="#">HR 9</a>, <a href="#">HR 6</a></li> </ul>
<b>Labour standards</b>		
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Cermaq is committed to dialogue with employees and their unions, and respect collective agreements at all levels.	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• Labour standard performance; <a href="#">LA 4</a>, <a href="#">HR 6</a></li> </ul>

<p>4. Businesses should uphold the elimination of all forms of forced and compulsory labour.</p>	<p>Cermaq will not tolerate any form of forced and compulsory labour in its operations or in those of its business partners.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• Human rights performance; <a href="#">HR 6</a></li> </ul>
<p>5. Businesses should uphold the effective abolition of child labour.</p>	<p>Cermaq condemn child labour and does not permit such conduct at any of the company's sites or with its suppliers.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• <a href="#">Supplier code of conduct</a></li> <li>• Human rights performance; <a href="#">HR 6</a></li> </ul>
<p>6. Businesses should uphold the elimination of discrimination in respect to employment and occupation.</p>	<p>Cermaq does not tolerate any form of discrimination or harassment.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• Labour standard and human rights performance; <a href="#">HR 6</a>, <a href="#">EC 7</a></li> </ul>

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**Environment**

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<p>7. Businesses should support a precautionary approach to environmental challenges</p>	<p>Cermaq is committed to minimize the environmental impacts of its operations. 9 of 10 operating companies have management systems certified according to ISO 14001 standards (as per February 2013). Cermaq has developed own environmental indicators relevant for its feed and farming operations, which do not yet have globally established GRI indicators. In 2012, the indicators for Cermaq's farming operations have been revised to take account of new sustainability challenges and external request for information. These changes are implemented for the 2013 reporting. At the company's operations in Vietnam, Cermaq engaged Veritas to conduct an environmental due diligence to make sure that the company was compliant with Vietnamese environmental regulations.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• Link to environmental performance; <a href="#">EN 26</a></li> </ul>
<p>8. Businesses should undertake initiatives to promote greater</p>	<p>Cermaq has promoted environmental responsibility within</p>	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> </ul>

environmental responsibility	its own operations as well as in the industry. The company has participated in several initiatives e.g. IFFO R/S (International Fish Oil and Fish meal Organisation Responsible Sourcing) standard. EWOS Vietnam has been working in a program with IFFO, SFP and also the Prince's Charities (UK) to work with some local suppliers to start to develop more sustainable fishing practices in Vietnam.	<ul style="list-style-type: none"> <li>• Environmental performance; <a href="#">EN 3</a>, <a href="#">EN 4</a>, <a href="#">EN 5</a>, <a href="#">EN 12</a>, <a href="#">EN 26</a>, <a href="#">EN 28</a> and all <a href="#">CEQ indicators</a></li> <li>• IFFO</li> <li>• SAD</li> <li>• GAA</li> </ul>
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9. Businesses should encourage the development and diffusion of environmentally friendly technologies.	Through Cermaq's research unit, EWOS Innovation, EWOS improves feed processing and feed composition. Cermaq also, collaborate with providers of new environmentally friendly technology, and completed a testing of sea-water based closed containment for fish farming. Mainstreamis also testing different types of nets in Canada and Norway to reduce the risk of escapes and has been testing sea lice skirts in Norway as a preventive measure to reducing the level of sea lice.	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• Environmental Performance; <a href="#">EN 5</a>, <a href="#">EN 26</a></li> </ul>
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## Anti-corruption

10. Businesses should work against all forms of corruption, including extortion and bribery.	Cermaq is member of Transparency International (Norway), and the company does not tolerate any forms of corruption including extortion and bribes. In 2012, Cermaq has rolled out an anti-corruption e-learning tool available for employees at risk in all its operating companies.	<ul style="list-style-type: none"> <li>• <a href="#">Cermaq ethical and corporate responsibility guidelines</a></li> <li>• Anti-corruption performance; <a href="#">SO 3</a></li> </ul>
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## Transparency International (TI)

Corruption undermines democracy and the rule of law. It also distorts national and international trade. In 2011, Cermaq became a member of TI Norway. Through the membership Cermaq supports TI's anti-corruption work. In addition TI is a channel for Cermaq to share its experience with other businesses and draw on other companies experience in the regions where the company is present.

Cermaq has implemented a zero-tolerance policy towards corruption within all its operations and perform regular training of management and other employees in vulnerable positions. In 2012, Cermaq has implemented an e-learning training program on anti-corruption.

## **Carbon Disclosure Project (CDP)**

Cermaq acknowledges the need for reducing carbon emissions in order to combat climate change. In support of this, Cermaq has submitted its carbon emissions to the CDP annually since 2010.

The CDP disclosure process has increased the awareness of the company's emissions throughout the operations and it has enabled Cermaq to better define activities and set targets. Cermaq obtained a CDP score of 74 C in 2012 (based on 2011 emission figures). (CDP's rating on disclosure is from 0-100 and on performance from A-E).

## **Global Reporting Initiative (GRI)**

GRI's Sustainability Reporting Framework enables all companies and organizations to measure and report their sustainability performance. By reporting transparently and with accountability, organisations can increase the trust that stakeholders have in them, and in the global economy. It also makes it possible to compare individual companies' performance. Cermaq started to report according to the GRI standard in 2009 and discloses its fourth report in 2012. Cermaq recognizes the value of external auditing of its report, and seeks external assurance for its sustainability reporting. The 2012 report meets the requirements of a B+ report.

## **International conventions**

Cermaq endorses a suit of international agreements and conventions. Some of the most central ones are the OECD Guidelines for Multinational Enterprises, the ILO Convention 169 and the UN Declaration of Indigenous Peoples (UNDRIP), and the eight ILO core conventions of the "Declaration of Fundamental Principles and Rights at Work"

These conventions are the basis for Cermaq's operations in all parts of the Group. Cermaq's reporting, e.g. management approach and performance indicators address part of the scope in these conventions.

In 2012, implementation of the UN guiding principles on human right (known as John Ruggie's principles) has been addressed, and Mainstream is cooperating with an NGO on a human right survey in Chile.

The complaint raised against Cermaq regarding compliance with the OECD Guidelines concluded with a joint statement in 2011. There has been substantial interest in the mitigation process leading up to the joint statement, and Cermaq has, together with the NGO parties in the joint statement, participated in several international seminars and meetings presenting their learning and experience from the mitigation process.

## **Aquaculture related initiatives**

EWOS has been an active supporter of the International Fish meal and Fish oil Organisation's standard for responsible sourcing (IFFO R/S) and supported a special program to assist companies qualifying for certification, and thus increasing the total volumes of certified fish meal and fish oil.

Cermaq has been and is engaged in several industry related international initiatives. Currently Cermaq is concentrating on processes and initiatives that seek better usage of the total catch from fisheries, as by-catch and by-products is a tremendous underexploited source of marine raw materials.

# Cermaq's Compliance Practice

**Cermaq's point of entry to social and environmental responsibility is to ensure that its operations respect and are compliant with local, national and international law.**

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Where breaches do occur, for whatever reason, this is taken seriously and investigated at the appropriate level before measures are taken to mitigate the risk of recurrence.

For transparency, Cermaq reports on the following GRI indicators related to compliance; environmental regulations (EN 28), product and service regulations (PR 02 and PR 09) and general societal regulations (SO 08).

In 2012 there were eight incidents of non-compliance, compared to six in 2011.

The eight non-compliance incidents are described below:

- MS Norway for late reporting of a possible escape at Langøyhovden in Nordland for not closing deviations related to technical control, and for not closing a deviation related to the risk matrix and an incorrect use of the risk matrix. These non-compliances resulted in total fines of 50 653 USD
- MS Chile for not properly investigating an incident that occurred in the Quemchi Plant, and for leaving plastic garbage (feed bags) empty at the beach nearby the Chauco farm. These non-compliances resulted in total fines of 3 465 USD
- EWOS Innovation Chile for operating on Mainstream's concession which should have been changed according to a legislative amendment in 2009. EWOS Innovation and Mainstream are working with the authorities to solve this. This non-compliance resulted in a fine of 4 226 USD
- EWOS Innovation Norway for a fish escape-incident. This non-compliance resulted in a fine of 40 617 USD
- EWOS Chile for odour to the atmosphere causing inconvenience for the community. This non-compliance resulted in a fine of 7 950

There are additional 13 incidents that have been reported in 2012, which have not been concluded. These incidents include:

- Wrongly signed attendance book
- Wrongly calculated production bonus at one plant
- Missing and delayed (weekly) mortality reports
- Fish held too long in the cages in primary processing plant
- Lack of permit to operate under bad weather conditions
- At one farm, working hours exceeded the number of hours allowed by law
- Lack of mortality register
- Feed spill in the river

– Feed monitoring system not in place in time

There were ten pending incidents from 2011. Of these, two incidents were found to be non-compliant, and are included in the total of six incidents in 2011.

## Compliance

	EN 28	SO 8	PR 2	PR 9	TOTAL	FINES (USD)
EWOS Chile	1				1	7 950
EWOS Canada						
EWOS Scotland						
EWOS Norway						
EWOS Vietnam						
EWOS Innovation	1	1			2	44 843
Mainstream Chile	1	1			2	3 465
Mainstream Canada						
Mainstream Norway	3				3	50 653
<b>Total 2012</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>106 911</b>
<b>Total 2011 *</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>14 306</b>

\* Figures in 2011 have been adjusted from four incidents to six because of conclusions of two pending incidents

## Independent assurance report

To the management of Cermaq ASA

### Scope of Engagement

We have been engaged by the management of Cermaq ASA to perform an independent assurance of Cermaq's 2012 Sustainability Report. The Sustainability report ("the Report") includes sustainability information on page 4, 8-9, 24, 28, and 34-40 in Cermaq's annual report and on Cermaq's website ([www.report2012.cermaq.com](http://www.report2012.cermaq.com)) under the sections "Performance" and "GRI navigator".

### Reporting criteria

As a basis for the assurance engagement, we have used relevant criteria in the sustainability reporting guidelines of the Global Reporting Initiative (GRI G3), as well as the CEQ indicators that Cermaq has developed and disclosed. These criteria are presented on Cermaq's website ([www.report2012.cermaq.com](http://www.report2012.cermaq.com)) under the sections "Performance" and "GRI navigator". We consider these reporting criteria to be relevant and appropriate to review the Report

### The management's responsibility

Cermaq's management is responsible for the sustainability reporting, and for selecting information, collecting data for presentation and for preparing the Report in accordance with applicable criteria.

### The auditors' responsibility

Our responsibility is to issue an independent assurance statement on Cermaq's sustainability report on the basis of the scope of the engagement outlined above.

### Assurance standard used and level of assurance

We have performed the assurance engagement in accordance with the ISAE 3000, "Assurance engagements other than audits or reviews of historical financial information". The standard requires that we plan and execute procedures in order to obtain limited assurance that the Report does not, in all material respects, contain wrongful information. The procedures performed in order to obtain limited assurance aim to verify the plausibility of information and probe less deeply than those performed for assurance engagements aimed at obtaining reasonable assurance. Our assurance does not comprise the assumptions used by Cermaq or whether or not it is possible for Cermaq to reach certain future targets described in the report (e.g. goals, expectations and ambitions).

### Assurance procedures for the Sustainability Report

Our assurance of the Report has been planned and performed in accordance with ISAE 3000 (limited assurance). The standard requires that we plan and execute procedures in order to obtain limited assurance on the Report.

Our review has, based on an assessment of materiality and risk, among other things included the following procedures:

- Interviews with representatives from the broader management group in order to update our understanding of critical areas of reporting and supporting processes
- Obtained and reviewed evidence on a test basis to support the 2012 data presented in the Report
  - A review of Cermaq's sustainability Key Performance Indicators (KPIs) on a test basis for all operating companies
- Obtained and reviewed evidence on a test basis to support the assertions and claims made in the Report
- An analytical review of reported information
- Reviewed conversion factors (CO<sub>2</sub> and exchange rates) in relation to their sources, relevance and accuracy
- Evaluated the overall presentation of the Report, including the consistency of the information, based on the above-mentioned criteria.

We believe that our procedures provide us with an appropriate basis to conclude with a limited level of assurance for Cermaq's 2012 Sustainability Report.

### Conclusion

On the basis of our procedures aimed at obtaining limited assurance, nothing has come to our attention that causes us to believe that the information in the Report does not comply with the above stated reporting criteria. This includes Cermaq's statement of complying with application level B+ according to the guidelines for sustainability reporting, GRI G3.

Oslo, 4. April 2013  
ERNST & YOUNG AS



Terje Kløpp  
State Authorized Public Accountant