ICL - Climate Change 2018

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

ICL (Israel Chemicals Ltd) Group is one of the world's leading fertilizer and specialty chemicals companies. For a world challenged by population growth and scarce resources, ICL makes products that increase global food and water supplies and improve industrial materials and processes. The company benefits from direct access to low-cost, highly concentrated sources of minerals – especially potash and bromine. Leveraging this strong basis, we have built leadership positions in the areas of fertilizers and specialty fertilizers, flame retardants, water treatment solutions, specialty phosphates for the food, hygiene and safety industries, and a growing range of sustainability solutions. In 2017, ICL spent an amount of approximately $115 million on issues related to the environment and environmental conservation. In 2018, ICL is expected to spend a sum of approximately $164 million in this area, promising the long-term competitive advantages of our company. ICL is a leading supplier of fertilizers in Europe and a major player in specialty fertilizer market segments. As one of the world's most integrated manufacturers and suppliers of phosphate products, ICL has become one the leading global providers of pure phosphoric acid and a major specialty phosphate player. ICL operates via two divisions: the Essential Minerals Division and the Specialty Solutions Division. The Essential Minerals Division includes the ICL Potash & Magnesium, ICL Specialty Fertilizers and ICL Phosphate business units. The division focuses on efficiency, process innovation and operational excellence. The Specialty Solutions Division includes three business units: ICL Industrial Products, ICL Advanced Additives and ICL Food Specialties. The division concentrates on achieving growth through a highly-tailored customer focus, product innovation and commercial excellence. ICL's major production activities are located in Israel, Europe, the US, South America and China, and are supported by major global marketing and logistics networks. ICL employs approximately 12,500 employees worldwide.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2017	December 31 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

Australia
Austria
Belgium
Brazil
Canada
China
France
Germany
Israel
Mexico
Netherlands
Spain
Turkey
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.
Operational control

C-CH0.7

(C-CH0.7) Which part of the chemicals value chain does your organization operate in?
Row 1
Bulk organic chemicals
Please select
Bulk inorganic chemicals
Fertilizers
Other chemicals
Specialty chemicals

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
No

C1.1c

(C1.1c) Why is there no board-level oversight of climate-related issues and what are your plans to change this in the future?

	Primary reason	Board-level oversight of climate-related issues will be introduced within the next two years	Please explain
Row 1	Currently, we find highest oversight by the COO as sufficient and effective for managing climate change issues.	No, we do not currently plan to do so	Currently, we find highest oversight by the COO as sufficient and effective for managing climate change issues.

C1.2

(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

ICL's Chief Operating Officer (COO) also serves as commissioner for environment, safety, health and security for the entire ICL Group, including supervision of the full range of the Group’s climate change-related activities and strategy, ICL's VP of EHS (Environment, Heath, Safety) reports directly to the COO. ICL's Global Sustainability Manager (GSM) reports directly to the global EHS. The ICL GSM is in charge of (among else) of promoting and coordinating carbon reporting and reduction initiatives on both product and facility levels, and coordinating all climate-change related company activities including reduction efforts, risk analysis, R&D of sustainable solutions, sustainable procurements and others. As part of his responsibilities, the ICL GSM is charged with gathering, processing and consolidating GHG emission and carbon related data from all ICL operations, analyzing

and preparing it for the sake of CDP reporting and other voluntary reports, and for internal management. The ICL GSM also produces periodic reports regarding climate change and carbon footprint issues for the ICL VP EHS and the ICL COO, who in turn generate reports quarterly and annually for the Board of Directors.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?
Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.
Who is entitled to benefit from these incentives?
All employees
Types of incentives
Monetary reward
Activity incentivized
Emissions reduction project
Comment
ICL has instituted the following initiatives to incentivize the reduction of GHG emissions: 1) As a general rule, ICL encourages suggestions from employees for projects regarding GHG management and/or reduction and other environmental issues, and offers material rewards (including monetary rewards) for suggestions that are adopted - including those that would help the corporation meet its GHG reduction target (see section 3.1a of this report); 2) ICL initiates competitions between facilities and subsidiaries to help the Company achieve its sustainability targets, including GHG reductions. The employees of the winning facilities receive material rewards (including monetary rewards) 3) ICL's primary stockholder, Israel Corp., holds an annual competition for environment-related improvements (including GHG reductions) which offers financial rewards.

Who is entitled to benefit from these incentives?
Management group
Types of incentives
Recognition (non-monetary)

Activity incentivized
Emissions reduction project
Comment
1) Climate-change leaders throughout ICL receive management recognition for the on-time supply of data for CFP calculations. 2) Companies that succeed in reducing their CFP from previous years (whether in terms of absolute quantities or as a percentage of production) are recognized in the Company's annual report and at Company conferences.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	5	
Long-term	5	100	Long-term is not in fact limited to any amount of years.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.
Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

ICL has established (since 2009) an Enterprise Risk Management (ERM) cycled program which aims at mitigating existing risks and identification of new risks, including climate related regulatory and physical risks and others. The ERM program is under the responsibility and supervision of the ICL COO who is also the corporate CRO and the commissioner for all EHS issues. The CRO is accountable for implementing the overall Risk Management policy in the group, on behalf of ICL's CEO and reports to the Board of Directors on a periodical basis. The asset/sub-company/business unit level risks are identified, then aggregated to the organizational (ICL group) level, and ranked by materiality to the entire organization. Risks reduction is accomplished through an organized periodical cyclic process which includes several phases:

► Identification of the risks – A structured process by which each sub-company's top management, within each business unit, identify the organizational key risks.

► Mapping and measurement of the risks – A process designed to rank and evaluate the identified risks.

► Management of the risk – Nomination of a team dedicated to analyze the key organizational risks and develop an improvement plan to mitigate the risk.

► Monitoring the execution of actions for reducing the risk

► Developing a control and monitoring mechanism within the group at the different levels (group, business units, sub-companies, assets).

Each business unit has identified several climate related risks within these categories and established a diverse working team (including mid-level management and operational personnel and managed by a senior manager) to analyze the risk exposure and develop a mitigation plan. The working teams update this analysis on a quarterly basis, and the progression of mitigation programs is constantly monitored, reported to ICL's management on a semi-annual basis and to the board of directors on an annual basis. As mentioned above, one of the cyclic phases of the Enterprise Risk Management (ERM) program is the Mapping and measurement of the risks identified. Is this phase, all risks (including Climate change related) are ranked and evaluated by Impact and Likelihood. ICL has developed a unified approach to evaluate and prioritize these risks. A matrix of impact and likelihood had been developed according to the specific characteristics of the company. The Impact of the risks is evaluated according to potential damage to the company's profitability, reputation or compliance. Each level is tailored by numbers or qualitative

description. The likelihood is evaluated according to frequency or probability. This ranking is conducted by the working teams of each business unit and the entire organization, and reported to ICL's management on a semi-annual basis and to the board of directors on an annual basis.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Complying with all current and future regulation is key to our ability to operate as an industrial company. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: The EU-ETS carbon trade program which includes two of ICL Europe's sites.
Emerging regulation	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Complying with all current and future regulation is key to our ability to operate as an industrial company. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: The possibility of China's emission trading scheme to include our operations, the possibility of a carbon tax and/or carbon trading scheme in Israel.
Technology	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Complying with all current and future regulation is key to our ability to operate as an industrial company. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: concessions, licenses and permits granted to us by the respective governments in the countries wherein they are located are vital to our operations, and can be dependent, among many various factors, on climate related issues.
Legal	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Complying with all current and future regulation is key to our ability to operate as an industrial company. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: concessions, licenses and permits granted to us by the respective governments in the countries wherein they are located are material to our operations, and could be dependent, among many various factors, on climate related issues.
Market	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Continues adaption to all changes in global markets is material to our ability to hold and/or attain market leadership. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: changes to fertilizers consumption patterns, due to climate change- such as higher preference to slow release fertilizers that would minimize N2O emission in use phase (among other benefits).

	Relevance & inclusion	Please explain
Reputation	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Reputation is key to ICL's public "license to operate"- which is vital to any company, especially those involved in mining operations and chemical products. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: growing consumer awareness to climate issues and potentially more frequent requests for analyzed carbon footprint of products.
Acute physical	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Acute and/or Chronic physical risks to our installations could potentially reduce our production capacities. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: risk of flood damage in some of our Israeli sites.
Chronic physical	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Acute and/or Chronic physical risks to our installations could potentially reduce our production capacities. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: risk of rising sea levels damaging our sites located in proximity of the ocean.
Upstream	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. Any significant reduction in the production capacities of our major suppliers could potentially reduce our production capacities. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: cases where we have only one current supplier for a certain chemical raw material- and that supplier could be affected by [physical climate change risks.
Downstream	Relevant, always included	This risk type (and all others on this list) are considered relevant to ICL, as a large, multi-national fertilizer and specialty chemical producer. ICL's revenues are dependent on the market demand from customers. Therefore, all risk assessment teams are directed to take it into consideration in the risk assessment process. Climate Change relevant example: the effect that droughts and/or floods have on demand for our fertilizer products.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

As mentioned above, one of the cyclic phases of the Enterprise Risk Management (ERM) program is the Mapping and measurement of the risks identified. Is this phase, all risks (including Climate change related) are ranked and evaluated by Impact and Likelihood. ICL has developed a unified approach to evaluate and prioritize these risks. A matrix of impact and likelihoo d had been developed according to the specific characteristics of the company. The Impact of the risks is evaluated according to potential damage to the company's profitability, reputation or compliance. Each level is tailored by numbers or qualitative description. The likelihood is evaluated according to frequency or probability. This ranking is conducted by the working teams of

each business unit and the entire organization, and reported to ICL's management on a semi-annual basis and to the board of directors on an annual basis. The identified risks (including climate change related) are prioritized by that ranking, and are managed by a mitigation plan. The mitigation plan includes assigned resources & identified specific responsible personnel for implementation, and monitoring of timelines for completion & mitigation measurements. ICL's Global Risk Manager in in charge of our global risk management reporting framework. Reports from risk owners contain updates on the risk's exposure and status of mitigation actions performed to date. Business Opportunities (including climate related) are usually identified, managed and monitored by business development managers and/or R&D personnel in ICL's different business units and global functions. These personnel search for business opportunities- with emphasis on those related to the current company strategy. For the climate-related physical risk of severe floods- the mitigation plan includes specific physical measures and barriers, and an annually renewed special insurance. For the climate-related physical risk/opportunity of higher/lower demand for fertilizers due to significantly changing whether patters (which in turn increase/decrease the agricultural activity of certain regions) - the mitigation/business plan includes continuing to explore new opportunities in developing markets by our widespread network of highly trained marketing/agronomy personnel. For the climate-related transitional risk/opportunity of growing consumer preference to environmental/climate friendly products- the mitigation/business plan includes monitoring how frequently we are asked by clients regarding the carbon footprint (CFP) value of certain products, and prioritizing which products to calculate/renew the CFP values for next (until today, ICL have analyzed the CFP of ~60 of our leading products).

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Most of ICL's largest producing facilities are located in Israel. GHG regulation in Israel is still in its first steps, and there is currently much uncertainty about the nature of the eventual mandatory GHG reporting scheme. In 2010, a voluntary mechanism for company reporting of GHG's (Scope 1 and Scope 2 emissions) was introduced by the Israeli Government with active participation of ICL. This mechanism has widely been considered to be the basis for of a future mandatory reporting and emission-reducing mechanism in Israel. However, in 2011, The Israeli parliament has also passed a law promoting the establishment of a local PRTR (Pollution Release and Transfer Registry) mechanism. This mechanism, which has now been now active for four years, requires all major Israeli industry facilities to annually report a significant variety of pollutant emissions, including GHG gases. The methodology used for this reporting of GHG's does not match the one used by the voluntary mechanism (for example, the PRTR scheme excludes Scope 2 emissions, uses different EF's in some cases, and other differences), which continues to operate in parallel. The leaders of these two government mechanisms have made statements promising to improve the alignment between them (and possibly unifying the reports) for the next reporting year to allow accurate and simple GHG reporting, but the results of this expected improvement are yet to be determined. In conclusion, it is still unclear what form the eventual mandatory mechanism in Israel would take: whether as part of the PRTR law, as an emission trading scheme (such as the EU-ETS), as a taxation plan or some other option. Additional related uncertainties include the base years which would be used in such a mechanism, and the magnitude of emission reductions that would be demanded. A general overall Carbon Tax, such as the one considered in Europe, could add additional costs to ICL's activities. However, it is likely that such an option would be adopted first in Europe, and would therefore first affect ICL’s European facilities if anything. ICL is already active in this field through its GHG Centre of Excellence, has gathered expertise in this field and is annually continuing the process of reporting and reducing its emissions. Hence, ICL believes that it is well prepared for such scenarios.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

10000000

Explanation of financial impact

Potential implications are the costs of a potential Carbon tax which will add a price for every CO2 ton emitted, of maintaini ng a dedicated GHG management staff, and of hiring a qualified third party to verify our emissions. The overall financial expense under this scenario should not exceed $10 million (<0.2% of ICL's total revenues). However, the scenario of a Carbon tax implemente d in Israel seems unlikely in the adjacent future, as Israel is still taking its first steps in GHG legislation.

Management method

ICL has established it's global sustainability department which has gathered expertise in the GHG field and the company has already reduced its emissions significantly from 2008 levels. Thanks to its significant role and advanced position with regar ds to GHG management, ICL is a strategic partner in the dialogue between the government and the Industry in Israel, and can anticipate coming developments within this risk in advance. Therefore, ICL is well-positioned to manage this risk, and has invested the necessary resources to deal with climate change as part of its sustainability policy.

Cost of management

200000

Comment

The costs associated with our actions are reflected in maintaining a dedicated and professional team for the continuous analy sis of GHG emissions, and hiring a qualified third party accounting company to begin verifying our GHG calculations. We estimate the overall costs at approximately $200 thousand annually (less than 0.01% of the company’s total revenues).

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact driver

Other, please specify (Reduction in production capacity)

Company- specific description

ICL, as a company within the chemistry industry, is influenced by regulatory demands and licensing polices (e.g. environment and safety). For instance, ICL produces potash and salt in Israel, Spain ,the UK and China according to permits and licenses issu ed by

the relevant countries. Regulatory demands have been intensifying throughout the world, and changes in the compliance landscape may impact ICL and its operations. Further, since climate change increases the likelihood and severity of natural disasters, the acceleration of climate change could result in increased regulatory activities, influencing governmental decisions regarding the renewal of licenses. Government approvals are important to ICL in cases in which non-renewal could affect the company. However, ICL maintains high standards throughout its production facilities, often significantly above regulatory requirement, and therefore sees this risk as exceptionally unlikely.

Time horizon

Long-term

Likelihood

Exceptionally unlikely

Magnitude of impact

Low

Potential financial impact

Explanation of financial impact

Potential financial implications of the risk are the losses of revenues from the operation of specific ICL facilities (due to non-renewal of permits). Revenues of ICL (2017) were $5.4 billion globally, and any loss of revenue is dependent on which facilities are involved and for what period of time. In addition, the financial impact is related to selling prices of our products, which are subject to market developments.

Management method

ICL believes the scenario of the non-renewal or cancelation to our permits is very unlikely. The ICL facilities are in full compliance with strict environmental regulations, and act to prevent the likelihood of a damage caused to our facilities by natural disasters, for example by mitigating the intensity of floods at our facilities areas using canals and other engineering solutions. Therefore, the scenario of a severe damage caused to one of our facilities that would lead to a non-renewal of permits is not considered by ICL as a significant risk. Furthermore, ICL is an extremely diverse and globally spread company, with over 40 production sites worldwide and a wide variety of products. Therefore, even the temporary or permanent shutdown of one of its facilities is very unlikely to have a significant influence on the company's overall profitability (net income of $364 million in 2017).

Cost of management

Comment

The costs associated with our actions are of implementing engineering solutions such as the canals described above. Such costs are dependent on the type of regulatory requirement, the production site involved and the scope of work needed, In 2017, for example, ICL spent a sum of around $115 million on environmental issues, out of which $34 million were invested in plant and equipment for the prevention of environmental hazards, and approximately $81 million as a current expense in this area.

Identifier
Risk 3
Where in the value chain does the risk driver occur?
Direct operations
Risk type
Transition risk
Primary climate-related risk driver
Policy and legal: Other
Type of financial impact driver
Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)
Company- specific description
ICL's plants throughout the world consume large amounts of energy (although they are highly energy-efficient). Governments are expected to act to mitigate climate change, and one of the mitigation methods they may use is the legislation of taxes and/or regulations associated with the combustion of fossil fuels, especially emission-intensive fuels such as fuel oil and diesel. Any increase in the input fuel cost rate will affect the Company's manufacturing costs and volumes. The fact that ICL is already implementing a gradual shift from fuel oil and diesel to natural gas positions it favourably to deal with such government initiatives.
Time horizon
Medium-term
Likelihood
About as likely as not
Magnitude of impact
Low
Potential financial impact
3000000
Explanation of financial impact
Potential implications of the risk are the added taxes related to (Carbon-intense) fossil fuels, which could add costs to large producing companies such as ICL. This impact can amount to several millions of USD annually. ICL’s energy costs in 2017 amounted to 7% of total oprating costs, including oil products ($16 million), electricity ($190 million) and natural gas ($87 million). The estimated sum stated in Potnetial financial impact is ~20% of the oil product-fuls, as a general estimation of potential.

Management method
As part of the effort to tackle global warming as well as the rising risk involved with dependency on fuel oil and as mentioned above, ICL has been completing a gradual shift to the full usage of natural gas as our main fuel source (instead of fuel oil and diesel). This strategic investment of nearly $110 million is expected to yield approx. $70 million in annual energy savings (see section 3 of this reprot), but also reduce our exposure to the fluctuating oil market. The transition is now near completion, by the end of 2017, 95% (40/42) of ICL Israel's main energy-consuming instllatatrions were converted to NG, and 89% of the total remote fuel consumption of ICL Israel's facilities was derived of NG. Since renewable energy has not yet become a reliable energy source for industries at Israel, Natural Gas is the best current available solution for ICL in GHG emission terms, and therefore it is very unlikely that it will be specifically taxed in Israel. ICL is also utilizing solar energy for the production of Carnallite at the Dead Sea, using one of the world's largest evaporation systems. The use of solar energy helps ICL avoid the high costs related to fossil fuels and other energy sources used by the company's competitors. Regardless to the transition to natural gas and use of solar energy, ICL is hedging against short-term fluctuating energy prices coordinated by ICL's energy forum.
Cost of management
110000
Comment
Costs associated with the strategic transition to natural gas are approx. $110 million.

Identifier
Risk 4
Where in the value chain does the risk driver occur?
Customer
Risk type
Physical risk
Primary climate-related risk driver
Chronic: Changes in precipitation patterns and extreme variability in weather patterns
Type of financial impact driver
Reduced revenues from lower sales/output
Company- specific description
ICL is a major producer of fertilizers for the agricultural industry. The agricultural industry is influenced by local weather conditions. Storms, long periods of drought, floods and extreme temperature change can affect crop quality and quantity, resulting potentially in decreased fertilizer usage and loss of sales. In fact, one of the main effects of climate change is expected to be an increased frequency of extreme weather events, such as harsher and/or longer droughts, which also leads to crop loss. If a

country experiences a dramatic change in crop characteristics or output, the government could activate a mitigation plan by increasing the subsidy offered to local producers and farmers. It is difficult to predict the effect that this might have on ICL sales and revenues. If demand for fertilizers drops, lCL might be forced to reduce its prices, thereby reducing its profits, or otherwise lose some sales. However, a drought in one country could lead to increased fertilizer demand in another country which becomes its supplier, leading to increased profits for ICL in the supplier country. As such, this aspect of climate change could represent both a risk and an opportunity for ICL.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

30000000

Explanation of financial impact

Potential implications of the risk are losses of revenues from fertilizers sales in the specific regions affected by the droughts. For instance, a 1% drop in the sale of ICL Essential Minerals Segment (which produces, among else, fertilizers of diverse types) would result in a lost income of approximately 30 million dollars (according to 2017 figures). However, since ICL has a well-diversified portfolio of global customers, it is highly unlikely that any specific cases of droughts would significantly affect the company's revenues.

Management method

As mentioned above, ICL's diverse range of customers around the world greatly reduces the chances of being impacted by this risk and the magnitude of it. In order to mitigate this risk, ICL continues to explore new markets and develop new products and service offering in order to reduce the company's exposure to specific markets.

Cost of management

0

Comment

There are no significant costs associated with managing this risk. The relevant marketing costs are included in the company's total selling and marketing costs (including shipping), which were approx. $746 Million at 2017, but are not considered a significant part in these costs.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising sea levels

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

ICL is a major producer of fertilizers, products which are needed globally to achieve the increasing need to produce more crops from a decreasing quantity of agricultural land. One of the expected effects of climate change is a rise in the level of the sea. Such a rise could significantly diminish the amounts of land available for all of mankind's needs, including agriculture. If the quantity of land used for agriculture is diminished, ICL's sales of fertilizer could be lowered at some cases. However, the need to grow the same or more crops on less land could also increase demand for fertilizers. Therefore, the rise in sea level represents both a risk and an opportunity for ICL.

Time horizon

Long-term

Likelihood

Very unlikely

Magnitude of impact

Low

Potential financial impact

30000000

Explanation of financial impact

Potential implications of the risk are losses of revenues from fertilizers sales in the specific regions affected by the rie in sea level. For instance, a 1% drop in the sale of ICL Essential Minerals Segment (which produces, among else, fertilizers of diverse types) would result in a lost income of approximately 30 million dollars (according to 2017 figures). However, since ICL has a well-diversified portfolio of global customers, it is highly unlikely that any specific cases of droughts would significantly affect the company's revenues.

Management method

As mentioned above, ICL's diverse range of customers around the world greatly reduces the chances of being impacted by this risk and the magnitude of it. In order to mitigate this risk, ICL continues to explore new markets and develop new products and service offering in order to reduce the company's exposure to specific markets.

Cost of management

0

Comment

There are no significant costs associated with managing this risk. The relevant marketing costs are included in the company's total selling and marketing costs (including shipping), which were approx. $746 Million at 2017, but are not considered a significant part in these costs.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Some of ICL’s Israeli plants are located in Sdom in the Dead Sea region. In 2004, severe flooding in the area caused property damages and loss of profits. Climate change is expected to increase the frequency of extreme weather events such as floods, and could therefore increase the chance of such incidents in the future. Apart from implementing physical measures to deal with extreme weather conditions, ICL has acquired insurance to protect itself from exposure to such natural disasters.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Low

Potential financial impact

Explanation of financial impact
Potential implications of the risk are the physical damage that could be inflicted to ICL's facilities in the case of floods, and the loss of revenue caused by a lowered production.
Management method
Apart from ICL implementing specific physical measures to deal with such scenarios, ICL has acquired insurance to protect itself from exposure to such natural disasters as floods. This does not affect the likelihood of floods, but greatly reduces the magnitude of potential damage to ICL. This insurance is currently expected to be renewed annually, hence mitigating this risk for a long-lasting timeframe.
Cost of management
Comment
The cost associated with our actions is the specific measures and price of the insurance, estimated at several millions of dollars.

Identifier
Risk 7
Where in the value chain does the risk driver occur?
Direct operations
Risk type
Physical risk
Primary climate-related risk driver
Chronic: Changes in precipitation patterns and extreme variability in weather patterns
Type of financial impact driver
Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)
Company- specific description
The Company’s Israeli phosphate plants use large amounts of water as part of their daily operations. Water is scarce, and is purchased from Israel’s national water company, Mekorot, at a cost determined by the Israeli government. Climate change is likely to reduce precipitation in Israel, thus increasing the price of water. Any increase in the cost of water may increase the Company’s operational costs.
Time horizon
Long-term
Likelihood
More likely than not
Magnitude of impact

Low

Potential financial impact

2750000

Explanation of financial impact

Potential financial implications of the risk are the added costs of water. Since the organization's annual expenses on water are approx. 25-30 million dollars, a 10% rise in water prices would result in an added cost of approx. 2.5-3.0 million dollars (roughly estimated). However, these added costs are not considered significant in proportion of the general ICL income.

Management method

For both financial and sustainability reasons, ICL is continually pursuing initiatives to minimize water usage and wastage so as to limit its dependency on water availability. Some of the ICL facilities are now operating new and improved waste water treatment facilities, which allow to recycle much of the wastewater back into the production processes (after treatment). Furthermore, the organization is constantly searching for opportunities to substitute the usage of drinking grade quality water with non-drinking grade quality water for the sake of the production processes (though only in cases where this does not affect the quality of the product). The usage of non-drinking grade quality water allows ICL to avoid some of the risk of a rising in water prices (as this grade of water is usually cheaper), and has sustainability advantages as well- by using water that would otherwise not used by the general public. One of the key examples of this is DSW, one of ICL's largest companies, which extracts local brackish water in the Dead Sea area for production needs. This water is otherwise unexploited by the public, and the extraction operations are approved and encouraged by the regulations.

Cost of management

13000000

Comment

In the last decade, the organization has spent over $13 Million on drilling in the Sdom area, in purpose of extracting brackish water. In addition, some of the environmental investments mentioned above include the establishment of new wastewater facilities, allowing for greater recycling capacity of water.

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Shifts in consumer preferences

Type of financial impact driver

Reputation: Reduced revenue from decreased demand for goods/services

Company- specific description

As awareness of climate change increases, consumers are pressing governments and companies to take preventative action. This trend has been increasing since the COP 21 global climate agreement, in December 2015. ICL has experienced growing demand from its clients to provide Carbon Footprint (CFP) calculations for its products. Products which will not have a reliable calculated CFP, could suffer from a competitive disadvantage compared to more climate change-oriented competitors. As a company with many diverse products, ICL invests significant resources (in terms of personnel, time and funding) to answer growing world's demand for product Carbon Footprinting. ICL's sustainability department has gathered much expertise on the subject, as well as its progress in product Carbon Footprinting. Therefore, the change of consumer behavior represents both a risk and an opportunity for ICL, as the Company's efforts in this area position it as a leader in the climate change field, improving its overall reputation (and potentially therefore increasing its sales).

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Low

Potential financial impact

27000000

Explanation of financial impact

Potential implications are the loss of sales, due to consumers preference to products with a lower, reliable CFP value. For instance, a 0.5% drop in all ICL sales due to such reasons would result in a lost income of approximately $27 million (according to 2017 publicly available financial statements). However, ICL is likely to be more prepared for the change in consumers' behavior than others. Therefore, this issue is more likely to present an opportunity to potentially increase our sales.

Management method

ICL's Sustainably department has gathered much expertise on the subject. The Carbon Footprinting of our products is advancing at a steady pace, with more than 60 products under reliable carbon footprint analysis according to the British standard PAS2050. Our actions in this field significantly reduce the magnitude of this risk, and in fact turn it into an opportunity, if we can keep our position as leaders in climate change management.

Cost of management

200000

Comment

The costs associated with our actions are the costs of maintaining a dedicated and professional staff for the measuring and the analyzing of our GHG emissions and product Carbon Footprint. We estimate the overall costs at approximately $200 thousand annually (less than 0.01% of the company's total revenues).

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Competitive Advantage)

Company- specific description

One of the scenarios related to the Israeli government's strategy regarding climate change is the implementation of a local cap & trade scheme and/or the joining of the country to one of the existing global schemes. As a company that has achieved expertise in both carbon reporting and physical reductions, ICL could benefit from the implementation of a cap & trade scheme in Israel.

Therefore, we believe this potential development has become an opportunity for the Company .Currently, however, such a development seems unlikely due to the evident crisis in the global carbon market, and since this issue is currently not included in Israel's INDC (submitted as part of the Paris agreement).

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Low

Potential financial impact

4000000

Explanation of financial impact

Potential implications: Emission trading schemes offer financial benefits for companies that exhibit the best reduction per cost ratios. Based on our earnings from trading carbon credits through the clean development mechanisms, the potential financial income from implementing such a scheme in Israel could reach approx. $4 million annually for ICL (depending on fluctuations in the carbon market).

Strategy to realize opportunity

As a large producing company which has highly developed its methods to calculate its GHG emissions and to find the best opportunities for emission reductions, ICL has already significantly reduced its emissions and continues to do so. Therefore, ICL has developed a competitive advantage for such a potential scheme. To address the potential impact, ICL has already contracted its carbon credits within the CDM scheme up to 2012, and in some cases on a spot basis with no future commitments, allowing the company sufficient carbon credits to manage potential opportunities arising in carbon markets. In order of increasing the likelihood of this opportunity, ICL is advocating for an open, free carbon market in Israel whenever we are asked for our opinion.

Cost to realize opportunity

200000

Comment

There are no direct costs associated with these actions, except for maintaining the activities within the corporate SustaniblitySustainability Department. These ongoing costs are estimated at approximately $200 thousand annually (less than 0.05% of the company's net income).

Identifier

Opp2

Where in the value chain does the opportunity occur?
Customer
Opportunity type
Markets
Primary climate-related opportunity driver
Other
Type of financial impact driver
Other, please specify (Increased demand for existing products)
Company- specific description
The agricultural industry, in which ICL operates, is influenced by local weather conditions. Storms, long dryness periods, floods and extreme temperature changes could affect the agricultural product quality and its quantity, resulting in higher fertilizer usage per acre and therefore increased sales. One of the expected main effects of climate change is the increase in frequency of extreme events such as harsher and/or longer droughts, which naturally leads to loss of crops. If a country experiences a dramatic change in crops characteristics or output, the government could activate a mitigation plan under which it would increase subsidies to local producers / farmers. In some cases, a drought in one country could lead to increased fertilizer demand in another country which supplies its food, leading to increased profits for ICL in the supplier country. Therefore, change in precipitation extremes and droughts are considered both a risk and an opportunity for ICL.
Time horizon
Long-term
Likelihood
About as likely as not
Magnitude of impact
Low
Potential financial impact
30000000
Explanation of financial impact
Potential financial implications of this opportunity are the additional revenues from sales of fertilizers to the specific regions as a result of the change in climate patterns. These financial implications are very much dependent on the type of products and markets involved. For instance, a 1% increase in the sales of ICL Essential Minerals Segment (which produces, among else, fertilizers of diverse types) would result in a lost income of approximately 30 million dollars (according to 2017 figures).
Strategy to realize opportunity

ICL continues to explore new opportunities in developing markets, and expands its global position to benefit from any direct opportunity arising in this field (change in climate patterns). ICL's vast distribution of customers around the world enhances its ability to benefit from this opportunity and the magnitude of the opportunity.

Cost to realize opportunity

0

Comment

There are no significant costs associated with realizing this opportunity. The relevant marketing costs are included in the company's total selling and marketing costs (including shipping), which were approx. $746 Million at 2017, but are not considered a significant part in these costs.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Increased demand for existing products)

Company- specific description

ICL is a major producer of fertilizers, products which are needed globally to achieve the increasing need to produce more crops from a decreasing quantity of agricultural land. One of the expected effects of climate change is a rise in the level of the sea. Such a rise could significantly diminish the amounts of land available for all of mankind's needs, including agriculture. If the quantity of land used for agriculture is diminished, ICL’s sales of fertilizer will be impacted. However, the need to grow the same or more crops on less land could increase demand for fertilizers. Therefore, the rise in sea level represents both a risk and an opportunity for ICL.

Time horizon

Long-term

Likelihood

Very unlikely

Magnitude of impact

Low

Potential financial impact

30000000

Explanation of financial impact

Potential financial implications of this opportunity are the additional revenues from sales of fertilizers to the specific regions as a result of the potential rise in sea level. These financial implications are very much dependent on the type of products and markets involved. For instance, a 1% increase in the sales of ICL Essential Minerals Segment (which produces, among else, fertilizers of diverse types) would result in an added income of approximately 30 million dollars (according to 2017 figures).

Strategy to realize opportunity

ICL continues to explore new opportunities in developing markets, and expands its global position to benefit from any direct opportunity in this field (rise in sea level). ICL's vast distribution of customers around the world enhances its ability to benefit from this opportunity and the magnitude of it.

Cost to realize opportunity

0

Comment

There are no significant costs associated with realizing this opportunity. The relevant marketing costs are included in the company's total selling and marketing costs (including shipping), which were approx. $746 Million at 2017, but are not considered a significant part in these costs.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

As awareness of climate change increases, consumers are pressing governments and companies to take preventative action. This trend has been increasing since the COP 21 global climate agreement, in December 2015. ICL has experienced growing demand

from its clients to provide Carbon Footprint (CFP) calculations for its products. Products which will not have a reliable calculated CFP, could suffer from a competitive disadvantage compared to more climate change-oriented competitors. As a company with many diverse products, ICL invests significant resources (in terms of personnel, time and funding) to answer growing world's demand for product Carbon Footprinting. ICL's sustainability department has gathered much expertise on the subject, as well as its progress in product Carbon Footprinting. Therefore, the change of consumer behavior represents both a risk and an opportunity for ICL, as the Company's efforts in this area position it as a leader in the climate change field, improving its overall reputation (and potentially therefore increasing its sales).

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Low

Potential financial impact

27000000

Explanation of financial impact

Potential implications are increased sales, due to consumers preference to products with a lower, reliable CFP value. For instance, a 0.5% increase in all ICL sales due to such reasons would result in a lost income of approximately $27 million (according to 2017 publicly available financial statements). ICL is likely to be more prepared for the change in consumers' behavior than others. Therefore, this issue is more likely to present an opportunity to potentially increase our sales.

Strategy to realize opportunity

ICL's Sustainably department has gathered much expertise on the subject. The Carbon Footprinting of our products is advancing at a steady pace, with more than 60 products under reliable carbon footprint analysis according to the British standard PAS2050. Our actions in this field significantly reduce the magnitude of this risk, and in fact turn it into an opportunity, if we can keep our position as leaders in climate change management.

Cost to realize opportunity

200000

Comment

The costs associated with our actions are the costs of maintaining a dedicated and professional staff for the measuring and the analyzing of our GHG emissions and product Carbon Footprint. We estimate the overall costs at approximately $200 thousand annually (less than 0.01% of the company's total revenues).

Identifier
Opp5
Where in the value chain does the opportunity occur?
Customer
Opportunity type
Products and services
Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services
Type of financial impact driver
Increased revenue through demand for lower emissions products and services
Company- specific description
Consumer awareness to climate change is on the rise in all business segment, including agriculture. One of the main agricultural-related sources of GHG emission is N2O emitted from fertilizers in the use phase - due to unused nutrient nitrogen evaporating to the air. In the last decade, ICL has significantly expanded it's specialty fertilizers business- purchasing production sites and developing new, advanced and more environment-friendly fertilizers. One of the main groups of specialty fertilizers in ICL is CRF - controlled release fertilizers. These fertilizers have many environmental benefits, as they highly increase the % of nutrient uptake by the plants from those applied in the field/potted plant/turf. Among the negative effects minimized - is the N2O emission.
Time horizon
Current
Likelihood
Very likely
Magnitude of impact
Medium
Potential financial impact
30000000
Explanation of financial impact
Potential financial implications of this opportunity are the additional revenues from sales of speciatly fertilizers to the customers who have/will have preference to them. These financial implications are very much dependent on the type of products and markets involved. For instance, a 1% increase in the sales of ICL Essential Minerals Segment (which produces, among else, fertilizers of diverse types) would result in an added income of approximately 30 million dollars (according to 2017 figures).
Strategy to realize opportunity
Purchasing specialty production sites and developing new, advanced and more environment-friendly fertilizers.

Cost to realize opportunity
Comment

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	The growing demand for more environmentally friendly fertilizers- including those that would minimize N2O emission in use phase- have urged ICL to invest in both purchasing new sites/companies/technologies for specialty advance fertilizers, and also to invest significant resources and personnel to researching possible advances in such fertilizers. Magnitude is currently considered medium. See further explanation in Opp 5 above.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Some ICL customers have already been interested in carbon footprint values for products, climate change practices, CDP scores and etc- causing ICL to analyze the CFP values for over 60 products, and invest in gaining expertise in GHG inventory calculations. These requests were one of the reasons for our decision to implement a global sustainability IT data management system (the SoFi system). Magnitude is currently considered low (see explanation in Risk 8 and Opp 4 above).
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	The changing climate conditions and chances of floods was one the factors in ICL decisions to implement physical measures to deal with extreme weather conditions in the relevant sites, and to acquire insurance to protect itself from exposure to such natural disasters. Magnitude is currently considered low. See further explanation in Risk 6 above.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	The growing demand for more environmentally friendly fertilizers- including those that would minimize N2O emission in use phase- have urged ICL to invest in both purchasing new sites/companies/technologies for specialty advance fertilizers, and also to invest significant resources and personnel to researching possible advances in such fertilizers. Magnitude is currently considered medium. See further explanation in Opp 5 above.
Operations	Impacted for some suppliers, facilities, or product lines	The growing global pressure to reduce oil-based fuels consumption and reduce related GHG emissions was one the reasons for our major transition to natural gas dependency (replacing fuel oil and diesel) in almost all ICL Israel production installations. Magnitude is currently considered low. See further explanation in Risk 3 above).
Other, please specify	Impacted for some suppliers, facilities, or product lines	The growing scarcity of fresh water was one the reasons for our decision to maximize non-fresh water as a substitute. In the last decade, the organization has spent over $13 Million on drilling in the Sdom area, in purpose of extracting brackish water. In addition, some of the environmental investments mentioned above include the establishment of new wastewater facilities, allowing for greater recycling capacity of water. Magnitude is currently considered low. See further explanation in Risk 7 above.

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	As stated above, ICL has significantly expanded it's business of specialty fertilizers, among else- due to their benefit in reduced climate impact (less N2O emissions in use phase) .Therefore the share of revenues in ICL from advanced and specialty fertilizers has increased in the last decade. The company continues to vigorously market these products and trying to increase revenues from them. Magnitude is currently considered medium. See further explanation in Opp 5 above.
Operating costs	Impacted for some suppliers, facilities, or product lines	The growing global pressure to reduce oil-based fuels consumption and reduce related GHG emissions was one the reasons for our major transition to natural gas dependency (replacing fuel oil and diesel) in almost all ICL Israel production installations, and for implementing the corporate wide energy efficiency ACE program (see expansion in targets chapter 4 below). Both these steps have reduced operating costs. Magnitude is currently considered low. See further explanation in Risk 3 above).
Capital expenditures / capital allocation	Impacted for some suppliers, facilities, or product lines	The growing global pressure to reduce oil-based fuels consumption and reduce related GHG emissions was one the reasons for our major transition to natural gas dependency (replacing fuel oil and diesel) in almost all ICL Israel production installations, and for implementing the corporate wide energy efficiency ACE program (see expansion in targets chapter 4 below). Both these steps have required significant capital expenditures in technological improvements- but have had a short return period of the investment. Magnitude is currently considered low. See further explanation in Risk 3 above).
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	The growing demand for more environmentally friendly fertilizers- including those that would minimize N2O emission in use phase- have urged ICL to invest in both purchasing new sites/companies/technologies for specialty advance fertilizers, and also to invest significant resources and personnel to researching possible advances in such fertilizers. Magnitude is currently considered medium. See further explanation in Opp 5 above.
Access to capital	Not yet impacted	We have not found, at this moment, a clearly detected sign of any climate change related risk or opportunity effecting our access to capital.
Assets	Impacted for some suppliers, facilities, or product lines	The growing demand for more environmentally friendly fertilizers- including those that would minimize N2O emission in use phase- have urged ICL to invest in purchasing new assets (sites/companies/technologies) of specialty advanced fertilizers, and also to invest significant resources and personnel to researching possible advances in such fertilizers. Magnitude is currently considered medium. See further explanation in Opp 5 above.
Liabilities	Not yet impacted	We have not found, at this moment, a clearly detected sign of any climate change related risk or opportunity effecting our iabilities.
Other	Not yet impacted	We have not found, at this moment, a clearly detected sign of any climate change related risk or opportunity effecting other aspects of financial planning.

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?
Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?
No, and we do not anticipate doing so in the next two years

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.
No, we do not have a low-carbon transition plan

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.
ICL’s commitment to sustainability, and to mitigating climate change in particular, have become cornerstones for the company's strategy. ICL’s Global Sustainability Department (GSD) promotes corporate-wide initiatives for implementing ICL's overall climate-change strategy. The GSD promotes carbon reporting and reduction initiatives on both product and facility levels, from R&D to procurement to M&A policies. The GSD is also responsible for gathering, processing and consolidating needed climate change-related data from all ICL companies, reporting it to the CDP and other bodies, and issuing a corporate-wide GHG analysis for internal management purposes. The COE also reports on climate change and carbon footprint issues to senior management on a periodic basis, who in turn report regularly (quarterly/annual) to the Board of Directors. The gathered GHG emission trends

data is assessed annually, and is used to determine ICL's progress against our reduction target (see chapter 3 of this report), and determine the effectiveness of different possible reduction initiatives. We also began 'Carbon Footprinting' our products in 2008. Our methodology is the use of LCA analyses based on the rigorous UK standard PAS 2050. We have so far calculated the Carbon Footprint of over 60 main products worldwide. Our strategy is based on the premise that climate change is becoming an increasingly significant issue for consumers, governments and companies worldwide. For ICL, climate change can impact both the demand to our products and services, as well as our ability to supply them. The aspects of climate change that have especially influenced our strategy are therefore: volatility in precipitation across different geographies, floods and wildfires, sudden rise or decline sea water levels, and desertification of previously fertile lands in various parts of the world. In addition, the demand for sustainable products, most notably in developed markets, has yielded several requests to analyze our products' CFP, showing growing consumer awareness for climate change issues. These requests, usually received by the different marketing divisions, were reported to ICL's management and have accelerated ICL's strategic adaptation to climate change. Furthermore, we are aware of intensifying global legislation and regulation of all issues relating to climate change. These phenomena, and the need to ensure the long-term sustainability of our business, have encouraged ICL to pursue industry leadership in both product and corporate Carbon Foot printing. From a strategic perspective, in recent years we have been charting a work plan aimed at accelerating our long-term growth in a dynamically changing marketplace. With a diversified product portfolio and a strong reputation in the areas of fertilizers, water treatment, food additives, hygiene and safety, we are well positioned to offer solutions that promote the wellbeing of the global population facing the challenges of global warming, population growth and intensified urbanization – challenges that give rise, amongst other things, to shortages of food and usable water. To help address these problems, we plan to increase our portfolio of environmentally-friendly and carbon-efficient products (Examples: 'smart' fertilizers and advanced electricity batteries) significantly in the coming decades (over 10 years), both through increased R&D investment and through acquisitions. By capitalizing on our products and know-how in these areas, our goal is to set in motion a "virtuous circle" of sustainability that simultaneously increases our sales and profits. In the short term, the need for reliable, company-wide CFP calculations has led us to implement improved measurements of the full range of our carbon-related activities. Example: One of the most significant short-term climate-change related business decisions that we have made is to shift all our significant energy-consuming sites to use natural gas rather than fuel oil or diesel to power our operations (on a continues, long term basis). This decision, for which implementation has begun in 2010, was sparked, amongst other factors, by the need to use less carbon-intensive fuels. The transition is still in progress and is due to be completed for all relevant sites by the end of 2018. Other examples of short-term strategy were process changes – for example, we have implemented CDM projects to reduce our SF6 and N2O emissions, and thereby generated approx. $14 million in revenues related to Carbon Credit (current projects). These CDM projects (and the transition to natural gas, described below) were initiated, among else, to help ICL reach its current reduction target (30% by 2020, see below)- and thus meet the growing expectations of stakeholders such as regulators and growingly-climate-aware customers. Strategic advantage: We believe we have become one of the leading companies in the GHG field, not

only in Israel, but also on a global industry basis. We believe our efforts in this field have positioned us favorably to withstand growing consumer scrutiny and the public's preference for low-carbon economies. ICL continues the reporting of the Company's overall GHG emissions to both the CDP and to the voluntary reporting mechanism in Israel. In this way, we are demonstrating our commitment to the mitigation of climate change and our aim to assume leadership in climate change mitigation activities. Substantial business decision relevant to the reporting period: In 2017, ICL continued the transition to natural gas (which started in 2010, see further details on the decision above), and one of last remaining Israeli sites using Fuel Oil - ICL Rotem Zin- has also transitioned to natural gas (NG). After this transition and by the end of 2017, 95% (40/42) of ICL Israel's main energy-consuming installations were converted to NG, and 89% of the total remote fuel consumption of ICL Israel's facilities in 2017 was derived of NG.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?
As described above in 3.1C and chapter 2, Climate Change has been significantly imbedded in ICL's strategy, risk and opportun ity analysis and sustainable practices. We do not currently find climate-change scenarios do to have any further benefit to these processes. Our management and sustainability department must prioritize all possible initiatives, reporting frameworks and requests from our numerous stakeholders according to all sustainably aspects: Environment, Safety, Fair and Diverse employment, Ethics, Sustainable Products and procurement, Community Contribution etc. When considering all possible new development to our sustainability policy, we have so far not found climate-related scenarios to be cost-effective, and we therefore do not plan to use them in the next few years or beyond them. We are also not currently aware of interest in these scenarios by other stakeholders besides the CDP. This decision could possibly change in the future, if more stakeholders are interested in these scenarios.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Scope

Scope 1+2 (market-based) +3 (upstream & downstream)

% emissions in Scope

100

% reduction from base year

30

Base year

2008

Start year

2013

Base year emissions covered by target (metric tons CO2e)

4179550

Target year

2020

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)

77

Target status

Underway

Please explain

Same target as reported in 2017 CDP report (AbS1). After achieving our previous goal (reducing 20% of emissions in Israel fro m 2008 and 2012), we have determined a new, more ambitious goal for the coming years. Note: Some emission figures appearing in this report for previous years differ slightly from past publications of the same figures in CDP and other reports. As part of our constant efforts to improve the accuracy and fullness of our vast and complex GHG inventory, we correct and/or re -baseline our emissions in some necessary cases (examples- inclusion of previously missing ICL facilities within the GHG inventory, retro -active

addition of GHG-generating activities which were previously missing, retroactive corrections to some specific-ICL emission factors). All such differences are well within the uncertainty range declared in this year's report and the previous ones.

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	4	1830000
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Activity type

Other, please specify (Transition to natural gas)

Description of activity

<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

450000

Scope

Scope 1

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

70000000

Investment required (unit currency – as specified in CC0.4)

110000000

Payback period

1-3 years

Estimated lifetime of the initiative

>30 years

Comment

Since 2010, ICL has been undertaking a strategic transition to increasingly use natural gas (NG) instead of 'heavy' fossil fu els (fuel oil, diesel and naphtha) to power its largest production plants in Israel, resulting in a drastic reduction in the Company's use of fuel oil and diesel. The transition is now near completion. By the end of 2017, 95% (40/42) of ICL Israel's main energy -consuming installations were converted to NG, and 89% of the total remote fuel consumption of ICL Israel's facilities was derived of NG. In 2017 ICL Rotem Zin transitioned from fuel oil to NG. These measures are reducing our Scope 1 emissions directly by decreasing emissions from onsite energy combustion. In addition, they may reduce our Scope 2 emissions, as the employment of new, more efficient CHP plants effectively reduces ICL's dependency on the purchase of more carbon -intense external electricity. The transition was voluntary, in line with Israel's national energy strategy. The transition significantly improves our energy efficiency, and reduces energy, maintenance and other costs, thereby saving ICL ~70 million USD($) annually .This estimated yearly saving is expected after the completion of the conversion of all ICL facilities to NG usage, was determined according to currently known fuel prices, and might be revised due to future events such as fluctuations in fuel prices, the availability of NG etc.

Activity type
Process emissions reductions
Description of activity
New equipment
Estimated annual CO2e savings (metric tonnes CO2e)
1000000
Scope
Scope 1
Voluntary/Mandatory
Voluntary
Annual monetary savings (unit currency – as specified in CC0.4)
0
Investment required (unit currency – as specified in CC0.4)
900000
Payback period
1-3 years
Estimated lifetime of the initiative
>30 years
Comment
Changes in the manufacturing process of metal magnesium: Magnesium, when melted, ignites if it comes into contact with oxygen in the air, an occurrence which impairs the quality of the product. For this reason, it is common industry practice to "protect" the magnesium by using cover gases that prevent its exposure to oxygen. ICL Dead Sea Magnesium (DSM) has previously used SF6 as a cover gas. As awareness of the need for environmental protection grows, the industry has become more aware that SF6 is a greenhouse gas with significant greenhouse potential (22,800 CO2e). As such, ICL DSM has replaced this gas with HFC134a, a gas with a much lower GWP value. Currently, SF6 is no longer used at DSM. For this reduction initiative, ICL's DSM has chosen to employ the UN's Clean Development Mechanism (CDM) for the trading of approvals for the reduction of GHG's (Carbon Credits). This project, started in 2009, has resulted in a significant reduction in DSM's CFP and in ICL's overall CFP. DSM has reduced its Scope 1 process GHG emissions by over 90%. The change was voluntary, and the company has received CDM credit for it, generating over $13 million overall in income from carbon credits. This initiative is expected to operate on a permanent basis, without a limited lifespan (in terms of not using SF6. Income levels may vary according to fluctuations in the Carbon Market.

Activity type
Process emissions reductions
Description of activity
New equipment
Estimated annual CO2e savings (metric tonnes CO2e)
80000
Scope
Scope 1
Voluntary/Mandatory
Voluntary
Annual monetary savings (unit currency – as specified in CC0.4)
0
Investment required (unit currency – as specified in CC0.4)
700000
Payback period
1-3 years
Estimated lifetime of the initiative
>30 years
Comment
Reduction of process emissions from nitric acid production: ICL Haifa Fertilizers and Chemicals (F&C) operates a nitric acid facility which emits a small quantity of nitrous oxide (N2O).Since late 2007, ICL has been deploying an innovative system aimed at reducing its nitrous oxide emissions (per nitric acid production) by approx. 80%. At this stage, the actual reduction achieve d has reached approx. 60%, and the Company is continuing its efforts to improve the performance of the system. The project was approved by the CDM Framework and backed by Israel's National Committee for Clean Development, making it possible to trade Carbon Credits. The reduction is in Scope 1 process emissions. The change was voluntary, and ICL has received CDM credit for it. This initiative is expected to operate on a permanent basis, without a limited lifespan. The estimated eventual annual CO2e reduction is difficult to estimate in absolute terms- as the production level of nitric acid at this facility can vary significantly according to market needs. Average production of 2008-12 was used to estimate the expected savings in absolute terms.

Activity type
Energy efficiency: Processes
Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

300000

Scope

Scope 1

Scope 2 (market-based)

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in CC0.4)

43000000

Investment required (unit currency – as specified in CC0.4)

30000000

Payback period

<1 year

Estimated lifetime of the initiative

>30 years

Comment

In 2013, ICL launched a global energy efficiency program. For this purpose, ICL developed a standard methodology that could be applied at all locations. By the end of 2017, 26 of ICL's main sites have implemented this methodology. The main areas of efficiency projects implemented so far include: optimizing the control and use of equipment used in production processes, re-using the residual heat in production plant stacks, greater efficiency in the production of compressed air and steam, and deployment of advanced control systems for automatic shutdown of power, light and air-conditioning systems, and behavioral changes. ICL's ACE energy efficiency plan has reduced expenses by approximately USD 43 million overall in 2017 compared to the 2012 base year, and the goal is to reach a USD 46 million annual saving by 2020. This program is meant to reduce both Scope 1 and Scope 2 emissions (by conducting savings in both fuel and external electricity uses). The program is partially-voluntary and partially-mandatory (as energy efficiency requirements have been inserted as a condition to business licenses for some Israeli sites, but this does not cover all aspects and facilities covered in our program). The program is an on-going process which will continue in future years. The initiative is expected to operate on a permanent basis, without a limited lifespan. The expected annual GHG reduction may vary as new savings projects are planned and initiated.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	
Dedicated budget for energy efficiency	
Employee engagement	
Other	The financial potential of the CDM mechanism.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Company-wide

Description of product/Group of products

Some of ICL's products can be used by customers to prevent the generation GHG emissions. Examples: • In the last decade, ICL has significantly expanded it's specialty fertilizers business- purchasing production sites and developing new, advanced and more environment-friendly fertilizers. One of the main groups of specialty fertilizers in ICL is CRF- controlled release fertilizers. These fertilizers have many environmental benefits, as they highly increase the % of nutrient uptake by the plants from those applied in the field/potted plant/turf. Among the negative effects minimized- is the N2O emission. • Potash, a common fertilizer (one of ICL Fertilizers' main products): the use of potash makes the use of land by farmers more efficient, thereby preventing the need to convert additional forests or wetlands for agriculture. As such, the use of potash has a beneficial effect on the global carb on balance. Potash also increases plant sequestration of CO2 in comparison with other fertilizers. • Flame retardants (ICL Industrial

Products largest product lines) enhance resistance to fire in diverse applications and delay its spread. The fires prevented (or quenched more rapidly) reduce significant unnecessary carbon dioxide emissions. • ICL's chemical-based water treatment solutions enhance the fresh water supply in water-challenged regions, reducing the need to engage in energy-intensive, costly desalination projects.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Please select

% revenue from low carbon product(s) in the reporting year

Comment

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2008

Base year end

December 31 2008

Base year emissions (metric tons CO2e)

3050059

Comment

Scope 2 (location-based)

Base year start

January 1 2008

Base year end

December 31 2008

Base year emissions (metric tons CO2e)

972949

Comment

Scope 2 (market-based)

Base year start

January 1 2008

Base year end

December 31 2008

Base year emissions (metric tons CO2e)

939487

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

1908948

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure
Scope 2, market-based
We are reporting a Scope 2, market-based figure
Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?
Row 1
Scope 2, location-based
1173895
Scope 2, market-based (if applicable)
1138502

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.
Source
20-30 local offices and logistic centres
Relevance of Scope 1 emissions from this source
Emissions are not relevant
Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant
Explain why the source is excluded
ICL is a global large organization with over 45 producing facilities, and also has operational control over sales offices, headquarter offices and logistic centers around the world. The emission data which is gathered and calculated by the ICL Global Suitability Department includes relevant data from all producing facilities, but also from a few of ICL's main offices and logistic centers - which have always proved to be very negligible producers of GHG emissions in ICL general scales. For the other offices and logistic centers not included in the GHG inventory, we have made assumptions (using the values already known for offices and logistic centers in ICL) and can state with reasonable confidence that these locations constitute together under 0.5% of our total emissions. We therefore consider the emissions from these locations not relevant, due to the negligible size of emissions, due to the high burden and low cost-benefit value of obtaining the necessary data from these locations, due to the hardship of finding significant reduction opportunities in these locations (compared with the much more viable reduction opportunities existing in our production facilities), and since these locations are usually of no environmental interest to our stakeholders.

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.
Purchased goods and services
Evaluation status
Relevant, calculated
Metric tonnes CO2e
6882
Emissions calculation methodology
The emissions given in this line represent our GHG emissions related to externally sourced water. The emissions were calculated using DEFRA/DECC 2017 emission factors for supplied water. These EF's were used on all water purchased by the different ICL companies (tap water, well, river etc.). Quality of information is considered high, as most water figures are derived of primary data (invoices of water suppliers). In the minority of cases, where no metering is conducted, the consumption was estimated by the relevant facility personnel. The assumption is that these GHG emissions derive of electricity consumed in pumping and/or pre-treatment of the water by the suppliers. Other materials sourced externally have been assessed as part of our product footprinting analyses in cooperation with our consultants and ICL's purchasing and supply-chain departments. Our conclusion was that ICL did not have influence on potential reduction of emissions resulting from the production/supply of these materials,

and they were therefore excluded from our Scope 3 GHG inventory. This conclusion will be re-discussed and assessed in coming years, in regards to the results of the pilot participation in the CDP supplier engagement program.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

The potential amount (size) of GHG emissions deriving of purchased capital goods was assessed by the ICL Global Sustainability Department., and was determined to be insignificant. ICL is a large manufacturing organization, and any emission arriving from specifically purchased capital goods is likely to be very negligible compared the significant emissions resulting from our fuel combustion, electricity consumption and process GHG emissions.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

32168

Emissions calculation methodology

The emissions given in this line represent our Scope 3 GHG emissions related to the activity of contractor vehicles (not owned directly by ICL companies), mostly heavy machinery working in our plants. Emissions were calculated using DEFRA/DECC 2017 emission factors for fuels (usually diesel), and at some cases also based on DEFRA /DECC 2017 emission factors for heavy machinery activity, measured in km's or ton-km's). Quality of information is considered medium, as in many cases the contractors could not supply accurate fuel consumptions, and estimation were conducted by the facility personnel. Some of these emissions, from our smaller facilities outside of Israel, have not been calculated yet (and are expected to be completed in coming years). However, the figure supplied in this line nonetheless represents the grand majority of this relevant activity within our organization.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Upstream transportation and distribution

Evaluation status
Not relevant, explanation provided
Metric tonnes CO2e
Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners
Explanation
As a large manufacturing organization, there are naturally emissions related to the transportation of ICL's significant amount of externally purchased raw materials. These emissions were previously assessed as a one-time project by our consultants. The cases of raw material transportation that constitute the major part in these emissions were identified, and discussions were made regarding the findings with ICL's different purchasing departments. However, our conclusion was that for several reasons, ICL does have significant influence in order of reduce these emissions, and therefore- they are currently excluded from our Scope 3 GHG inventory.
Waste generated in operations
Evaluation status
Relevant, calculated
Metric tonnes CO2e
1325
Emissions calculation methodology
The emissions given in this line represent our Scope 3 GHG emissions related to the treatment of our wastes by external companies. The emissions were calculated using DEFRA/DECC 2017 emission factors according to the different waste streams and treatment method. Quality of information is considered medium, as in some cases specific metering of waste streams is available, but on many others- the amounts are still calculated based on mass balances or assumptions. Therefore, future corrections to the emissions provided in this line may be possible.
Percentage of emissions calculated using data obtained from suppliers or value chain partners
Explanation
Business travel
Evaluation status
Relevant, calculated
Metric tonnes CO2e
2092
Emissions calculation methodology

The emissions given in this line represent our Scope 3 GHG emissions related to flights taken by our company's personnel. The emissions were calculated using DEFRA/DECC 2017 emission factors for short/long haul flights (per one person traveling in the plane). An uplift factor was also used. Quality of information is considered medium, as in some cases specific km's/miles of flights taken by company employees was available, but on others- the km's were estimated or calculated using the number of flights taken and an average flight distance. Other business travel (by car, train) was estimated by the ICL Global Sustainability Department and is considered to be very negligible- and is therefore not annually calculated.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1951

Emissions calculation methodology

Scope 3 GHG emissions related to employee commute by regular daily buses, mini-buses and transits (not owned by ICL) which transport employees from different cities and towns in Israel (and some additional countries) to our facilities. Also included are special taxi rides taken in Israel. The emissions were calculated using DEFRA/DECC 2017 emission factors for diesel consumption, and km's travelled by bus. Quality of information is considered medium, as in some cases specific diesel consumptions were supplied, but on others- emissions were calculated using assumptions about the km's of bus travel and number of employees per ride. Other employee commuting (by personal vehicles of the employees) was estimated by the ICL Global Sustainability Department and is considered to be very negligible compared with other company fuel consumptions, and furthermore- relevant information is very hard to obtain. Therefore, our calculations cannot be regularly updated.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

The potential amount (size) of GHG emissions deriving of upstream leased assets was assessed by the ICL Global Sustainability Department, and was determined to be insignificant. ICL is a large manufacturing organization, and any emission arriving from our small number of upstream leased assets is likely to be very negligible compared the significant emissions resulting from our fuel combustion, electricity consumption and process GHG emissions. Therefore, we do not maintain an annual update of these emissions.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

133683

Emissions calculation methodology

The emissions given in this line represent our Scope 3 GHG emissions related to some of our downstream distribution by our companies. The figures included in the calculation are the fuels consumed during transportation of ICL goods by external contractors, working for our cargo transportation company (Mifaley-Tovala), and also by the Israeli national rail services (transporting ICL goods from the Tzefa terminal to Ashdod and Haifa harbors). The emissions were calculated using DEFRA/DECC 2017 emission factors for diesel and for ton-km of rail transportation. Quality of information is considered high, as in both cases relevant bills are supplied and available. As a large manufacturing organization, with a highly complex supply chain of products, we assume that there are further emissions related to our supply chain (transport by ships, trucks in countries outside of Israel). However, we currently assume our influence on these emissions to be quite negligible (and relevant information is very hard to obtain), and therefore do not currently calculate these added emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

ICL manufactures and sells hundreds of different products to many diverse customers around the world. Most of these products have several customers, with diverse usages for our many products. Any information on the processing, usage and end of life treatment of our products is very hard to obtain. Although the organization does actively promote safe and environmentally-

responsible usage of its products, we consider our influence on the GHG deriving of our co stumers actions (processing, usage and end of life treatment) to be insignificant. Therefore, we do not annually asses these emissions.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

ICL manufactures and sells hundreds of different products to many diverse customers around the world. Most of these products have several customers, with diverse usages for our many products. Any information on the processing, usage and end of life treatment of our products is very hard to obtain. Although the organization does actively promote safe and environmentally - responsible usage of its products, we consider our influence on the GHG deriving of our costumers actions (processing, usage and end of life treatment) to be insignificant. Therefore, we do not annually asses these emissions.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

ICL manufactures and sells hundreds of different products to many diverse customers around the world. Most of these products have several customers, with diverse usages for our many products. Any information on the processing, usage and end of life treatment of our products is very hard to obtain. Although the organization does actively promote safe and environmentally - responsible usage of its products, we consider our influence on the GHG deriving of our costumers actions (processing, usage and end of life treatment) to be insignificant. Therefore, we do not annually asses these emissions.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
The potential amount (size) of GHG emissions deriving of downstream leased assets was assessed by the ICL Global Sustainability Department, and was determined to be insignificant. ICL is a large manufacturing organization, and any emission arriving from our small number of downstream leased assets is likely to be very negligible compared the significant emissions resulting from our fuel combustion, electricity consumption and process GHG emissions. Therefore, we do not annually asses these emissions.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
The potential amount (size) of GHG emissions deriving of franchises was assessed by the ICL Global Sustainability Department, and was determined to be insignificant. ICL is a large manufacturing organization, and any emission arriving from our franchises not operationally controlled by ourselves is likely to be very negligible compared the significant emissions resulting from our fuel combustion, electricity consumption and process GHG emissions at our operationally controlled facilities. Therefore, we do not annually asses these emissions.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
The potential amount (size) of GHG emissions deriving of investments was assessed by the ICL Global Sustainability Department, and was determined to be insignificant. ICL is a large manufacturing organization, and any emission arriving from our investments in facilities not operationally controlled by ourselves is likely to be very negligible compared the significant emissions resulting from our fuel combustion, electricity consumption and process GHG emissions at our operationally controlled facilities. Therefore, we do not annually asses these emissions.

Other (upstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners
Explanation
Other (downstream)
Evaluation status
Not evaluated
Metric tonnes CO2e
Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners
Explanation

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.
Intensity figure
0.0005625
Metric numerator (Gross global combined Scope 1 and 2 emissions)
3047451
Metric denominator
unit total revenue
Metric denominator: Unit total
5418000000
Scope 2 figure used
Market-based

% change from previous year
1.6
Direction of change
Increased
Reason for change
Text field [maximum 2,400 characters] While ICL Revenues increased by 1% in 2017 (compared with 2016), emissions increased by 2.6% and therefore a minor increase was experienced in emissions per revenues. The increase in emissions is mostly related to Scope 2 electricity emissions. A large portion of the total electricity consumption of ICL is in ICL Israel production sites. Most these sites had contracts with private natural gas (NG) based power plants in Israel in recent years, providing them access to electricity with a relatively low carbon footprint. These contracts expired in early 2017, and most ICL Israel Electricity consumed in 2017 was from the national Israeli electricity corporation (IEC), which are still partially coal-based and therefore have a higher emission intensity per KWh. In 2018, a new, effciecnt.NG-based power plant built in ICL Dead Sea is due to begin full operation and supply most of the electricity needs of the ICL Israel sites- and therefore we expect a reduction in these emissions in 2018.

Intensity figure
241
Metric numerator (Gross global combined Scope 1 and 2 emissions)
3047451
Metric denominator
full time equivalent (FTE) employee
Metric denominator: Unit total
12627
Scope 2 figure used
Market-based
% change from previous year
9
Direction of change
Increased
Reason for change
As explained above (emissions per revenue)- the total emission have slightly increased in 2017 (compared with 2016). However the main reason for the increase in this intensity metric is the 6% decrease in global FTE's of ICL.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	1872470	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	3318	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	8498	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	24662	IPCC Fourth Assessment Report (AR4 - 50 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Israel	1385571
Other, please specify (Rest of World)	523377

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
ICL Essential Minerals	1536652
ICL Specialty Solutions	372296

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	1908948	<Not Applicable>	
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Israel	654610	606767	1047973	0
Other, please specify (Rest of World)	519285	531735	1076060	99597

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
ICL Essential Minerals	977934	956952
ICL Specialty Solutions	195961	181550

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	1173895	1138502	
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-CH7.8

(C-CH7.8) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology

C-CH7.8a

(C-CH7.8a) Disclose sales of products that are greenhouse gases.

	Sales, metric tons	Comment
Carbon dioxide (CO2)	24678	Sold as input CO2 for carbonated drinks
Methane (CH4)	0	
Nitrous oxide (N2O)	0	
Hydrofluorocarbons (HFC)	0	
Perfluorocarbons (PFC)	0	

	Sales, metric tons	Comment
Sulphur hexafluoride (SF6)	0	
Nitrogen trifluoride (NF3)	0	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	Please select	0	
Other emissions reduction activities	23000	Decreased	0.8	00 In 2017 a total of ~23,000 tonnes CO2e were reduced by our emissions reduction initiatives, and our total S1 and S2 emissions in the previous year were 2,969,548 tonnes CO2e, therefore we arrived at 0.8% through (23,000 / 2,969,548)*100= 0.8%. The majority of this reduction specifically in 2017 is due to the ACE energy efficiency program, and the transition of one more site- ICL Rotem Zin- to NG combustion. See section "targets and initiatives" of this report for further details on this initiative.
Divestment	0	Please select	0	
Acquisitions	0	Please select	0	

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Mergers	0	Please select	0	
Change in output	0	Please select	0	
Change in methodology	0	Please select	0	
Change in boundary	0	Please select	0	
Change in physical operating conditions	0	Please select	0	
Unidentified	0	Please select	0	
Other	100000	Increased	3.4	In 2017 a total of ~100,000 tonnes CO2e was increased due to other reasons (see below), and our total S1 and S2 emissions in the previous year were 2,969,548 tonnes CO2e, therefore we arrived at 3.4% through (100,000 / 2,969,548)*100=3.4%. This increase in emissions is mostly related to Scope 2 electricity emissions. A large portion of the total electricity consumption of ICL is in ICL Israel production sites. Most these sites had contracts with private natural gas (NG) based power plants in Israel in recent years, providing them access to electricity with a relatively low carbon footprint. These contracts expired in early 2017, and most ICL Israel Electricity consumed in 2017 was from the national Israeli electricity corporation (IEC), which are still partially coal-based and therefore have a higher emission intensity per KWh. In 2018, a new, effciecnt.NG-based power plant built in ICL Dead Sea is due to begin full operation and supply most of the electricity needs of the ICL Israel sites- and therefore we expect a reduction in these emissions in 2018.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	6381839	6381839
Consumption of purchased or acquired electricity	<Not Applicable>	27363	1883654	1911017

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	72234	115313	187547
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	99597	8380806	8480403

C-CH8.2a

(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	6381839
Consumption of purchased or acquired electricity	<Not Applicable>	1911017
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	187547
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0
Total energy consumption	<Not Applicable>	8480403

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	Yes
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Natural Gas
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
5492952

Fuels (excluding feedstocks)
Oil Shale
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
343778

Fuels (excluding feedstocks)
Diesel
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
265776

Fuels (excluding feedstocks)
Fuel Oil Number 1
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
141766
Fuels (excluding feedstocks)
Coal
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
93412

Fuels (excluding feedstocks)
Petrol
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
36463

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)
Heating value
LHV (lower heating value)
Total fuel MWh consumed by the organization
7437

Fuels (excluding feedstocks)
Kerosene
Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
255

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.
Coal
Emission factor
0.10002
Unit
metric tons CO2e per metric ton
Emission factor source
DEFRA (11/2017)-Sheet-Table-Factor: Fuels - Solid fuels - Coal (domestic) - Energy - Net CV (Net CV basis) Scope 1
Comment
Diesel
Emission factor
0.0743
Unit
metric tons CO2e per GJ
Emission factor source
DEFRA (11/2017)-Sheet-Table-Factor: Fuels - Liquid fuels - Diesel (100% mineral diesel) - Energy - Net CV (Net CV basis) Scope 1
Comment
Fuel Oil Number 1
Emission factor
0.09416
Unit
metric tons CO2e per GJ
Emission factor source
DEFRA (11/2017)-Sheet-Table-Factor: Fuels - Liquid fuels - Fuel oil - Energy - Net CV (Net CV basis) Scope 1+WTT- fuels - WTT- liquid fuels - Fuel Oil - Energy - Net CV (Net CV basis) Scope 3

Comment

Kerosene

Emission factor

0.0721

Unit

metric tons CO2e per GJ

Emission factor source

DEFRA (11/2017)- Sheet-Table-Factor: Fuels - Liquid fuels - Burning oil - Energy - Net CV (Net CV basis) Scope 1

Comment

(we consider burning oil and kerosene to be the same)

Liquefied Petroleum Gas (LPG)

Emission factor

0.06398

Unit

metric tons CO2e per GJ

Emission factor source

DEFRA (11/2017)- Sheet-Table-Factor: Fuels - Gaseous fuels - LPG - Energy - Net CV (Net CV basis) Scope 1

Comment

Natural Gas

Emission factor

0.05684

Unit

metric tons CO2e per GJ

Emission factor source

DEFRA (11/2017)- Sheet-Table-Factor: Fuels - Gaseous fuels - Natural gas - Energy - Net CV (Net CV basis) Scope 1

Comment

Oil Shale

Emission factor

0.1869

Unit

metric tons CO2e per GJ

Emission factor source
Calculated by ICL Rotem environmental personnel, to match specifics of Oil Shale used by ICL Rotem in the Negev Desert, Israel. Approved by the voluntary reporting mechanism of the Israeli government .
Comment
Petrol
Emission factor
0.07031
Unit
metric tons CO2e per GJ
Emission factor source
DEFRA (11/2017)- Sheet-Table-Factor: Fuels - Liquid fuels - Petrol (100% mineral petrol) - Energy - Net CV (Net CV basis) Scope 1
Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	798593	798593	0	0
Heat				
Steam				
Cooling				

C-CH8.2e

(C-CH8.2e) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

	Total gross generation (MWh) inside chemicals sector boundary	Generation that is consumed (MWh) inside chemicals sector boundary
Electricity	798593	798593
Heat		
Steam		
Cooling		

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor

Contract with suppliers or utilities (e.g. green tariff), supported by energy attribute certificates

Low-carbon technology type

Wind
Hydropower
Biomass (including biogas)

MWh consumed associated with low-carbon electricity, heat, steam or cooling

99597

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

Steam and Electricity Consumption in ICL Austria Hartberg are both carbon neutral (figure above is sum of both): - Our electricity is CO2 neutral; The supplier "Stadtwerke"provides a CO2 neutral Certificate; 100% renewables, carbon neutral (89% hydro; 7% wind; 4% biomass and other) - Steam comes from the supplier "KELAG" and generated out of wood chips - wood chips are CO2 neutral - a Certificate is supplied

C-CH8.3

(C-CH8.3) Disclose details on your organization's consumption of feedstocks for chemical production activities.

Feedstocks
Natural gas
Total consumption
0
Total consumption unit
thousand cubic metres
Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit
2.03
Heating value of feedstock, MWh per consumption unit
10.68
Heating value
LHV
Comment
Natural gas only used for combustion and energy creation, not as feedstock

C-CH8.3a

(C-CH8.3a) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

	Percentage of total chemical feedstock (%)
Oil	
Natural Gas	0
Coal	
Biomass	
Waste	
Fossil fuel (where coal, gas, oil cannot be distinguished)	
Unknown source or unable to disaggregate	

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products.

Output product

Other, please specify (Potash, all types (from ICL Dead Sea))

Production (metric tons)

3645928

Capacity (metric tons)

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.095

Electricity intensity (MWh per metric ton of product)

Steam intensity (MWh per metric ton of product)

Steam/ heat recovered (MWh per metric ton of product)

Comment

The emission intensity above is the carbon footprint (CFP) value calculated for Potash, fine grade, from ICL Dead Sea, in 2009 (based on 2008). Current value is expected to be lower due to reduction initiatives taken since - but has not been recalculated yet. CFP for Potash Granulated Grade: 0.161 tonnes CO2e per tonnes product.

C-CH9.6

(C-CH9.6) Disclose your organization's low-carbon investments for chemical production activities.

Investment start date

Investment end date

Investment area
Products
Technology area
Other, please specify (Renewable Energy Storage)
Investment maturity
Pilot demonstration
Investment figure
Low-carbon investment percentage
81 - 100%
Please explain
Deploying Innovative Bromine-Based Battery Technology for Energy Storage: Energy storage is the capture or storage of energy produced so it can be used at a later time. One of the greatest challenges to the success of renewable energy is the ability to ensure continuity of supply. Storing the energy created from renewable resources (wind and solar energy) while it is generated, makes power available even when energy production is down. The transition to renewable energy is an important societal challenge. ICL has developed special chemical blends required to create zinc bromine 'flow' batteries which are ideally suited for storing large amounts of energy. These batteries are contributing to efforts to solve the energy storage problem. By creating these special chemical blends and recycling these chemicals, ICL assures that this technology is fully sustainable, in its post-use phase, as well. The company's innovative 'energy storage' provides a complete chemical support for producers of zinc bromine flow batteries. ICL is currently the only company in the world that can deliver this complete solution. In 2016, ICL's accomplishment was recognized by the Netherlands' national chemical industry association (VNCI), with its nomination of ICL for the Dutch Responsible Care Award in 2016. The annual prize recognizes outstanding approaches to Responsible Care and Sustainable Development in the chemical industry. For further information on the deployment of innovative battery technology for energy storage, please see page 112 in our 2015 Corporate Responsibility Report.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope
Scope 2 market-based
Verification or assurance cycle in place
Annual process
Status in the current reporting year
Complete
Type of verification or assurance
Moderate assurance
Attach the statement
C0001 - AA1000 Assurance Statement - Amfert NL - August 2018 Final.pdf
Page/ section reference
Pages 1-3 (entire document)
Relevant standard
A1000AS
Proportion of reported emissions verified (%)
1

Scope
Scope 1
Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete
Type of verification or assurance
Reasonable assurance
Attach the statement
2017 AEM Report- CPL.pdf
Page/ section reference
Pages 16-26; This is for ICL UK Cleveland Potash (Boulby mine)
Relevant standard
European Union Emissions Trading System (EU ETS)
Proportion of reported emissions verified (%)
1

Scope
Scope 1
Verification or assurance cycle in place
Annual process
Status in the current reporting year
Complete
Type of verification or assurance
Reasonable assurance
Attach the statement
Informe emisiones GEI IBERPOTASH Suria.PDF
Page/ section reference
p 1-17 (entire document; available only in Catalan, no English version); This is for ICL Iberia Iberpotash (Suria mine)
Relevant standard
European Union Emissions Trading System (EU ETS)
Proportion of reported emissions verified (%)
1

Scope
Scope 1

Verification or assurance cycle in place
Annual process
Status in the current reporting year
Complete
Type of verification or assurance
Reasonable assurance
Attach the statement
Informe_emisiones_GEI_IBERPOTAH_Sallent.PDF
Page/ section reference
p 1-17 (entire document; available only in Catalan, no English version); This is for ICL Iberia Iberpotash (Sallent mine)
Relevant standard
European Union Emissions Trading System (EU ETS)
Proportion of reported emissions verified (%)
1

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.
EU ETS
% of Scope 1 emissions covered by the ETS
3
Period start date
January 1 2017
Period end date
January 1 2017
Allowances allocated
46000
Allowances purchased
0
Verified emissions in metric tons CO2e
54648
Details of ownership
Facilities we own and operate
Comment
Only two companies owned and operated by ICL participate in the EU-ETS: ICL Iberia Iberpotash, and ICL U.K CPL. Also, only some of the installations in both these companies are included in the EU-ETS scheme.

C11.1d

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

ICL's sustainably department coordinates a quarterly update meeting of all relevant parties to the EU-ETS (managers from both sites participating in the EU-ETS, finance team form global HQ, and carbon pricing specialists), to make sure all activities are informed and coordinated. Total emissions of sites in EU-ETS was larger in 2017 than the given allowances, but both sites have large unused surpluses from previous years and therefore we do not anticipate a need to purchase external credits in the next few years. Currently, both sites are in contact with relevant regulators regarding the allowances expected in the next stage of the EU-ETS (from 2020 and onwards). In case in ICL UK CPL- emissions are expected to reduce in upcoming years due to switch from production of mainly Potash to mainly Polysulphate- a less carbon intense product. In addition, both sites have underwent the ACE energy efficiency ICL program (see Targets and performance chapter of this report), and have already implemented energy efficiency projects that would both reduce energy costs and reduce GHG emissions- assisting with meeting the EU-ETS allowances.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

1

% total procurement spend (direct and indirect)

17

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

76 key suppliers were prioritized and chosen for the second pilot year of the CDP supplier engagement program, as a sample group which represents a significant amount of total procurement for ICL.

Impact of engagement, including measures of success

Our main focus for 2017, ICL's second year in the CDP supplier engagement program, was increasing the response rate of our suppliers to the data request. Our goals/measures for success for the second year were that at least 30% of approached suppliers will report to the CDP at ICL's request. Final 2017 Response rate of suppliers was 45% (34/75 suppliers completed the report). And therefore the target was achieved. Through the data supplied (especially question SM 2.1) we looked to find routes of possible cooperation with our suppliers to reduce emissions for both sides. If this initiative is successful and expanded (to more suppliers and/or other sustainability issues), we hope to gather enough data to enhance the sustainability and climate-change related considerations if our supplier assessments, and increase these consideration weight in the choice of suppliers. However, this process is still in its first steps.

Comment

In early 2016, ICL has become the first fertilizer and/or chemical company to join the CDP supplier engagement program, and has continued membership for a second year in 2017. Through this program, which includes over 100 global leading businesses, the ICL Global procurement organization has asked its main key suppliers to disclose their GHG emissions and climate change mitigation strategies, through the internationally recognized CDP reporting methodologies. ICL has joined the CDP supplier engagement program in purpose of increasing its positive impact regarding the global struggle against climate change, and of increasing its overall sustainability-related collaboration with its suppliers and the CDP organization. This was the first global-organizational level sustainability scheme that ICL has undertaken in relation to its suppliers. The ICL Global procurement organization considered this initiative as a successful pilot. Currently, in 2018, ICL has discontinued it's membership of this

program, and is now in process of joining a wider program that would cover all sustainability aspects of our suppliers, inclu ding climate change.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

Size of engagement

1

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Since initiating the ICL GHG project at 2008, ICL has initiated several efforts alongside partners and customers to reduce GH G emissions throughout the life cycle. In some cases we have even approached our customers with carbon data and presented them with facts and figures on our performance. For example, ICL's bromine-based flame retardants offer a low-carbon alternative to phosphorus-based retardants used for fire safety purposes. ICL has also received several requests for carbon footprint values for our products by our customers (and the frequency of these requests has increased lately, since the COP 21 global climate agreement). In all such cases- we are determined to readily provide them with these values. In some cases, where these requests are for products that have not been assessed yet (as of today, we have calculated ~60 products carbon footprints, but our organization offers hundreds of different products) these requests help us determine the prioritization of product assessments. The required products are given high priority within our decision on which batch of products to assess in any given time. The customers selected: those who are actively asked for climate related data, or customers for products where ICl is interested to communicate the climate related (and other benefits) related to it's solutions. We have selected 1% in size of engagement sin ce the number of customers actively interested in climate change aspects still remains very minor compared to ICL's very wide and diverse customer base. However, we believe this % could be expanded in the future and further such requests would arrive.

Impact of engagement, including measures of success

Success is measured by our ability to provide our customers with the CFP value of our products immediately after their request (if already calculated) or within a reasonable timeframe (if calculation is still needed), and in our ability to maintain and enhance long-standing business engagement with such customers. The impact of these requests which we have already managed to answer- is the enhancement of this business engagement. However this impact for now remains limited - since the number of customers actively interested in climate change aspects still remains very minor compared to ICL's very wide and diverse customer base. However, we believe this % could be expanded in the future and further such requests would arrive.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Voluntary and Mandatory Carbon reporting)	Support	Voluntary and Mandatory Carbon reporting In the last 8 years: ICL has become one of the first companies to make a GHG emission report to the voluntary GHG reporting mechanism established by the Israeli Ministry for the Protection of the Environment. Member companies, such as ICL, have been asked to help shape the evolving mechanism: for example, ICL has suggested the inclusion of a number of factors relevant to chemical companies. ICL believes that its participation will be a positive catalyst for the participation of other Israeli companies, thus helping Israel to achieve its nationwide climate change mitigation targets. The voluntary mechanism was generally believed to be the basis for a future mandatory reporting scheme in Israel. Meanwhile, the Israeli PRTR reporting mechanism	ICL has often voiced it's opinion on the need to coordinate and unify the reporting methodologies and boundaries of GHG emissions between the Israeli voluntary GHG reporting mechanism and the Israeli PRTR reporting mechanism. We believe this would both reduce reporting burden from the participating companies, and help avoid confusion amongst our stakeholders regarding the actual amounts of annual GHG emissions.

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
		(established in 2012) has included a different, partial mandatory reporting of GHG emissions of the different ICL facilities within Israel. ICL representatives are participating in round table forums regarding the PRTR law, and voice their support in mandatory GHG reporting and their experience-based opinions on the best way of implementing this type of reporting.	
Cap and trade	Support	ICL representatives have taken an active role in several discussions in recent years with government representatives in Israel regarding the possibility of the country joining the EU-ETS, expressing their support in such a development. As a local leader in GHG accounting and reduction, ICL is well prepared to participate in any future emission trading scheme and would profit from Israel's joining of an international emission trading program.	
Energy efficiency	Support	ICL has implemented several energy efficiency programs in its global facilities, and supports energy efficiency schemes proposed by governments in territories where the company operates.	
Other, please specify (Support of climate change management)	Support	As one of the leading climate change activist companies in Israel, a country which is moving ever closer towards the legislation of carbon-limiting initiatives, ICL is regularly asked to state its opinion regarding proposed carbon initiatives, drafts of new Carbon Footprint (CFP) standards, etc. For example, ICL's representatives took an active part in a national GHG mitigation committee (Israel's GHG Reduction curve), and in discussions regarding Israel's proposed national reduction plan, submitted as part of the COP 21 global climate agreement. We often voice ICL's support of stricter climate change policies and potential emission-trading schemes. ICL's sustainability department representatives are frequently asked to lecture on ICL's CFP work, with an emphasis on the marketing and material advantages that the program has generated so far. This is another sign that ICL is viewed as a leader for climate change-related activities within Israel. ICL frequently asks its suppliers to provide CFP accounting for their products as an input for ICL's	

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
		product CFP calculations. This is one of the ways in which ICL is encouraging other companies to conductproduct CFPs.	

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?
Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.
Trade association
Israel's Manufacturers Association
Is your position on climate change consistent with theirs?
Consistent
Please explain the trade association's position
Supporting Climate Change legislation and mitigation policies
How have you, or are you attempting to, influence the position?
ICL is an active member of Climate Change committees as part of Israel's Manufacturers Association. As one of the leading climate change activist companies in Israel, we encourage other manufacturing companies to report and manage their GHG emissions, and for the manufacturers association to take a positive active role in shaping GHG legislation in Israel in a matter that would be beneficial for both the industry and the efforts to mitigate climate change.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

All our activities regarding influence on climate change policies are coordinated by and reported to the ICL Global Sustainability department (GSD), which leads the implementation of ICL's climate change strategy, as determined by ICL's management. The GSD reports these issues fluently to ICL's global VP EHS, and common decisions are made and communicated internally on the corporation's position on different policy issues- to all internal parties who are in contact with policy makers or other relevant external parties. In this way- we ensure that our climate change strategy is indeed reflected and represented in all activities that could influence policies.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary sustainability report
Status
Underway – previous year attached
Attach the document
ICL-Corporate-Responsibility-Report-2016.pdf
Content elements
Governance
Strategy
Emissions figures
Emission targets
Other metrics

Publication
In mainstream reports
Status
Complete
Attach the document
ICL-2017-Annual-Report-20-F.pdf
Content elements

Governance
Strategy
Risks & opportunities
Other metrics

Publication
Other, please specify (Voluntary report of GHG's to Israeli gov)
Status
Complete
Attach the document
2017_ICL_original_form_9.8.18.xlsx
Content elements
Emissions figures

C14. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.
Some information in this document is based upon certain sections from ICL's 2017 Annual financial (F-20) report. You are advised to review the entire report, available on our internet site at: http://www.icl-group.com. For details regarding adjustments you should refer to the full documentation as published. You should not assume that the information contained herein is accurate as of any date other than the date of this document. We are not providing you with any investment, legal, business or tax advice. All statements, other than statements of historical facts included in this document, may be forward-looking statements. Although we believe that the expectations reflected in these forward-looking statements are reasonable, we can give no assurance that such expectations will prove to have been correct. Such forward looking information involves risks and uncertainties, including those referred to in the company's 2017 Annual financial (F-20) report referred above. Some of the market and industry data contained in this document are based on independent industry publications or other publicly available information, while other information is based on internal studies and/or estimates. Although we believe that these sources and our internal data are reliable, as of their

respective dates, the information contained in them has not been independently verified, we cannot assure you as to the accuracy or completeness of this information. As a result, you should be aware that the market and industry data contained in this document and beliefs and estimates based on such data, may not be reliable. © ICL 2018

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Global Sustainability Manager	Environment/Sustainability manager