

ECOLEAN SUSTAINABILITY REPORT 2018



ecolean
a lighter approach to packaging

ecolean

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ABOUT THIS REPORT

THIS IS ECOLEAN'S SECOND SUSTAINABILITY REPORT THAT COVERS THE REPORTING PERIOD FOR 2018.

The report has been prepared in accordance with the GRI Standards: Core option. No significant changes or restatements of information have occurred compared with our last sustainability report 2017. Our reporting cycle is annual. Our Sustainability Reports can be found at: ecolean.com/sustainability. The Ecolean Sustainability Report covers all activities within the Ecolean Group during 2018. This includes Ecolean AB and the subsidiaries Ecolean (Tianjin) Co., Ltd., Ecolean Inc., Ecolean Pakistan (Pvt) Ltd., Ecolean SE Asia SDN. BHD, and UMZ Ecolean Ltd.

The Ecolean packaging material production plants in Sweden and China are certified in accordance with ISO 14001. We have a long history of monitoring environmental data and take the precautionary principle. During 2018, our filling lines operation was certified in accordance with ISO 14001.

Please contact our Sustainability Manager Anna Palminger (anna.palminger@ecolean.se) with any queries on the Ecolean Sustainability Report.



HIGHLIGHTS IN 2018

<p>Launch of Ecolean® Filling Machine EL3+ for filling family-sized packages for ambient distribution.</p>	<p>LAUNCH OF ECOLEAN® FILLING MACHINE EL6 FOR FILLING PORTION-SIZED PACKAGES FOR AMBIENT DISTRIBUTION.</p>	<p>First filling machines installed in Mexico and USA.</p>
<p>Acquisition of a 30 000 square metre piece of land in Landskrona, Sweden, to establish a new material production facility.</p>	<p><i>Construction of our third production plant continued in Lahore, Pakistan.</i></p>	<p>Participated at Anuga Foodtec, Cologne, Germany.</p>
<p><i>814 million litres of liquid food products sold in Ecolean packaging around the world.</i></p>	<p>First products in Ecolean® Air Aseptic Clear packaging were launched in China.</p>	<p><i>401 employees – 78 women, 323 men</i></p>

THIS IS ECOLEAN

ECOLEAN IS A RAPIDLY GROWING AND GLOBALLY-EXPANDING SYSTEM SUPPLIER OF BOTH LIGHTWEIGHT PACKAGING AND FILLING LINE EQUIPMENT.

ECOLEAN – IN BRIEF

Ecolean is a privately-owned company, founded in 1996 in Helsingborg, Sweden. Our headquarters are located in Helsingborg and Ecolean has production sites in Sweden and China. A third production plant in Lahore, Pakistan is under construction.

Ecolean has commercial activities in 30 countries, and our largest markets are China, Russia and Pakistan. The company has local sales offices in twelve locations around the globe that also provide technical support. During 2018, a new sales office opened in Dubai.

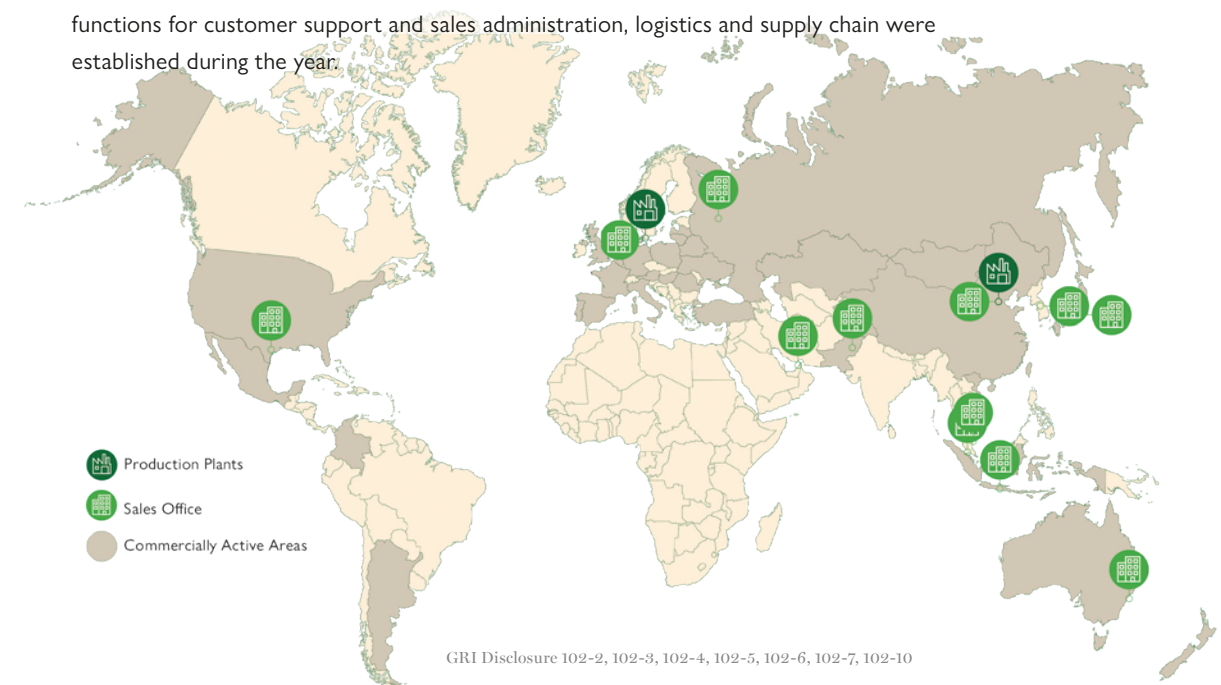
In 2018, Ecolean had net sales of SEK 1 097.9 (917.9) million and total capitalisation of SEK 1 919.1 (1 603.9) million (equity SEK 1 573.6 (1 242.5) million and debt SEK 345.5 (361.4) million). No changes of the share capital structure has occurred during the year.

OUR CONCEPT

The Ecolean concept is to use minimal raw materials to produce unique flexible lightweight packaging and filling systems for liquid food products. Ecolean is a system supplier for the liquid food industry that continuously develops its products in order to meet new customer and consumer demands.

INVESTMENTS IN 2018

During the year, major investments have been made in a new production plant in Pakistan and the decision was taken to construct a new material production plant in Sweden. Land was acquired in Landskrona, Sweden, for the plant and construction has begun. Global functions for customer support and sales administration, logistics and supply chain were established during the year.



- FOUNDED IN 1996 IN HELSINGBORG, SWEDEN
- COMMERCIAL ACTIVITIES IN 30 COUNTRIES
- LOCAL SALES OFFICES IN TWELVE LOCATIONS AROUND THE GLOBE
- NET SALES OF SEK 1 097.9 (917.9) MILLION

CEO STATEMENT

We made excellent progress on our 'People' and 'Packaging Solutions' strategic focus areas in 2018 as we firmly established ourselves as a sustainability leader in the packaging industry.

2018 was another eventful year with expansion into new markets with new customers and product categories as well as strategic collaborations with our existing customers. As part of our long-term strategy and in order to meet the increasing demand for our packaging solutions we are right now building two new factories. In Landskrona, Sweden, we started the construction of a new factory for material production which will be up and running in 2020. Our new factory in Pakistan neared completion and will be opened in 2019. Together these factories will create around 200 new job opportunities.

Ecolean's mission is to provide the world with safe and convenient packaging solutions with minimal environmental impact. This is core when developing our packaging systems further, and the launch of two new aseptic filling machines, EL3+ and EL6, are proof of that. The highly innovative machines were launched during 2018 and offer higher capacity, reduced environmental impact and competitive operational costs, while maintaining the same footprint compared to previous versions. They are also easy to operate, as all our filling machines.

In our packaging material operations, we sent zero waste to landfill for the first time in 2018, which is a fantastic achievement that we can all be proud of. However, with new production facilities opening in the coming years, we will continue to closely monitor our waste processes and performance to ensure we achieve our zero waste to landfill goal by 2030.

At the Anuga FoodTec trade fair in, Cologne, Germany in March 2018 we introduced our Environmental Product Declarations (EPDs), which were very well received by our customers and partners. As the first packaging system supplier to conduct life-cycle analyses of our entire systems, we have set the sustainability standard in the industry for others to follow.

I believe that the life-cycle perspective will become increasingly important, particularly in the face of societal concern over plastic recycling and littering. As we cannot overcome this challenge alone, we have joined the European project CEFLEX (a circular economy for flexible packaging), which aims to make flexible packaging more relevant to the circular economy. At the same time, we have also decided to support local recycling initiatives in certain markets.

Respect for human rights will continue to be fundamental to our way of doing business as we continue to expand around the world. We remain committed to the principles of the UN Global Compact that are the foundation of our sustainability work, including human rights, and we will continue to raise awareness of our values and Code of Conduct with all existing and new employees. Our commitment to the Sustainable Development Goals will also remain a cornerstone of our work with establishing operations in new markets.

I would like to thank all our employees around the world for their efforts in 2018. Together, we will continue to make Ecolean a leading sustainable packaging company.

Peter L Nilsson, CEO Ecolean



”As the first packaging system supplier to conduct life-cycle analyses of our entire systems, we have set the sustainability standard in the industry for others to follow”

OUR VISION, MISSION AND CORE VALUES – THE ECOLEAN WAY

To be the best packaging company
in the world in the eyes of all our stakeholders.
VISION

To provide the world with safe and convenient packaging solutions
for liquid food with minimal environmental impact.
MISSION

We are brave.

We always strive to be bolder and better than we were
yesterday. We are quick on our feet, and our drive to
do better than all others is limitless.

We are innovative.

The known is already known. And done. Different
means a change for the better.

We create less. The world doesn't need more.
It needs less. That is what we bring: a *lighter*
solution for the good of the planet.

And yes, this includes *you.*
CORE VALUES

LIGHTWEIGHT AND EFFICIENT PACKAGING SOLUTIONS

SYSTEM SOLUTIONS FOR LIQUID FOOD PRODUCTS

The manufacture of our filling line equipment takes place in Helsingborg. The packaging material is produced in our production plants in Sweden and China and a range of hermetically sealed ready-to-fill packages in a variety of different sizes are delivered to our customers. In 2018 we sold 3.12 billion packages.

The fundamental premise behind the Ecolean system is the optimisation and efficient use of raw materials and energy. Using less raw materials, while still keeping the product inside safe, is one of the most efficient ways to improve the sustainability of packages. Up to 35 percent of the packaging material (except the clear versions) consists of chalk which is a natural mineral. By using chalk as a filler, the lightweight Ecolean package uses less plastic, while providing strength and stiffness.



ECOLEAN® AIR

Ecolean® Air is a lightweight package that is used for the chilled distribution of liquid food products such as dairy products, still drinks, soups and beverages.



ECOLEAN® AIR ASEPTIC

Aseptic packaging can travel long distances and withstand long-term storage at ambient temperatures.

The Ecolean® Air Aseptic packages are hermetically sealed and sterilised using electron beam treatment, or e-beam, at the Ecolean manufacturing plant. The Ecolean® Air Aseptic package is suitable for filling products such as white milk, flavoured milk, drinking yoghurts, juice drinks, nectars, iced tea, soups and sauces.





ECOLEAN FILLING MACHINES

The fundamental element of the Ecolean packaging system is the filling machine, which is designed for efficient operations. In 2018 we sold 30 filling machines. During the year, the Ecolean® filling machines EL1 and EL2/EL2+ for chilled distribution and EL3/EL3+, EL4/EL4+ and EL6 for ambient distribution were available. The manufacturing of these machines includes component procurement, equipment assembly and quality assurance with factory acceptance testing.

The components and equipment for Ecolean filling machines are manufactured and assembled by ourself and suppliers. In Helsingborg, these partners work closely with our product support department, R&D department, technical and global technical service teams. All filling machine design, supply and operation activities are certified in accordance with ISO 9001.

ANUGA FOODTEC, COLOGNE, 2018

ECOLEAN PARTICIPATED, FOR THE SIXTH TIME, IN THE TRIANNUAL ANUGA FOODTEC TRADE FAIR FOR THE FOOD AND DRINK INDUSTRY IN MARCH 2018 IN COLOGNE, GERMANY.

PROMOTING THE LIFE-CYCLE PERSPECTIVE

At the Ecolean stand, we demonstrated two filling machines for the first time – the EL2+ and the EL6 – and customers could follow the filling process. Both machines now have greater capacity with the same physical footprint. We also promoted our newly launched Environmental Product Declarations (EPDs) as part of our work to shift the focus to the entire life-cycle of a product and not just the materials used in the product itself. While other packaging suppliers typically only focus on one part of a package’s life-cycle, Ecolean offers transparent environmental impact data for both its packaging and filling machines.

One of Ecolean’s sustainability objectives – *We take responsibility for fair and transparent information regarding our systems* – involves raising the benefits of our system by using relevant standards and guidelines. At Anuga FoodTec, we had many interesting discussions with stakeholders on the importance of life-cycle assessments and how EPDs can help make the case for investments in more sustainable packaging solutions. The environmental impact guide that was available at the fair, as well as on the Ecolean website, gives customers a good overview of the environmental impact of Ecolean packaging.



” *At Anuga Foodtec, we had many interesting discussions with stakeholders on the importance of life-cycle assessments and how EPDs can help make the case for investments in more sustainable packaging solutions* ”

STRATEGY, STAKEHOLDERS, GOVERNANCE



SUSTAINABILITY POLICY

VISION

To be the best packaging company in the world in the eyes of all our stakeholders.

MISSION

To provide the world with safe and convenient packaging solutions for liquid food with minimal environmental impact.

DELIVERING RESOURCE EFFICIENT PACKAGING FOR A MORE SUSTAINABLE WORLD

Ecolean delivers unique lightweight packaging solutions to liquid food producers around the world. We believe in resource efficiency – both in terms of our innovative products and the way we conduct our business. We develop products and solutions in ongoing dialogue with our stakeholders in order to meet their demands in the most efficient way.

In a world of growing population and consumer demands, we offer safe and innovative packaging that reduces waste and can be used anywhere, regardless of local distribution channels and climate conditions. In everything we do, we strive to create value for all our key stakeholders, from our employees to the end-users of packaged liquid food.

OUR SUSTAINABILITY POLICY

Our Sustainability Policy covers Ecolean's approach to economic, environmental and social aspects. The effective management of these aspects enhances Ecolean's performance and the quality of our products.

We continuously improve our management system and processes to strengthen our operational efficiency.

*Packaging
solutions with
minimal
environmental
impact*

ECONOMIC SUSTAINABILITY

- We always follow our Code of Conduct in terms of business ethics, and we have zero tolerance toward all forms of corruption.

ENVIRONMENTAL SUSTAINABILITY

- Ecolean's packaging solutions shall have the lowest possible environment impact. Our design and manufacturing processes are based on a life-cycle perspective.
- Ecolean strives to improve its sustainability performance by focusing on our most material topics and by working to reduce our negative impacts.

SOCIAL SUSTAINABILITY

- We support our employees and provide equal opportunities for career development.
- We follow our Code of Conduct, which covers the areas of human rights, diversity, equality and non-discrimination.
- Ecolean has a zero-accident target that we strive to meet by systematically improving our work environments and promoting the physical, mental and social health of our employees.
- Food safety and high-quality packaging solutions are at our core.
- We always provide our stakeholders with accurate and transparent information about our operations. All our environmental data is based on life-cycle assessments.

COMPLIANCE

Ecolean complies with relevant legal obligations and voluntary standards that apply to our operations and packaging solutions. We constantly work to raise the awareness of sustainability and quality, and encourage our employees and business partners to respect people and the environment in their day-to-day activities.

The Sustainability Policy is in accordance with the Ecolean Code of Conduct and is supported and complemented by our Whistleblowing Policy. With our commitment to reduce environmental and social impacts and improve performance, we contribute to a more sustainable world.

MATERIALITY ASSESSMENT

THE ECOLEAN SUSTAINABILITY REPORT REPORTS ON OUR MOST IMPORTANT SUSTAINABILITY TOPICS TO OUR ORGANISATION AND OUR STAKEHOLDERS.

Relevant topics are those that may be considered significant for our economic, environmental and social impacts, or that influence the decisions of our stakeholders. We have used the GRI Reporting Principles as a guideline to define the content of this report.

OUR RELEVANT TOPICS AND STAKEHOLDERS

We use different sources to identify the relevant topics for Ecolean and our stakeholders:

- media articles
- input from industry organisations
- new laws and regulations relating to our industry and raw materials
- environmental organisations
- the United Nations Sustainable Development Goals
- direct communication with stakeholders during the reporting period

These sources provide us with a list of relevant topics that reflect Ecolean's sustainability impacts and the interests of our stakeholders. Our stakeholders are those directly or indirectly impacted by our business, including our owner, employees, customers, consumers, suppliers, auditors, governments, local authorities and neighbours of our operations. The main input for the analysis was provided by customers, media, employees, industry organisations and regulators. We use our continuous meetings with various stakeholders as an input to our materiality analysis. Sustainability is often a topic discussed at meetings and input from these discussions are used as a background in our reporting.

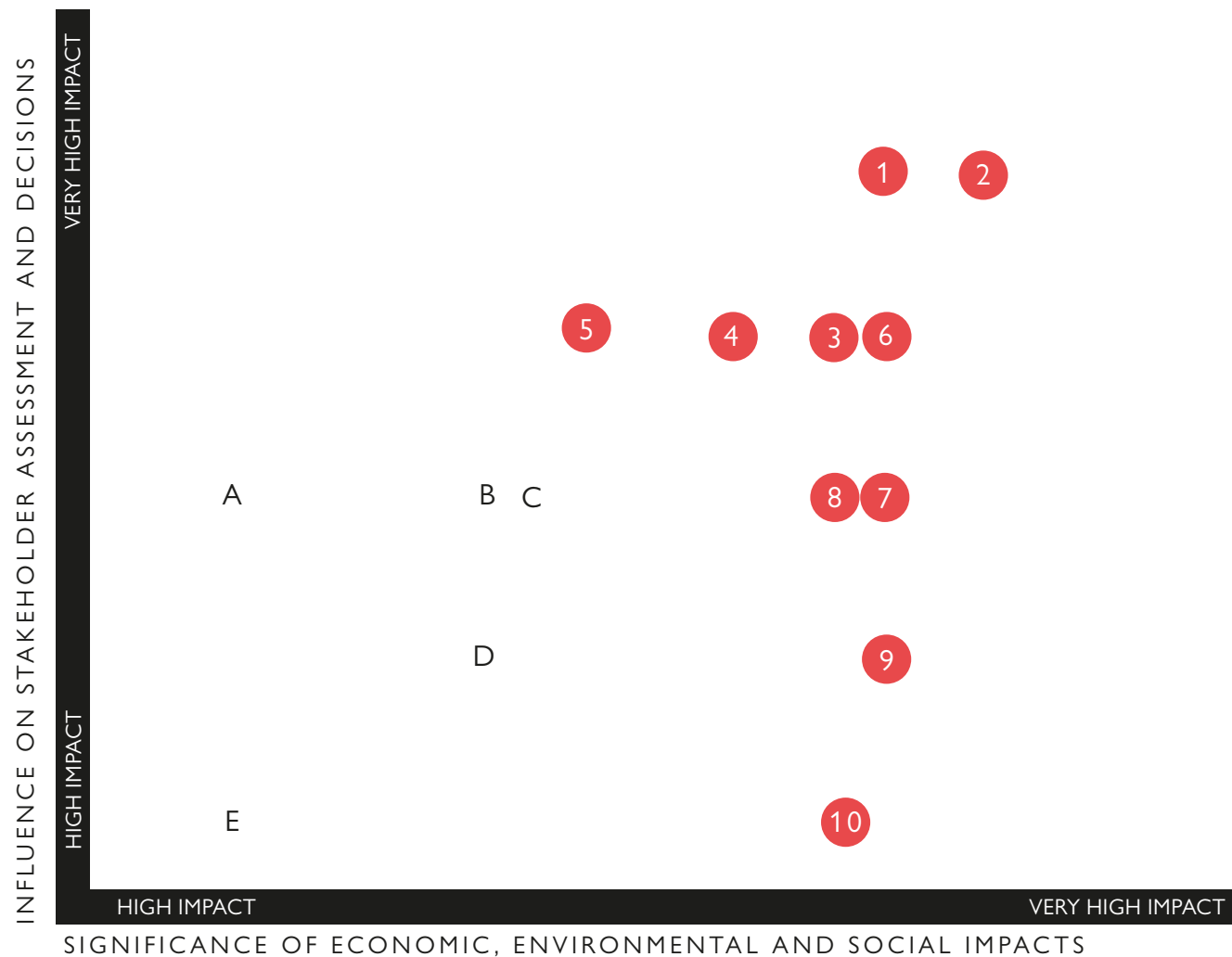
We have incorporated the key topics and concerns raised by our stakeholders in our materiality analysis. The material topics and concerns raised have been adopted into our approach and constitute the foundation for our sustainability objectives. Compliance with laws and legal obligations is of greatest importance to our organisation and any deviations will be reported in our annual Sustainability Report.



MATERIALITY

A full materiality assessment was performed during 2017 to define our sustainability objectives.

THE WORKSHOPS RESULTED IN THE FOLLOWING MATERIAL TOPICS



- IDENTIFIED MATERIAL TOPICS (PRIORITY)**
- 1. Occupational Health and Safety
 - 1. Customer Health and Safety
 - 2. Anti-corruption
 - 3. Marketing and Labeling
 - 3. Diversity and Equal Opportunity
 - 3. Non-discrimination
 - 5. Training and Education
 - 6. Effluents and Waste
 - 7. Promote recycling
 - 8. Emissions
 - 9. Materials
 - 10. Energy

- OTHER IMPORTANT TOPICS (NOT PRIORITY)**
- A. Operational water in filling machines
 - B. Market presence
 - C. Energy use in filling machines
 - D. Human rights in supply chain
 - D. Environmental impact in supply chain
 - E. Employee turnover

OUR OBJECTIVES AND FOCUS AREAS

Our sustainability objectives have been linked to appropriate GRI Standard topics and disclosures have been chosen to ensure completeness of the report. In our first materiality analysis, we defined 13 objectives that are divided into two focus areas. *People* includes our objectives related to social topics and society, and *Packaging Solutions* relates to the environmental impact of our production and products.

MATERIALITY

Our materiality analysis was confirmed by stakeholder input in 2018. During last year's reporting, we identified two of our defined objectives as having a similar meaning: *We have zero tolerance for discrimination* and *We promote a diverse workforce and equal opportunities*. As the two objectives address the same risks, we decided to merge them into *We promote a diverse workforce and equal opportunities*. This objective includes our zero tolerance for discrimination to ensure the same KPIs will be reported as before.

STAKEHOLDER TRENDS IN 2018

During the year, we noticed increased interest in plastics and plastic packaging in particular. Media coverage of plastics and littering in the environment has created a need to step up our communication of the life-cycle perspective to raise awareness of the full picture.

The importance of plastic packaging recycling has also increased during the year in almost all our markets, as a solution to plastic littering. Many brand owners during the year made public commitments to use reusable and recyclable packaging by 2025.

We can also see increasing activity from regulatory bodies in several markets regarding regulation on circular economy, single use products, recycling rates, recyclability and recycled content. Ecolean closely follows the development of regulations.

The increased attention on plastic packaging, littering and recycling was identified in our last materiality assessment and we already have sustainability objectives in place focusing on these topics. In 2019, activities are planned to address these topics even further – through objectives related to circular economy, materials and transparent information. The materiality matrix is approved by the Ecolean Group management team.

People includes our objectives related to social topics and society, and Packaging Solutions relates to the environmental impact of our production and products

THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

IN 2015, THE UNITED NATIONS LAUNCHED A SET OF GOALS TO END POVERTY, PROTECT THE PLANET AND ENSURE PROSPERITY FOR ALL AS PART OF A NEW SUSTAINABLE DEVELOPMENT AGENDA FOR 2030 – THE SUSTAINABLE DEVELOPMENT GOALS (SDGS).

As part of our materiality analysis and stakeholder engagement, we have linked our sustainability objectives to the relevant SDGs. Our sustainability approach supports the following SDG, and more information can be found in the introduction to the *People and Packaging Solutions* chapters in this report.



GOVERNANCE STRUCTURE

THE BOARD OF DIRECTORS IN ECOLEAN AB IS RESPONSIBLE FOR THE GOVERNANCE OF THE TOTAL ECOLEAN GROUP.

There are four sub committees to the Board of Directors, the Audit Committee, the Strategy Committee, the Remuneration Committee and the Technical and Innovation Committee. The Board of Directors has the ultimate authority in the strategic decision making within Ecolean Group.

The Ecolean Group management team, including the CEO and the functional and regional directors, is responsible for the operational governance of the company, including decision-making on economic, environmental and social topics.



OBJECTIVES AND ACTIONS

PEOPLE

Ecolean Sustainability Objective	Action	GRI Topic	Boundary/Specific interest to stakeholders
We have zero tolerance for corruption.	Ecolean has zero tolerance concerning all forms of corruption and will work actively to ensure a non-existence within the Ecolean Group.	Anti-corruption	Ecolean Customers Suppliers
We have zero tolerance for breaches of human rights.	We will respect human rights as defined in the United Nations Global Compact, and we desire to take that responsibility towards our employees and the societies within which we work.	Human Rights Assessment	Ecolean Society
We promote a diverse workforce and equal opportunities.	We offer all individuals equal opportunities regardless of gender, nationality, religion, age, ethnic background or other distinctive characteristics.	Diversity and Equal Opportunity	Ecolean
	We will work actively for a company culture and a working community free from discrimination and harassment.	Non-discrimination	Ecolean
We have a zero accident target in all our operations.	Appropriate health and safety information and training are provided to employees.	Occupational Health and Safety	Ecolean
We invest in training and education for our personnel.	We will strive to develop and retain qualified and motivated employees in a professional environment.	Training and Education	Ecolean
We provide the world with safe and convenient packaging solutions for liquid food.	The products manufactured and marketed by Ecolean comply with all laws and rules relating to product safety, throughout the value chain.	Customer Health and Safety	Ecolean Customers Consumers Suppliers
We take responsibility for fair and transparent information regarding our systems.	Information regarding our systems will always be true and transparent, by following relevant standards and guidelines.	Marketing and Labeling	Customers

PACKAGING SOLUTIONS

Ecolean Sustainability Objective	Action	GRI Topic	Boundary/Specific interest to stakeholders
We will reduce the GHG intensity from our packages.	Reducing GHG emissions by reducing use, shift to renewable energy sources, optimising production, transports, etc.	Emissions	Ecolean Customers Suppliers Logistics
We will use 100% renewable electricity in all our production sites by 2030.	We will use renewable electricity, by using the RE100 definitions.	Energy	Ecolean
We will keep reducing the environmental impact from raw materials used in production, based on a life cycle perspective.	By monitoring raw material usage and research progress, we will reduce the impact from materials used in a life cycle perspective.	Materials	Ecolean Suppliers
We will have zero waste to landfill from our production sites by 2030.	Use the waste hierarchy (EU Directive 2008/98/EC) as a guideline for our waste handling and work with waste contractors to find better treatment options than landfill for all our production sites.	Effluents and Waste	Ecolean
We are taking action to increase the possibilities for a circular economy for our packaging solutions.	Support different initiatives for recycling of flexible plastic packaging. To offer circular solutions for our filling line equipment.	No topic-specific GRI Standard – Circular Economy	Ecolean Customers Consumers/ Society Industry/ Partners





PEOPLE



OUR SOCIAL RESPONSIBILITY

WE ARE COMMITTED TO CONDUCTING OUR BUSINESS WITH HONESTY AND INTEGRITY, WHICH IS ALSO WHAT WE EXPECT OF OUR EMPLOYEES.

OUR CODE OF CONDUCT

We apply our Code of Conduct throughout Ecolan and it covers business ethics, human rights, fair employment conditions and safe working conditions, environmental responsibility and high ethical standards. The Code of Conduct is supported by more detailed company policies, which are statements of mandatory behaviour concerning areas such as whistleblowing, IT, HR, confidentiality and authorisation. All employees shall comply with the Code of Conduct, which sometimes exceeds the relevant laws, regulations and standards in the countries we operate in.

All Ecolan employees responsible for personnel are obligated to introduce new employees to the Code of Conduct as well as update current employees on a regular basis. Furthermore, we will strive to ensure that our business partners comply with our Code of Conduct and other policies. Ecolan respects human rights as defined by the United Nations Global Compact.

OUR SOCIAL OBJECTIVES AND THE UN SUSTAINABLE DEVELOPMENT GOALS

Through our operations, we support the following UN SDGs:



We deliver safe packaging solutions that can bring healthy food to people without access to refrigeration and electricity for storage.



We work to ensure the health and safety of our employees and safeguard their labour and human rights.



We provide jobs and help build infrastructure, particularly in developing countries, and we promote product innovation by driving a life-cycle perspective.



We forge local and international partnerships that promote sustainable development in the markets in which we operate.

PEOPLE

ECOLEAN WORKS TO ENSURE A SAFE WORKING ENVIRONMENT THAT ATTRACTS, ENGAGES AND DEVELOPS EMPLOYEES WITH THE RIGHT SKILLS.

At the end of 2018, Ecolean had 401 employees. During the year, around 100 contractors have been involved in the construction of our new production plant in Pakistan and 10 consultants are involved in activities related to the new plant in Sweden.

HEALTH AND SAFETY

One of our most material aspects is health and safety in our operations. Our ongoing target is to achieve zero accidents throughout our operations. We work towards this target through continuous risk management, ongoing training and promoting a culture of incident reporting.

ATTRACTING AND RETAINING TALENT

We are dependent on our ability to attract and retain key talent and competences as a loss of key employees could impact Ecolean's operating and financial performance. Being a fast-growing company requires the continuous recruitment of skilled employees. Our Human Resources team work together with line management to find the competences we need as well as developing existing employees to ensure that they stay in the company. Ecolean offers its employees the opportunity to develop personally and professionally – and to be part of a journey to change the world of packaging.

EMPLOYEE ENGAGEMENT

The growing nature of our company impacts our employees, and it is important we maintain employee involvement and transparency. We do this by promoting our core values and a common Ecolean culture in all our markets and offices. During the year, we have continued to strengthen our culture by involving everyone in discussing and committing to our vision, mission and core values to create clarity of who we are, what we stand for and our purpose.

Ecolean is a global company with local perspectives. All of our market offices have local staff and are in tune with the regional cultures and conditions. Our core values help us to find a balance between an international and regional approach.

OUR EMPLOYMENT TERMS AND CONDITIONS

The employment terms and conditions offered to our employees must be easy to understand and comply with national law and/or collective agreements as well as relevant ILO Conventions. All our employees in Sweden and approximately 40 percent of our employees in Pakistan are covered by collective bargaining agreements, with 54 percent of our total work force covered.

At the end of 2018, Ecolean had 401 employees



TOTAL NUMBER OF EMPLOYEES

	Europe		Americas		Russia		Asia and Oceania	
	2017	2018	2017	2018	2017	2018	2017	2018
Female	31	31	0	0	12	12	31	35
Male	158	168	4	1	17	17	121	137
Total	189	199	4	1	29	29	152	172

TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT, BY GENDER

	Permanent		Temporary	
	2017	2018	2017	2018
Female	72	73	2	5
Male	293	313	7	10

TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT BY REGION

	Europe		Americas		Russia		Asia and Oceania	
	2017	2018	2017	2018	2017	2018	2017	2018
Permanent	181	184	4	1	28	29	152	172
Temporary	8	15	0	0	1	0	0	0
Total	189	199	4	1	29	29	152	172

TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT TYPE, BY GENDER

	Full time		Part time	
	2017	2018	2017	2018
Female	70	69	4	9
Male	293	315	7	8

All figures refer to the number of employees 2018-12-31

OUR SOCIAL SUSTAINABILITY OBJECTIVES

ECOLEAN HAS DEFINED SEVEN SOCIAL SUSTAINABILITY OBJECTIVES THAT COVER HOW WE WORK WITH EMPLOYEES, CUSTOMERS AND SUPPLIERS.

OUR APPROACH TO SOCIAL SUSTAINABILITY

Several of our seven objectives are related to how we interact with each other, both as colleagues and as business partners. As misconduct in these interactions can damage Ecolean's reputation, it is important that any misconduct is reported, either to the Ecolean management or via our reporting systems.

Being an organisation with short decision-making processes, we have the ability to quickly address potential problems. The reporting of deviations is also part of our environmental and quality management systems, and we have a whistleblowing policy and system in place with an external online whistleblowing service.

Our whistleblowing function provides a mechanism for reporting, investigating and remedying any wrongdoing in the workplace. We strive to maintain a transparent business climate and high business ethics. The openness between colleagues and management often results in addressing issues and finding solutions before any serious harm is done, which is demonstrated by the fact that our whistleblowing system is rarely used. No cases were reported via the whistleblowing system during 2018.

#1 – ZERO TOLERANCE FOR CORRUPTION

Ecolean is a global company that operates in many markets. This can create risks when it comes to doing business and operating in new markets. A key risk involves breaches of our Code of Conduct related to corruption. Bribery and corruption are detrimental to society, particularly in developing countries, and can also damage a company's brand and reputation.

Before entering a new market, we conduct a risk assessment that includes corruption-related risks. We continuously discuss and evaluate the corruption risks and our corporate management is ultimately responsible. This is part of our due diligence of new suppliers and consultants and is particularly relevant for some of the high-risk markets we operate in. All suspected cases should be reported to the Ecolean management.

Our Code of Conduct makes our zero tolerance for corruption very clear. All employees can find information regarding bribery and corruption on the Ecolean intranet and printed versions of our Code of Conduct are available at all our offices. We discuss our Code of Conduct at staff meetings and aim to make it part of our daily work. No cases of corruption have been reported during the year.

#2 – ZERO TOLERANCE FOR HUMAN RIGHTS VIOLATIONS

The risk of human rights violations within Ecolean is considered to be very low. Violations in our supply chain can potentially have severe detrimental impacts on individuals and society, as well as potential negative impacts on our brand and reputation. As Ecolean is a growing company working with a large number of global suppliers, we need a comprehensive risk assessment system. During 2018, our supply chain organisation developed a digital system for supplier assessments as well as a supplier Code of Conduct. These will be fully implemented throughout our business during 2019.

Human rights are addressed in our Code of Conduct and we provide human rights training. All new employees receive information on the Code of Conduct during introduction and sign up to the code. During 2018, all new employees and personnel that have taken part in the Ecolean Academy Orientation course were trained on the Code of Conduct, which equates to 30 percent of our employees at year end. Our whistleblowing system is in place to report any suspected human rights violations, although none were reported in 2018.

*Our Code of Conduct
makes our zero
tolerance for corruption
very clear*

#3 – PROMOTING A DIVERSE WORKFORCE AND EQUAL OPPORTUNITIES

As a growing company, Ecolean needs to attract skilled personnel. We have adopted a successful strategy of hiring locally in the markets where we are active, which has resulted in a very diverse global organisation.

Many of the positions within Ecolean are of technical nature and are traditionally male dominated. Ecolean considers several criteria for each individual recruitment, including the promotion of a better gender balance in our workforce.

PROMOTING EQUAL OPPORTUNITIES

Being perceived as an employer that provides equal employment opportunities is key. For the past five years, Ecolean has cooperated with the Swedish organisation Tekniskprånget that offers internship opportunities to people under the age of 21 with the relevant technical education. Through internships, Ecolean has offered young people opportunities to work as an engineer within the company for four months. In 2018, we had two interns. In recent years, the initiative has proved beneficial for both Ecolean and the interns, and half our interns have been female. We have offered four of our interns continued employment during their studies.

Equality in the workplace addresses our ambition to break down the barriers that could block opportunities in our business for certain groups of people. We risk unintentionally excluding highly competent and talented people, so it is important we identify and remove the barriers that prevent equal opportunities for all.

Any cases of discrimination should be reported to the Ecolean management or via our whistleblowing system. The Code of Conduct is discussed at staff meetings and is part of our daily work. During 2018, one case of harassment was reported, which was resolved through discussions with those involved.

EMPLOYEE DEVELOPMENT

Ecolean works to ensure that all employees develop through their daily work and feel secure in their professional roles. We assume that personal differences are respected to counteract discrimination and harassment. At Ecolean, all employees have the same rights, obligations and opportunities regardless of gender, gender identity or gender expression, age, sexual orientation, disability, ethnicity, religion or nationality.

Being perceived as an employer that provides equal employment opportunities is key

GENDER DIVERSITY BY EMPLOYMENT CATEGORY

	Production/ Blue collar		Commercial/Technical/ General		Management		Total	
	2017	2018	2017	2018	2017	2018	2017	2018
Female	6%	7%	30%	27%	19%	26%	20%	19%
Male	94%	93%	70%	73%	81%	74%	80%	81%

AGE DIVERSITY BY EMPLOYMENT CATEGORY

	Production/ Blue collar		Commercial/Technical/ General		Management		Total	
	2017	2018	2017	2018	2017	2018	2017	2018
<30	34%	37%	19%	20%	3%	0%	22%	22%
30-50	60%	54%	61%	58%	71%	76%	62%	60%
>50	6%	9%	20%	22%	25%	24%	16%	18%

#4 – EMPLOYEE TRAINING AND EDUCATION

As a rapidly growing company, continuous employee training is key to our success. The Ecolean Academy is a common portal and platform that provides internal education and training, orientation courses and e-learning on a range of topics.

We provide the Ecolean orientation course to our employees around the world. The course provides information on our operations, ethics, Code of Conduct, strategies, sustainability and market activities. The Ecolean orientation courses held during 2018 totalled 1 536 hours of training. Additionally, our employees are continuously trained on our technical features, upgrades and new releases. Continuous education and training is also applied in applicable professional areas, whether in commercial, technical or administrative fields.

In 2018, we introduced a common company-wide performance review template. The aim is to promote discussions between managers and employees on relevant individual objectives for the year that support Ecolean’s overall objectives. Furthermore, we want to ensure a simple and qualitative approach in the discussions as well as a continuous follow-up mechanism that goes beyond the standard annual review format. As part of the performance review, the need for training and education is identified. Since the review is a continuous process throughout the year, our ambition is to provide the manager and the employee with a tool to ensure that the need is met.

LEADERSHIP AND EMPLOYEE TRAINING

The Ecolean top management has implemented a common leadership training programme for all managers in our offices around the world. During 2017 and 2018, the majority of Ecolean leaders, both formal and informal, have participated in the programme, and participants have represented all Ecolean functions and locations. The nine-day programme aims to strengthen individual leadership capabilities and how to effectively lead in the Ecolean context and culture. During 2017 and 2018, more than 55 Ecolean leaders have completed the training.

At Ecolean, we want to ensure the long term employability for our employees. This is manifested in a couple of different ways. The most important, however, being the uniqueness of our technology, product development and production apparatus. This implies that, after a careful selection process, we will invest in substantial training periods for our employees to ensure the right skills and behaviors to manage and grow within the role. With a constantly evolving organization and operation, this foundation will facilitate internal horizontal or vertical movement with Ecolean. The on-the-job training is an automatic institution where our employees will grow with the development of the technology, product development and production apparatus. This is also facilitated by the Ecolean Academy, where internal training is collected to ensure availability for our employees.



#5 – OUR ZERO ACCIDENT TARGET

As Ecolean produces packaging and filling machines in an industrial environment, we constantly work with safety throughout our operations. Safety risk assessments are performed on all processes and formal health and safety committees conduct safety inspections four times a year, attended by employees, management and external safety engineers. All ‘near miss’ incidents are reported and action is taken to prevent accidents.

When an accident or near-miss occur, a report is filed locally. The report is then sent directly to the director for material production, who has the over-all responsibility for health and safety. The occupational health and safety reporting will be reviewed during 2019 and actions will be taken to improve reporting and the possibilities for benchmarking.

Ecolean reports all injuries that occur by gender, and we also began reporting by region in 2018. The total number of injuries covers injuries that are work-related and includes minor (first-aid level) injuries for Ecolean employees.

	Europe		Americas		Russia		Asia and Oceania	
	Female	Male	Female	Male	Female	Male	Female	Male
Number of injuries	0	9	0	0	0	0	0	0
Number of injuries/employee	0	0.054	0	0	0	0	0	0.029
work related fatalities	0	0	0	0	0	0	0	0
Lost day rate	0	0.00081	0	0	0	0	0	0.00050

Safety risk assessments are performed on all processes and formal health and safety committees conduct safety inspections four times a year

The Ecolean orientation courses held during 2018 totalled 1 536 hours of training

55 Ecolean leaders have completed our leadership training programme during 2017 and 2018

#6 – SAFE AND CONVENIENT PACKAGING SOLUTIONS FOR LIQUID FOOD

Ecolean provides packaging solutions for liquid food and a potential product safety or integrity incident could have adverse consequences on the company’s reputation and financial performance. Products manufactured and marketed by Ecolean must comply with all laws and rules relating to product safety. Beyond this, we also comply with voluntary certification schemes.

We follow the ISO 22000 family of International Standards that address food safety management. The BRC/IOP is also a leading global standard we follow that verifies technical performance, supports manufacturer fulfilment of legal obligations and helps provide consumer protection. The FSSC 22000 Food Safety System Certification provides us with a framework for effectively managing food safety responsibilities.

Our production plants continuously work with quality inspections and audits. All our processes have documented instructions to follow including quality checks and hygiene rounds. The performance of the management systems is regularly audited, both by internal and external audits.

Production site	Certificates
Packaging material production, Sweden	ISO 14001, BRC/IOP, ISO 22000, Halal certificate
Production of filling line equipment, Sweden	ISO 9001, ISO 14001
Packaging material production, China	ISO 14001, FSSC 22000, Q-mark for the Chinese market

The Ecolean filling lines operation is certified according to ISO 9001 and was certified to ISO 14001 in 2018. The filling line technical teams provide customers with support and expertise on how to optimise the performance of the Ecolean packaging system. Systematic performance assessments, customised training programmes and technical upgrades maximise performance and minimise downtime.

The Performance Optimisation Programme (POP365) is our system for auditing customer sites. The audit follows-up on safety, machine operator training and optimising machine performance. Customers gain greater equipment performance, lower operating costs and better skilled operators. During 2018, the process has been further implemented and 13 external audits have been performed.



LIABILITY CLAIMS

Producing and packaging liquid food products is complex, and our customers have the ultimate responsibility to ensure compliance with relevant health and safety regulations. If regulations are violated and the customer believes the packaging system is at fault, they can issue a product liability claim. In 2018, no product liability claims or product recalls were reported from our customers.

In the event of a customer making a claim on one of our products, including anything from a minor issue to a liability claim, they first approach our regional market office. All claims follow our deviation process. A claim investigation is coordinated by the quality department, to assure relevant actions are taken. The actions are communicated with the customer and further activities are decided depending on the claim.

CONVENIENT PACKAGING

The development of packaging is an ongoing process. Many packaging producers strive to reduce raw materials, but lightweight packaging still needs to remain convenient to handle. Another risk related to packaging solutions is changes in consumer preferences for certain types of packaging. To be able to address this, Ecolean works closely with customers to identify their evolving preferences.

The Swedish Rheumatism Association (SRA) test is a good example of how to provide convenient packaging. By testing and obtaining SRA approval and the association’s quality mark, Ecolean’s lightweight packages are certified as being easy-to-open and easy-to-use by people with reduced hand function.

In 2018, no product liability claims or product recalls were reported from our customers

All our processes have documented instructions to follow including quality checks and hygiene rounds

Swedish Rheumatism Association



#7 – ACCURATE AND TRANSPARENT COMMUNICATION

In a world where environmental claims and messages are everywhere, transparent communication based on facts is more important than ever. This is why we have committed ourselves to always base our environmental communication on life-cycle assessments. We only make claims that we can back up with solid proof – which helps to avoid green washing and strengthens our brand.

We believe that our customers should have access to accurate and transparent information regarding our systems to base their decisions upon. We follow all relevant laws and regulations regarding marketing.

We use standardised programmes to give our customers the full picture and allow them to request the same type of documents from other suppliers. We use Environmental Product Declarations (EPDs) to communicate the environmental impact of our products. Our four published EPDs cover the packaging range for ambient and chilled distribution, and our filling machines for ambient and chilled distribution. As far as we know, we are the only packaging company that provides such fully transparent documents. We use the International Chamber of Commerce (ICC) Framework for Responsible Environmental Marketing Communications as guidance in our environmental communication.

Any complaints regarding the quality of our communications are reported to the marketing department and are managed by the marketing director. The reasons for the complaint will be investigated and corrected if necessary. No incidents of non-compliance concerning marketing communications were reported during the year.

We believe that our customers should have access to accurate and transparent information regarding our systems to base their decisions upon

Environmental Product Declaration

- In accordance with ISO 14025
- Based on life-cycle assessment (LCA) according to ISO 14040 and ISO 14044
- Third-party verified
- Published by the International EPD® System (www.environdec.com)



ECOLEAN PACKAGE'S LIFE-CYCLE

1. Extraction and transportation of raw materials to Ecolean site.
2. Design and development of packaging film and packages in-house.
3. Production of packaging film. Hermetically sealed ready-to-fill packages are wound on reels.
4. Transportation of pre-converted packages to producer's site.
- 5-6. Filling of liquid food product.
7. Filled packages are transported to distribution centre and retail outlets.
8. The package is used by the consumer.
9. End-of-life, the packages can be recycled as plastics or recovered as energy, depending on local waste handling systems.



PACKAGING SOLUTIONS



OUR ENVIRONMENTAL RESPONSIBILITY

CLIMATE CHANGE

Climate change is a major challenge for all industries and using products with a low-carbon footprint is more important than ever. Ecolean offers low-carbon footprint packaging solutions that use minimal raw materials and energy efficient production and distribution.

Climate change can also impact our operations. Warmer weather increases the need for cooling in our facilities, which has economic implications for Ecolean. Climate change increases the risk of heavy rain and flooding, which can disrupt our operations and logistics. We monitor our GHG emissions and take action to reduce our climate impacts. Life-cycle assessments help to identify the most urgent areas we should improve in.

PLASTIC AND LITTERING

One of the greatest current challenges for the plastic packaging industry is the public debate on plastic and littering, which is closely linked to inadequate waste management and recycling infrastructure in some markets. Many brand owners are working towards 100 percent reusable, recyclable or compostable plastic packaging by 2025 and the challenge for the industry is to deliver on this goal. Meanwhile, legislation and bans are being discussed in several markets. To be able to overcome this challenge, Ecolean has continued its involvement in CEFLEX (a Circular Economy for Flexible Packaging).

OUR ENVIRONMENTAL OBJECTIVES AND THE UN SUSTAINABLE DEVELOPMENT GOALS

To be able to address our material environmental risks and opportunities, we have identified five sustainability objectives within our Packaging Solutions area. These objectives focus on the environmental performance of our production sites as this is where our greatest impacts occur.

Ecolean offers low-carbon packaging solutions that use minimal raw materials and energy efficient production and distribution

Through our operations, we support the following UN SDGs:



We reduce water consumption in our processes and in the cleaning phase of our filling machines.



We use renewable energy at our production sites and reduce energy use, both at our production sites and in our filling line equipment.



We reduce food waste by producing packages that keep food safe and are easy to empty. We minimise the use of raw materials and optimise our production processes through a life-cycle approach.



We reduce our emissions by working with energy efficient production methods and monitoring our logistics.



We engage with relevant partners to address challenges and collaborate with our stakeholders to constantly improve our performance.

PACKAGING SOLUTIONS

ECOLEAN'S TAGLINE – A LIGHTER APPROACH TO PACKAGING – EXPRESSES OUR VISION TO BE THE LEADING PROVIDER OF SUSTAINABLE PACKAGING SYSTEMS FOR LIQUID FOOD.

Our philosophy is to keep our packages lightweight and simple. This is also how we develop filling machines and filling line equipment. Keeping them compact and minimising the use of chemicals and energy in the filling process is another way of reducing our impact. We have always worked with a life-cycle approach to our products, which enables us to identify where environmental impacts occur and how we can address them.

RESOURCE EFFICIENCY

The fundamental premise behind our production process is the optimisation of raw materials and energy, from the very start. Using less raw materials while maintaining food safety is one of the most efficient ways to improve the sustainability of our packages. By making resource efficient packages, and helping our customers to use less packaging material, we reduce environmental impact by ensuring less materials go to waste.

The waste hierarchy defined in the EU Directive 2008/98/EC sets the rules for how to handle waste. Ecolean strives to recycle most of its production waste and follows the waste hierarchy by reducing the amount of generated waste. Ecolean packages ensure very high product to packaging ratios, which ensures the least amount of packaging material (by weight) is needed to provide optimal protection and functionality for a given amount of product.

ECOLEAN SUSTAINABILITY OBJECTIVES

Our sustainability objectives have been defined and decided upon by the Ecolean Group management team. Responsibility to achieve the objectives follows our organisational structure where each director has identified relevant actions to address their impact. Our production plants are ISO 14001 certified, which drives our sustainability objectives and activities. The objectives related to Packaging Solutions are primarily managed by the directors for material production and filling lines and their organisations. During the year, a Production Director responsible for our global material production plants was appointed, which will enable even more strategic development and uniformity for our material production facilities.



Using less raw materials while maintaining food safety is one of the most efficient ways to improve the sustainability of our packages

OUR ENVIRONMENTAL SUSTAINABILITY OBJECTIVES

ECOLEAN HAS DEFINED FIVE ENVIRONMENTAL SUSTAINABILITY OBJECTIVES THAT COVER HOW WE WORK WITH OUR OPERATIONS, SUPPLY CHAIN AND SOCIETY.

#1 – 100 PERCENT RENEWABLE ELECTRICITY
WE WORK TO PROMOTE ENERGY EFFICIENCY BY REDUCING OUR ENERGY INTENSITY AND AIM TO USE 100 PERCENT RENEWABLE ELECTRICITY AT OUR PRODUCTION SITES BY 2030.

The Ecolean manufacturing process uses electricity as our main energy source. Electricity generation can emit greenhouse gases and impact the climate. Our reporting covers the energy use of our filling line equipment production in Helsingborg, Sweden and the packaging material production plants in Helsingborg, Sweden and Tianjin, China. As our main energy use occurs at these production sites, further optimising our production can reduce our GHG intensity.

The number of packages we produced increased by 17 percent during the year, which means an increased production of packaging film and electricity use at our manufacturing plant in Sweden. During 2017, a new production line in Tianjin was finalised that increased our production capacity as well as our electricity use. During 2018, Ecolean used a total of 112 401 gigajoules (GJ) of energy at its three production sites, which is an increase of 10 percent compared with 2017.

ENERGY EFFICIENCY

Despite our total increase in energy use, energy efficiency measures at our material production plants have reduced energy intensity in terms of the total energy consumption divided by the total amount of ingoing raw materials for packaging material production. Our energy use was 4.11 MJ/kg of raw materials in 2018, which is a decrease of 11 percent compared with the previous year. The decrease resulted from more efficient production.

RENEWABLE ENERGY

By switching to renewable electricity, we can reduce the climate impact of our production. By demanding renewable electricity, we also help drive demand for more renewable energy in society. We have therefore committed to sourcing 100 percent renewable electricity for all our production sites by 2030, according the definition set by RE100.

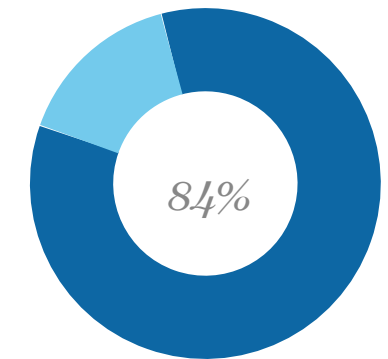
Our energy use was 4.11 MJ/kg of raw materials in 2018, which is a decrease of 11% compared with the previous year



84% of the electricity in our production plants was renewable and 82% of our total energy used in production originated from renewable sources in 2018

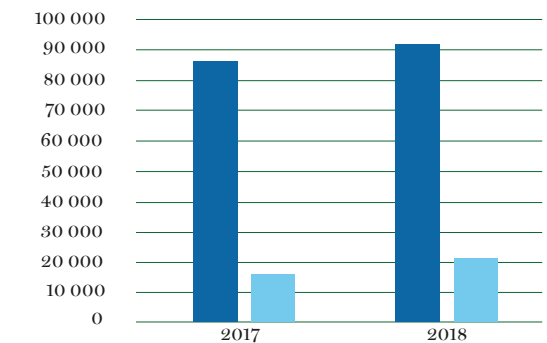
Since January 2017, Ecolean has purchased renewable electricity from hydropower plants for its production sites in Sweden. From October 2018, the natural gas used for production heating processes at our Helsingborg site was replaced by renewable biogas. Due to the increased capacity of the Chinese material production plant, the total share of renewable electricity decreased slightly compared with 2017. 84 percent of the electricity in our production plants was renewable and 82 percent of our total energy used in production originated from renewable sources in 2018. All energy data is delivered from suppliers as Ecolean does not produce or sell energy.

Renewable electricity



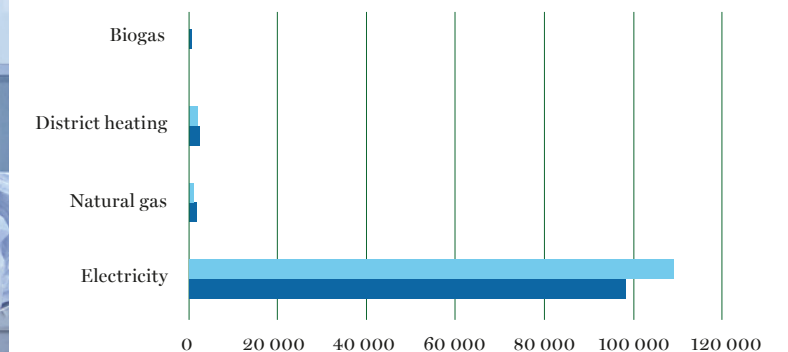
■ Non renewable electricity 16%
■ Renewable electricity 84%

Total energy consumption GJ



■ Renewable energy (GJ) 86 013 91 681
■ Non renewable energy (GJ) 16 016 20 720

Energy consumption GJ



■ 2018 Electricity 108 965 Natural gas 1 105 District heating 1 858 Biogas 473
■ 2017 98 335 1 556 2 139 0

#2 – REDUCING THE GHG INTENSITY OF OUR PACKAGING

AS PART OF OUR COMMITMENT TO REDUCE OUR GHG EMISSIONS THROUGHOUT OUR VALUE CHAIN, WE PROMOTE ENERGY EFFICIENCY, USE RENEWABLE ENERGY AND REDUCE IMPACTS FROM LOGISTICS.

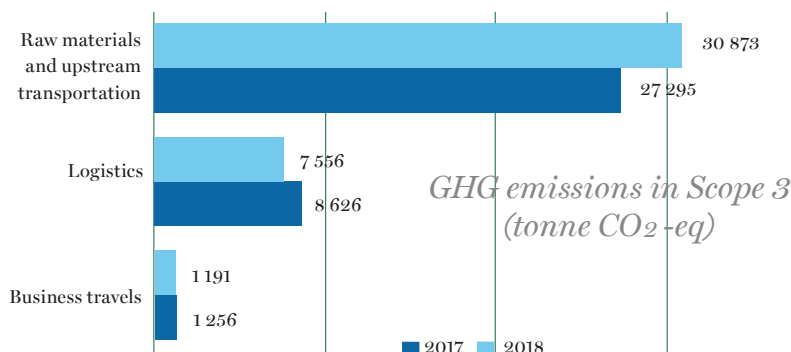
We closely monitor our GHG emissions to identify relevant areas to improve and to develop a baseline for establishing an internal emissions target.

ECOLEAN EMISSIONS REPORTING

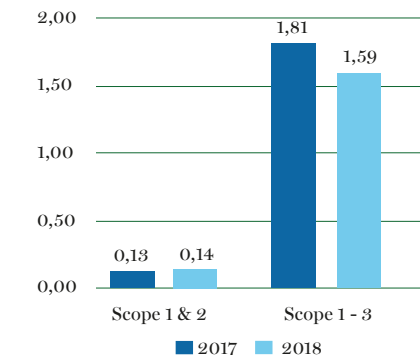
Ecolean reports on the emissions of our production sites by using common boundaries for GHG calculations related to energy and waste. For business travel, we include all Ecolean subsidiaries and data from cars, trains and flights when available. Biogenic carbon dioxide emissions occur within the Ecolean organisation. Biogas is used for energy and the biogenic carbon dioxide emission from biogas use is 44 tonne CO₂-eq. The share of renewable fuels in petrol and diesel are unknown on our markets. Reporting is based on the GHG Protocol, more information can be found in the appendix.

In 2018, our direct and indirect GHG emissions in scope 1, 2 and 3 according the GHG Protocol amounted to 43 488 tonnes CO₂-eq, which is an increase of 9 percent compared with 2017. Scope 1 and 2 emissions have grown due to increased electricity use and the greater use of company cars within the organisation. 78 percent of our scope 3 emissions are derived from the extraction, processing and transport of raw materials for packaging production and filling machines to our factory in Helsingborg. Most of the remaining scope 3 emissions are generated by the transportation of packaging and filling machines from Ecolean in Sweden to customers around the world. Our products are transported by sea, road, train and air. The impact from logistics has decreased due to more transport by sea as we have increasingly avoided air freight when possible.

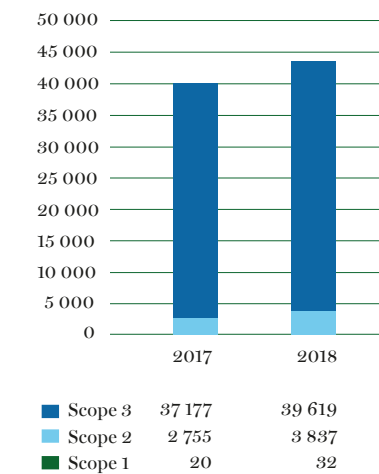
To be able to monitor our progress in reducing our climate impact, we monitor GHG intensity. The total GHG emissions from scope 1, 2 and 3 is divided by the used amount of raw materials for packaging production. The GHG intensity comparison shows a similar result for scope 1 and 2 as for 2017 but a reduction by 12 percent in 2018 for scope 1-3.



GHG intensity (kg CO₂-eq/kg raw material)



Total GHG emissions Scope 1-3 (tonne)



Scope 1: Emissions from sources that are owned or controlled by the organisation.
Scope 2: Emissions from the consumption of purchased electricity, steam, or other sources of energy (e.g. chilled water) generated upstream from the organisation.
Scope 3: Emissions that are a consequence of the operations of an organisation, but are not directly owned or controlled by the organisation.

#3 – A LIFE-CYCLE PERSPECTIVE ON RAW MATERIAL IMPACTS

A LIFE-CYCLE PERSPECTIVE ON ALL THE RAW MATERIALS WE USE FOR OUR PACKAGES, CHEMICALS AND THE MANUFACTURE OF OUR FILLING MACHINES ENABLES US TO FURTHER IMPROVE THE OVERALL EFFICIENCY OF OUR OPERATIONS.

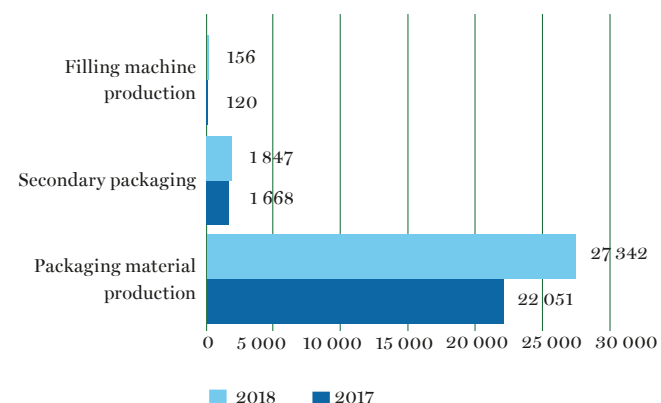
Ecolean used 29 345 tonnes of materials in total for the production of packages and filling machines, including transport packaging materials. Renewable materials amounted to 1 776 tonnes and non-renewable to 27 569 tonnes. Raw materials are purchased from external suppliers that also provide us with procurement data.

OUR USE OF PLASTICS

Ecolean uses polymers made from fossil oil, due to the quality and safety requirements for food packaging. Future restrictions on the use of fossil oil could impact our business. Bio-based plastics could be an alternative, but the supply of bio-based plastics remains limited and the total environmental impact of using bioplastics has not been comprehensively studied. Ecolean closely follows progress in this area.

Plastics are generally a hot topic in the media at the moment, often related to plastic recycling challenges – including inadequate collection facilities, recycling technologies and the low quality of recycled plastic material. In the future, there may be greater demands on using recycled plastics in products. However, such rules would pose risk for the food packing industry, as most recycled plastics today will not pass the strong requirements for food contact materials. Ensuring a high quality of recycled plastic raw material for the food packaging industry is one of the key issues that needs to be solved. Another challenge is to ensure that raw material changes actually have an environmental benefit. Life-cycle assessments are needed to evaluate the environmental effects of switching to bio-based plastics and recycled materials.

Raw materials (tonnes)



Management Approach: Materials
GRI Disclosure 301-1



Ecolean used 29 345 tonnes of materials in total for the production of packages and filling machines, including transport packaging materials

The GHG intensity comparison shows a similar result for scope 1 and 2 as for 2017 but a reduction by 12% in 2018 for scope 1-3

CHEMICAL USE

We handle chemicals in our operations that pose risks to the environment and our employees. All the chemicals we use are registered in a web-based system, employees are trained in chemical use and 237 risk assessments were performed during the year. The assessment resulted in the reduction in the total number of chemicals we use by 30 percent.

RAW MATERIALS AND INTERNAL RECYCLING

During 2018, the amount of raw materials for packaging production has grown due to our increased production. In the production of packaging film, Ecolean uses approximately 25 percent internally recycled material. Edge trims from packaging film production are reground and granulated internally and mixed with our raw material. This reduces the waste generated and the need for virgin materials.

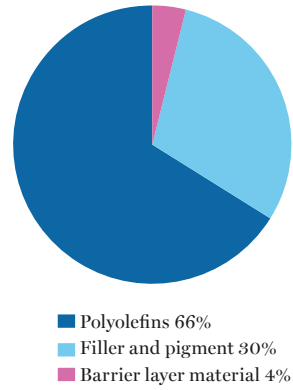
Our packages are delivered to customers in transport packaging, also called secondary packaging. The amount of secondary packaging we use rose during the year due to our increased production.

RAW MATERIALS FOR OUR FILLING MACHINES

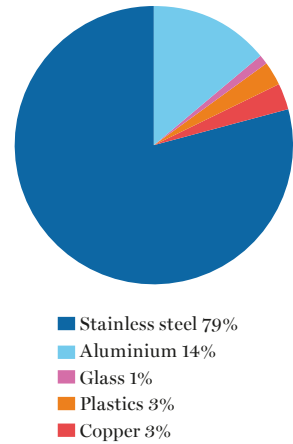
The filling machines consist mainly of stainless steel, aluminium, glass, rubber and copper. During 2018, more filling machines for aseptic distribution have been sold, compared to the previous year. This is reflected in the increased amount of raw materials since an aseptic machine weighs almost four times as much as a filling machined for chilled distribution. The amount of raw materials used are based on the composition model reported in the two Environmental Product Declarations for the Ecolean filling machines (EL1 and EL2+, EL3+ and EL4+).

Ecolean uses approximately 25% internally recycled material

Raw materials Packaging



Raw materials Filling machines



#4 – ZERO WASTE TO LANDFILL FROM OUR PRODUCTION SITES BY 2030

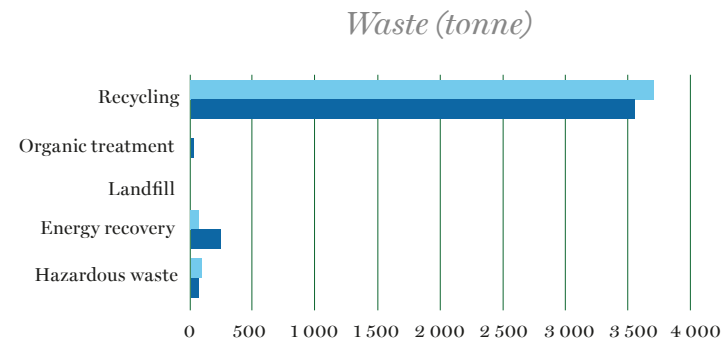
WE SENT NO WASTE TO LANDFILL IN 2018 AND ARE COMMITTED TO MAINTAINING THIS TARGET.

OUR APPROACH TO WASTE MANAGEMENT

We work according to the waste hierarchy (EU Directive 2008/98/EC) and aim to reduce the amount of generated waste, optimise recycling and find solutions for waste to energy. All production sites sort waste materials and work to minimise waste to landfill. No waste was sent to landfill in 2018, and the majority is sent for recycling. We will continue to monitor this objective as the establishment of new plants can have an impact.

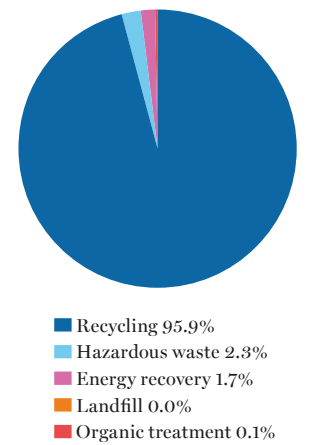
In 2018, a new waste management contract for our plants in Helsingborg, Sweden, was signed. The contract included a review of our sorted fractions and improvements to how we monitor waste.

Waste is handled by different waste contractors in each country. Waste is treated according to the regulations for each country, and information is provided by our waste contractors. Hazardous waste in Sweden is treated by incineration, which is also the main method in China.



	Hazardous waste	Energy recovery	Landfill	Organic treatment	Recycling
Total waste (tonne) 2018	88	67	0	5	3 708
Total waste (tonne) 2017	64	241	7	23	3 555

Waste treatment



#5 – PROMOTING A CIRCULAR ECONOMY FOR OUR PACKAGING SOLUTIONS

WASTE MISMANAGEMENT AND DISCARDING PLASTICS IN THE ENVIRONMENT IS ONE OF THE GREATEST RISKS FOR THE PLASTIC PACKAGING INDUSTRY.

In many markets, the collection and sorting of plastic packaging waste is inadequate. By improving the market and creating value for recycled plastics, the incentive for recycling increases.

The risk for potential bans or taxes to reduce the use of plastic packaging exists in several markets. In response to this, many brand owners are defining their commitments to introduce recyclable, reusable or compostable packaging within certain timespans. For Ecolean, it is crucial that we work with innovation and development to help fulfil these commitments.

PROMOTING RECYCLING

Ecolean works to increase opportunities for recycling and enable a circular economy for flexible plastic packaging. Opportunities for recycling differ between markets and according to the Ellen MacArthur Foundation only 14 percent of plastic packaging is recycled globally.

Both our stakeholders and the Ecolean Group management team identified circular economy and recycling as a material topic in our materiality assessment. During the year, more knowledge has been collected, study visits have taken place at plastic recyclers and more information on chemical recycling technologies have been gathered.

CHALLENGES RELATED TO RECYCLING PLASTIC PACKAGING

The main issues concerning recycling plastic packaging are:

- Inadequate infrastructure – many countries lack collection systems for plastic packaging. Some countries even lack proper waste management in general, with approximately 2 billion people worldwide lacking access to waste management.
- Recycling technologies – mechanical recycling is still the dominant recycling technique for plastic packaging, which involves sorting, grinding, washing and typically converting the recycled plastic into granulates. The quality of recycled plastic can be difficult to ensure, which limits its potential market.
- Limited demand for recycled plastic – recycled plastic raw material is currently limited to low-value products (trays, sacks, pots, etc.), while plastics with more advanced material properties are mainly derived from virgin raw material. The quality of plastics that Ecolean uses in its packaging is not currently available from recycled material and there are limited amounts of recycled plastics that fulfil the demands for food packaging.

All three areas need to be addressed, both on a national and international level but also in the entire packaging value chain.



Ecolean has joined forces with the full value chain for flexible packaging

CEFLEX PARTNERSHIP

By engaging and sharing knowledge with the recycling industry and dedicated recycling projects, Ecolean enhances the opportunities for recycling our packaging solutions. Ecolean has joined forces with the full value chain for flexible packaging and joined a European project called CEFLEX (a circular economy for flexible packaging), which is growing with over 110 companies currently involved. Ecolean attends stakeholder meetings and different work groups, for example for creating guidelines on flexible packaging recycling and design for recycling.

CEFLEX gathers representatives from material producers, flexible packaging converters, brand owners and retailers, collectors, sorters and recyclers, suppliers and end users. The project mission is to make flexible packaging more relevant to the circular economy by advancing better system design solutions via the collaboration of companies representing the entire value chain.

The CEFLEX Vision is that by 2020, there will be a comprehensive sustainability and circular economy roadmap for flexible packaging in Europe. This includes widely recognised design guidelines and a robust approach to measure, demonstrate and communicate the significant value flexible packaging adds to the circular economy. By 2025, there will also be an established collection, sorting and reprocessing infrastructure/economy throughout Europe for flexible packaging based on end-of-life technologies and processes that deliver the best economic and environmental outcomes for a circular economy.

SUPPORTING LOCAL RECYCLING SCHEMES

In many markets, recycling infrastructure for flexible plastic packaging is inadequate. But local schemes are gaining ground in some markets, for example in Australia and New Zealand. The REDcycle and Soft Plastic Recycling schemes offer collection services at designated drop off locations often nearby stores to transport material to recyclers. The systems are developed and financed by a product stewardship model where manufacturers, retailers and consumers share responsibility to create a more sustainable future. Ecolean supports these schemes to enable end consumers to recycle Ecolean packages.

CIRCULAR ECONOMY SOLUTION FOR FILLING MACHINES

We have an extended producer responsibility to provide information on the recycling of our equipment. For filling equipment, we have already implemented a circular economy solution. Filling line equipment agreements include a paragraph that regulates the end-of-life for the filling machine. Our regional directors and sales teams work to ensure that this paragraph is included and used. When a machine is taken out of production, Ecolean offers to refurbish or recycle the machine. In 2018, one machine was refurbished.

SUPPLY CHAIN

ECOLEAN DEPENDS ON VARIOUS RAW MATERIAL SUPPLIERS THAT WE SEEK TO ESTABLISH LONG-TERM RELATIONSHIPS WITH.

There is always a risk that suppliers might go out of business, do not deliver in time or stop producing an important raw material or component. Our procurement department assesses new suppliers before signing supplier contracts, both through self-assessments and audits on site. During 2018, a global procurement department has been launched that will increase our capabilities to audit suppliers and maintain a common approach to our procurement.

OUR SUPPLY CHAIN

Ecolean works with 275 raw material suppliers for packaging material production and the manufacture of filling line equipment. In 2018, Ecolean paid SEK 609 million directly to suppliers. Both our number of suppliers and the value paid to suppliers increased compared with 2017. This was mainly due to our expanding business. Our main suppliers are large, international companies in the chemical sector, located in Sweden and Europe, that provide us with the polymers and additives needed for our packaging.

In filling machine production, Ecolean mainly works with Swedish suppliers providing machine parts and components for machine assembly. Some of the equipment assembly is done by local Swedish suppliers. No significant changes to our supply chain have occurred during the reporting period.



EXTERNAL INITIATIVES

WE WORK WITH VARIOUS EXTERNAL INITIATIVES THAT PROVIDE US WITH GUIDANCE AND COLLABORATION OPPORTUNITIES TO FURTHER IMPROVE OUR OPERATIONS.

Our approach to sustainability is described in our Code of Conduct, which refers to the United Nations Global Compact guidelines. Our packaging production sites are certified according to ISO 14001 and several standards relevant to products for liquid food packaging. These standards are described in separate sections in this report.

Organisation	Membership status	Geographic area
CEFLEX	Member	Europe
EUROPEN - The European Organization for packaging and the environment	Member	Europe
Normpack	Member	Sweden
Swedish Association for Quality	Member	Sweden
FTI AB	Member	Sweden
Sedex	Registered supplier	Global
IKEM	Member	Sweden
Packbridge	Member	Sweden
HR Club of Tianjin	Member	China
Dairy producer's union	Member	Russia
Juice producer's union	Member	Russia
Chamber of Commerce and Industry	Member	Pakistan
Pakistan dairy association	Member	Pakistan
Swedish Business Council, Pakistan	Member	Pakistan
Swedish Chambers of Commerce	Member	USA
SWEFLEX	Member	Sweden
SNS	Member	Sweden
China Dairy Industry Association	Member	China

EXTERNAL ASSURANCE



This is a translation of the original Swedish Auditor's Report

Auditor's report on the statutory sustainability report

To the general meeting of the shareholders in Ecolan AB, corporate identity number 556351-0212

Engagement and responsibility

It is the board of directors who is responsible for the statutory sustainability report for the year 2018 and that it has been prepared in accordance with the Annual Accounts Act.

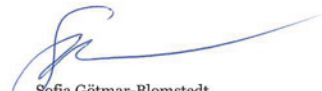
The scope of the audit

Our examination has been conducted in accordance with FAR's auditing standard RevR 12 *The auditor's opinion regarding the statutory sustainability report*. This means that our examination of the statutory sustainability report is substantially different and less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

Opinion

A statutory sustainability report has been prepared.

Malmö, 26 March 2019
Öhrlings PricewaterhouseCoopers AB


Sofia Götmar-Blomstedt
Authorised Public Accountant


My Lidén
Authorised Public Accountant

EXTERNAL ASSURANCE



Assurance statement

2050 Consulting was commissioned by Ecolan AB to conduct an independent third-party assessment to verify the Ecolan's 2018 sustainability report's fulfillment of the GRI Sustainability Reporting Standards (2016) requirements at the Core reporting level. The assurance does not include verification of the robustness and veraciousness of the contents of the report. The audit has been conducted and quality assured using a systematic and documented method developed by 2050 Consulting AB. The assurance process has involved desktop assessment of the written report in its final version.

We hereby confirm that Ecolan's 2018 sustainability report does fulfill the GRI SRS requirements at the Core level. Several omissions were made with valid reasons which are described throughout the report and in the GRI Index.

Malmö, 2019-02-25

Carl Højman

2050 Consulting AB

Malmö, 2019-02-25

Anna Yelistratova

2050 Consulting AB

GRI CONTENT INDEX

GRI Standard Title	Disclosure Number	Disclosure Title <i>Individual disclosure items ('a', 'b', 'c', etc.) are not listed here</i>	Page Number	Omissions	Explanation
GRI 102: General Disclosures 2016	102-1	Name of the organisation	3		Data compiled and reported by all offices, by the end of the year, 2018-12-01. The data corresponds to data in human resource management systems
	102-2	Activities, brands, products, and services	5, 9, 10		
	102-3	Location of headquarters	5		
	102-4	Location of operations	5		
	102-5	Ownership and legal form	5		
	102-6	Markets served	5		
	102-7	Scale of the organisation	4, 5, 9, 10, 28, 29		
	102-8	Information on employees and other workers	29		
	102-9	Supply chain	52		
	102-10	Significant changes to the organisation and its supply chain	5, 43, 44, 52		
	102-11	Precautionary Principle or approach	3		
	102-12	External initiatives	19, 20, 27, 42, 53		
	102-13	Membership of associations	53		
	102-14	Statement from senior decision-maker	6-7		
	102-16	Values, principles, standards, and norms of behavior	8-9, 14-15		
	102-18	Governance structure	21		
	102-40	List of stakeholder groups	17		
	102-41	Collective bargaining agreements	28		
	102-42	Identifying and selecting stakeholders	17		
	102-43	Approach to stakeholder engagement	17		
	102-44	Key topics and concerns raised	17, 19, 22-23		
	102-45	Entities included in the consolidated financial statements	3		
	102-46	Defining report content and topic Boundaries	17, 19, 22-23		
	102-47	List of material topics	18		
	102-48	Restatements of information	3		
	102-49	Changes in reporting	3, 19		
	102-50	Reporting period	3		
	102-51	Date of most recent report	3		
	102-52	Reporting cycle	3		
	102-53	Contact point for questions regarding the report	3		
	102-54	Claims of reporting in accordance with the GRI Standards	3		
	102-55	GRI content index	56-58		
102-56	External assurance	54-55			

GRI Standard Title	Disclosure Number	Disclosure Title <i>Individual disclosure items ('a', 'b', 'c', etc.) are not listed here</i>	Page Number	Omissions	Explanation
GRI 205: Anti-corruption 2016	GRI 103: Management approach 2016		30		
	205-03	Confirmed incidents of corruption and actions taken	30		
GRI 301: Materials 2016	GRI 103: Management approach 2016		43, 47-48		
	301-1	Materials used by weight or volume	47-48	No data available for associated process materials. Only raw materials are reported.	
GRI 302: Energy 2016	GRI 103: Management approach 2016		43, 44-45		
	302-1	Energy consumption within the organisation	44-45		
GRI 305: Emissions 2016	GRI 103: Management approach 2016		43, 46		
	305-1	Direct (Scope 1) GHG emissions	46, 59		Emissions are consolidated from entities over which Ecolean has operational control.
	305-2	Energy indirect (Scope 2) GHG emissions	46, 59		Emissions are consolidated from entities over which Ecolean has operational control.
	305-3	Other indirect (Scope 3) GHG emissions	46, 59	Energy from renewable sources can be used in scope 3 but the data is not provided from suppliers.	
	305-4	GHG emissions intensity	46		
GRI 306: Effluents and Waste 2016	GRI 103: Management approach 2016		43, 49		
	306-2	Waste by type and disposal method	49		
GRI 403: Occupational Health and Safety 2016	GRI 103: Management approach 2016		28, 35		
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	35	Consolidated data for absenteeism and total occupational diseases not available for Ecolean Group. No available data for workers other than Ecolean employees.	Lost days refers to scheduled working days and counts actual days when the employee is unable to work.

GRI Standard Title	Disclosure Number	Disclosure Title <i>Individual disclosure items ('a', 'b', 'c', etc.) are not listed here</i>	Page Number	Omissions	Explanation
GRI 404: Training and Education 2016	GRI 103: Management approach 2016		28, 34		
	404-2	Programs for upgrading employee skills and transition assistance programs	34		
GRI 405: Diversity and Equal Opportunity 2016	GRI 103: Management approach 2016		27, 32-33		
	405-1	Diversity of governance bodies and employees	32-33		
GRI 406: Non-discrimination 2016	GRI 103: Management approach 2016		27, 32		
	406-1	Incidents of discrimination and corrective actions taken	32-33		
GRI 412: Human Rights Assessment 2016	GRI 103: Management approach 2016		27, 31		
	412-2	Employee training on human rights policies or procedures	31	412-2a: No data available on total hours devoted to training on human rights.	A new Learning Management System is being implemented where training of code of conduct will be mandatory. Monitoring of devoted time will be developed.
GRI 416: Customer Health and Safety 2016	GRI 103: Management approach 2016		36		
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	37		
GRI 417: Marketing and Labeling 2016	GRI 103: Management approach 2016		38-39		
	417-3	Incidents of non-compliance concerning marketing communications	38-39		
We are taking action to increase the possibilities for a circular economy for our packaging solutions	GRI 103: Management approach 2016		50-51		
	No topic specific GRI standard	Report on initiatives taken to increase recycling and circular economy for our products	50-51	Data on availability of circular solutions for flexible plastic packaging solutions is missing.	Mapping of availability for separate collection and recycling possibilities for flexible plastic packaging will be further developed, as part of this objective.

APPENDIX 1

- **GHG emissions – scope 1, 2 and 3**

Ecolean reports on energy use from its production sites and the same boundaries are used in the GHG emissions calculations from energy and waste. For business travel, Ecolean AB and its subsidiaries are included, and the data on the impacts from cars, trains, and flights are used when available. We use both generic and company specific emission factors.

- **Scope 1 and 2**

The Greenhouse Gas Protocol has been used to calculate emissions. Carbon dioxide is the dominating greenhouse gas, although others are included. The calculation model has been conducted by an independent consultancy. For scope 1 and 2 emissions, we use operational control as a consolidation approach. For scope 2 we report according to the market based method. Location based emission factors are however used for China due to no information from the energy suppliers. Since January 2017, Ecolean has purchased renewable electricity from hydropower plants for its production sites in Sweden. If we would use location based method for Scope 2, emissions would increase with less than 3%, to 3946 tonnes CO₂-eq. The reason for this is that the Swedish electricity mix has low input of fossil fuel. Emission factors from the Gabi 7 LCA 2017 software have been used for the Swedish average electricity mix.

Scope 1 emission factors for natural gas are based on values from Miljöhandboken 2011 and emission factors from fuel for company-owned cars are based on data from the Swedish Transport Agency (Handbok för vägtrafikens luftföroreningar, 180208). In Sweden, fuels for cars have a share of renewable content but it's unknown if this is the case on our other markets. The share of biogenic carbon dioxide emissions are therefore unknown. Emission factors for scope 2 are based on data for electricity and district heating in China from the GHG Protocol, Purchased electricity v4.8 and the GHG Protocol's Stationary Combustion v4.1. Emissions for Swedish electricity is based on data from the Swedish electricity supplier. The Swedish Environmental Protection Agency Emission data for biogas was used for calculation of biogenic carbon dioxide emission.

- **Scope 3**

Scope 3 emissions cover all other indirect emissions in a company's value chain. In scope 3, Ecolean reports according to the GHG Protocol Corporate Value Chain Standard using the following categories: 1. Purchased goods and services, 4. Upstream transportation and distribution, 6. Business travels and 9. Downstream transportation and distribution.

Emission factors for business trips by air are derived from ICAO, and business trips by train and car from the GHG Protocol Average 2015.

Impacts from raw materials and upstream transportation are based on background data from life-cycle assessments performed during 2017, published in the four Ecolean Environmental Product Declarations in October 2017. Impacts from raw materials include upstream transportation and distribution. Energy from renewable sources can be used in scope 3 but the data is not provided from suppliers, therefore no specific reporting of biogenic carbon emissions.



ecolean

a lighter approach to packaging

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