




Environment



Environmental issues are of increasing societal concern and have brought many challenges to our society. For instance, today, we are facing the consequences of climate change, such as melting ice caps, rising sea levels, and changing weather patterns. We all need to address these issues and, as a global organization, we recognize that we have a key role to play in reducing our environmental impact.

As with most industries, the environment has a direct influence on our business. We also know that our operations impact the environment, through resource usage, emissions, and waste generation, but we strive to minimize this impact.

By implementing sustainable business practices, we are able to conserve resources, reduce waste, manage costs, and meet the growing consumer demand for more sustainable products – bringing benefits to both the environment and our business.

This approach is explained in [the JT Group Environment Policy](#). 

[Read more >](#)

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In 2019, we launched the JT Group Environment Plan 2030, building on what we already established in our 2020 plan. The new plan sets objectives and targets to address our key environmental risks and opportunities across three focus areas: Energy and Emissions, Natural Resources, and Waste.

It considers not only our operations, but also key elements of our value chain. The plan contains longer-term objectives for energy and emissions, along with quantified targets to achieve by 2030.

We will track performance and progress towards our objectives and targets, and we will revisit the plan periodically to ensure that it remains relevant to our business and stakeholders.

JT Group Environment Plan 2030

OUR CHOICE. OUR FUTURE.

Energy and emissions

	Energy	Emissions
Objective	Transition our operations to net zero carbon energy supply.	Reduce our greenhouse gas emissions to support the Paris Agreement on global climate change with the aim to achieve net zero carbon emissions from our operations.
Targets	We will double the proportion of renewable electricity that we use to 25% by 2030 and 100% by 2050.	<p>We will reduce greenhouse gas emissions from our own operations by 32%.</p> <p>We will reduce emissions associated with our purchased goods and services by 23%. This will be achieved through a 40% reduction from our direct leaf supply chain and reductions in our non-tobacco materials, such as packaging.</p>

Natural resources

	Water	Forestry
Objective	Support global water stewardship by reducing our water withdrawal and by encouraging water risk management in our supply chain.	Ensure a sustainable wood supply for our product supply chains and further contribute to forest conservation and rehabilitation.
Targets	<p>We will reduce water withdrawal associated with our tobacco business by 15%.</p> <p>To better understand water risk and use in our supply chain, by 2022, we will implement a water risk management process in our manufacturing supply chain.</p>	<p>To further focus our efforts on sustainable forest management, by 2020, we will have assessed the drivers for deforestation and forest degradation in communities where we source tobacco and developed action plans for improved wood resource use, forest conservation, and forest rehabilitation.</p> <p>We will replace all wood from natural forests used in the tobacco curing process of our directly contracted growers with renewable fuel sources.</p>

Waste

	Waste
Objective	Further reduce the environmental impacts of waste associated with our processes and products.
Targets	We will reduce waste associated with our tobacco business by 20%. By 2020, we will have targets and action plans relating to the appropriate use and responsible disposal of materials, including plastics, used in our products and packaging.

Baseline year for all targets is 2015. Target year is 2030 unless stated otherwise. The overall plan is to be reviewed every five years.



Environmental management

In our more complex operations, we align our approach to environmental management with the internationally recognized standards ISO 14001 and ISO 50001.* In our smaller and less complex operations in Japan, we have implemented our own 'JT Green System', which promotes a simple and consistent approach.

ISO 14001 encourages businesses to think more broadly about environmental issues – not only those associated with their direct operations, but throughout their entire value chains. A revised ISO 50001 standard was issued in 2018, and we are in the process of broadening our approach to energy management according to the new framework.

We are also working to streamline and better integrate our environmental and energy management systems with other business considerations, such as quality, occupational health and safety, and business continuity.

To objectively review our approach to environmental management and our overall performance, we use external disclosures and ratings agencies, such as [CDP](#) and the [Dow Jones Sustainability Indices \(DJSI\)](#). In DJSI's environmental dimension, we improved our rating and achieved the maximum score in Environmental Reporting and Climate Strategy.

ISO 14001 certification

We use ISO 14001 as the framework for our environmental management systems to manage significant environmental aspects, mitigate risks, and optimize opportunities. We track the proportion of our cigarette and tobacco-related factories that are certified to ISO 14001. Our aim is to achieve 100% ISO 14001 certification of those factories by the end of 2020. Data for current and past certification of our factories can be found [here](#).

*ISO 14001 and ISO 50001 are the internationally recognized standards for environmental management systems and energy management systems, respectively. These standards do not prescribe absolute performance requirements. Rather, they provide us with a framework to help build effective management systems that deliver continual improvement in environmental and energy performance.

CDP A List and Supplier Engagement Leader

This year we regained our spot on CDP's prestigious "A List" for climate change, having done so previously in 2016. We are also very proud to report that we are included in the CDP "A List" as a global leader on water security for the first time and recognized as a global leader in engaging our supply chain in addressing climate change. This is recognition of our approach and performance in relation to tackling environmental challenges.

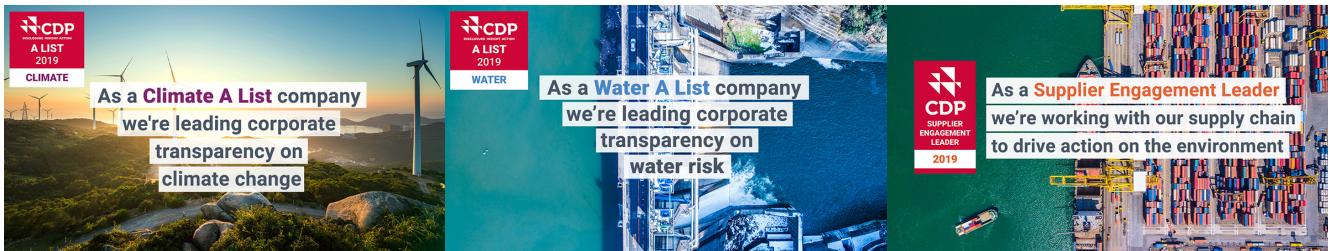


We are honored to be included in CDP's Water Security "A List" for the first time, following our recognition in CDP's "A List" for climate change in the same period. This clearly reflects our continued holistic approach to address environmental issues particularly water risks that can have a major impact on society and our business. We will continue our work to tackle environmental challenges and thus fulfill our social responsibility to help achieve a sustainable society.



Kazuhito Yamashita

Director and Senior Vice President
Chief Sustainability Officer,
Compliance and General Affairs



Related links

Environment

Environmental management

Environment and our operations

Environment and our products

Environmental data / External verification



Environment and our operations

Energy and emissions



Natural resources



Waste



Case studies



We strive to further reduce the environmental impact of our operations, focusing on the most significant environmental risks and opportunities for our business and stakeholders. These currently include climate change, the sustainable use of resources, and responsible waste management.

Energy and emissions

Climate change such as modified weather patterns is the biggest environmental challenge facing society and our business. These changes could have serious implications for the supply chain of our materials, as our products are mainly agricultural-based.

We are committed to tackling this issue and we are reducing our GHG emissions to support the Paris Agreement on global climate change, with the longer-term aim of transitioning our operations to net zero carbon energy supply.

The potential for financial impact associated with climate change is now well known, and concern is growing about its mid to long-term impact on business operations and financial market stability. The Task Force on Climate-related Financial Disclosures (TCFD) encourages companies to develop more effective climate-related financial disclosures.

With this in mind, in 2019, we began conducting climate scenario analysis. Our first round of analysis was based on two scenarios: a global temperature increase of two and four degrees Celsius. To limit within two degrees from industrial revolution era till the end of this century is the required target from

Paris agreement and four degrees are expected figure if GHG reduction efforts continued in pace of business as usual in the world.

Two main risk factors were identified: 'potential cost increases due to the raising of carbon taxes by government to further reduce GHG emissions' and 'the impact on leaf tobacco growing due to changes in environmental conditions'. Our conclusion was that we could mitigate these risks by continuing to implement climate-related initiatives and programs across our value chain so that our business operations would not be materially disrupted by financial impacts.

During the next stage, we will further develop our scenario analysis and improve governance system on this topic also. We will continue to use the results of the analysis to enhance engagement with our stakeholders and corporate value. Based on the climate-related risks and opportunities identified, we will continue to strengthen the resilience of our business strategy and optimize the way we disclose the information.

In our Group Environment Plan 2030 we have committed to reduce greenhouse gas emissions from our own operations by 32% (2030 versus 2015). We are on track to achieve the target. To date, this is through a combination of energy and emissions reduction initiatives, increasing the proportion of the energy we use that comes from renewable sources and production impacts. Going forward, the main programs to achieve the target relate to further improvements in energy efficiency renewable energy and vehicle fuel type and efficiency.

As part of our efforts to meet our energy and emissions target, we will double the proportion of renewable electricity that we use to 25% by 2030, in support of our goal of reaching 100% by 2050.

In our direct operations, the renewable electricity target will be achieved through on-site generation and the sourcing of third-party renewable energy.


Our Renewable Energy Task Team has carried out a factory-by-factory feasibility review of opportunities associated with solar, hydro, wind, and biomass power. We are assessing the feasibility of solar energy generation for our non-production sites too. Where possible, and where it makes business sense, we have included these opportunities in our business planning and in our feasibility study for the 2030 Science Based Target. The team has also reviewed options relating to zero or low-carbon energy tariffs and green energy certificates.

We are well on the way to achieving our 2030 renewable electricity target. By the end of 2019, 32.6% of electricity used in our international factories came from renewable sources (either purchased^{*1} or generated on-site^{*2}). Overall, 14% of the electricity we used in 2019 came from renewable sources. We have plans in place which will further increase the proportion of renewable electricity we use.

Through our Energy Opportunities Scheme, our factories have identified over 200 no- or low-investment projects. These avoid over 7,900 tons of GHG emissions and represent a cost saving of over 1.5 million U.S. dollars, with an average payback of three months.

Vehicle emissions are another important consideration for us, and we encourage all of our locations to select alternative, more environmentally friendly fleet vehicles.

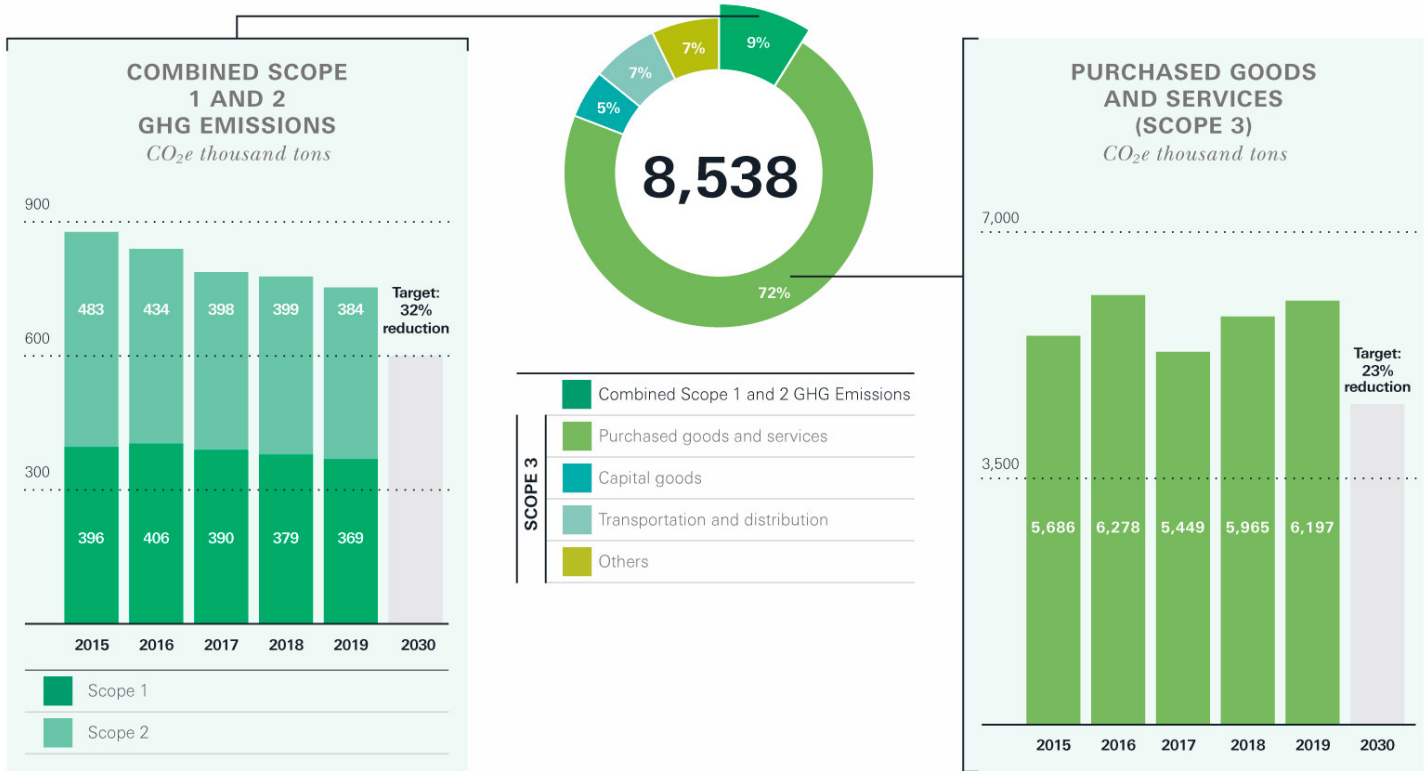
As part of the JT Group Environment Plan 2030, we are committed to reducing emissions associated with our purchased goods and services by 23% between 2015 and 2030. We aim to achieve this through a 40% reduction in emissions from our direct leaf supply chain and reductions in non-tobacco materials such as packaging.

As such, we will continue to improve our existing [curing barn projects](#)  and expand to more locations. We will reduce the amount of wood used for curing, while at the same time ensuring that the wood we use comes from renewable sources in Zambia and Tanzania, for instance.

Another initiative to reduce leaf-related emissions is further optimizing the use of crop inputs, such as fertilizers and crop protection agents, wherever possible. We will also be working with suppliers to reduce the amount of packaging associated with our non-tobacco materials.

In 2019 GHG emissions related to Purchased Goods and Services increased by 9.0% compared to 2015, due to increased leaf volume sourced from Zambia and Tanzania, both of which use wood for curing that currently is predominantly non-renewable. We expect that the impact of initiatives to reduce leaf-related emissions will be seen from 2022 onwards, with curing barn upgrades and the increase in proportion of renewable wood used for curing in Zambia and Tanzania.

GHG EMISSIONS IN OUR VALUE CHAIN IN 2019
CO₂e thousand tons



Science Based Targets (SBT)

We have set a long-term GHG emission reduction target, which was approved as a science based target (SBT) by the Science Based Targets initiative (SBTi).

Read the [press release](#) (February 2019)

*1 We purchase electricity from renewable sources in Canada, Germany, Poland, Romania, Sweden, the Philippines, and Serbia.

*2 We generate electricity on-site from renewable sources in Nigeria, the Netherlands, the Philippines, and Turkey.

Natural resources

Water

Societal demand for water is increasing globally and water-related issues such as availability, quality, flooding, drought, or regulatory changes can have a major impact on society and our business.

Our tobacco and food manufacturing activities all use water. However, our main operation, the tobacco business, is not water-intensive and the water that is required for tobacco crops comes predominantly from rainfall.

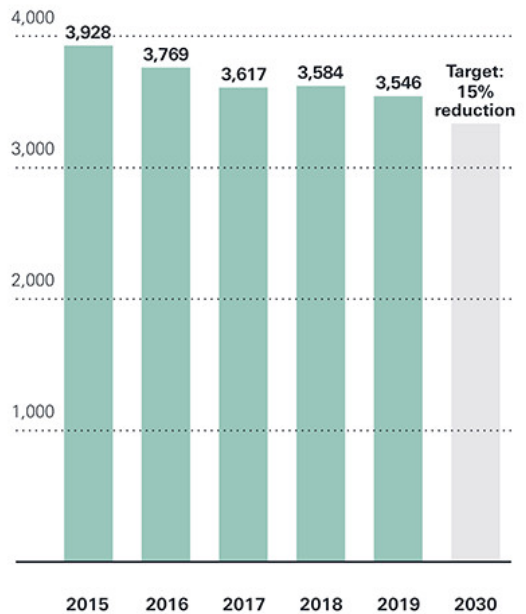
As part of our ongoing program to address water-related risks to our business and further promote effective water management, by the end of 2019 we had completed water risk assessments at 75 of our 79 factories (95%).

In the JT Group Environment Plan 2030, we commit to supporting global water stewardship by reducing our water use and encouraging water risk management in our supply chain. We have set a target to reduce our tobacco business-associated water withdrawal by 15% by 2030 vs 2015. To calculate this target, we took into account site level water intensities and regional predictions for future water stress.

We plan to achieve the target by using less freshwater for factory site irrigation,

WATER WITHDRAWAL BY TOBACCO BUSINESS

Thousand m³



reducing water use in our processes and improving leak control, using more recycled water, and improving cleaning practices. Based on 2019 results, we are ahead of target, through a combination of water efficiency improvement programs and the impact of production volume changes.

Water risk in our supply chain

Many of our raw materials require water in their production, and water is an important resource for many of our suppliers. To better understand water usage and water-related risk in our supply chain across the Group, by 2022 we plan to implement a water risk management process.

Forestry

Ensuring a sustainable wood supply and further contributing to forest conservation and rehabilitation are key objectives set out in the JT Group Environment Plan 2030.

We already have a number of programs and initiatives in relation to sustainable forestry and wood. Through our live barns initiative in Malawi, we are reducing the number of trees that are cut down to build curing barns, by constructing the barns from living trees.

In addition to our current programs and to further focus our efforts on sustainable forest management, we will have assessed the drivers for deforestation and forest degradation in communities where we source tobacco. We will also have action plans for improved wood resource use, forest conservation, and forest rehabilitation by the



end of 2020. We are currently conducting surveys in Zambia and Tanzania to assess these drivers. Quantitative and qualitative results from these surveys will enable us to take focused, high-impact actions, where in our control and in alignment with our sustainability strategy.

Within the JT Group Environment Plan 2030, we have a target to replace all wood from natural forests in the tobacco curing process of our directly contracted growers with renewable fuel sources by 2030. To achieve this, we are implementing measures to reduce wood consumption in tobacco curing through barn improvements and upgrades in Zambia, Tanzania, and Brazil.

In 2019, we saw a reduction of around 30% in wood requirements vs 2015. We are also addressing the sourcing of wood required for curing. Through dedicated agroforestry programs, based on fundamental and scientific forestry research, we are seeing improvements in tree seedling production and woodlot establishment. This will ultimately lead to optimal tree growth and wood production.

Waste

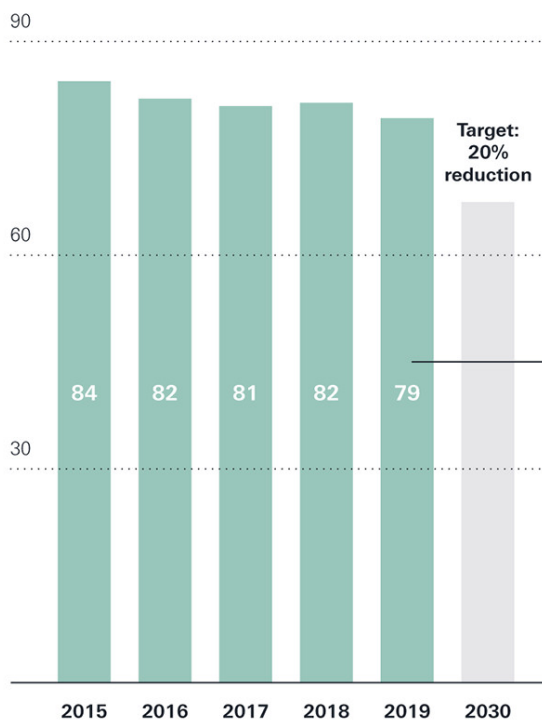
From a societal and stakeholder perspective, waste, and particularly plastic waste, is of increasing concern. From a business perspective, all waste has a direct cost (handling and disposal) and an indirect cost (e.g. resource and processing costs).

Waste management is a key component of our Environment Plan 2030, and we have set targets for waste reduction. Across the JT Group we apply a 'Reduce, Reuse, Recycle' approach. We also set targets for waste reduction as we believe that reducing waste helps to conserve resources, which in turn helps to minimize our environmental impact and cut business costs.

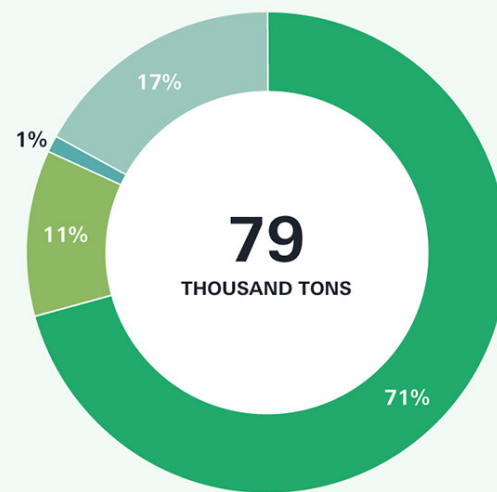
By 2030, we will reduce waste associated with our tobacco business by 20% vs 2015. We will do this by improving resource efficiency and rolling out innovative solutions across different sites. Based on 2019 results, we are on track to achieve our waste reduction target. This is due to a combination of waste reduction programs and the impact of production volume change. Going forward, we are working on further reducing secondary packaging and tobacco waste, along with other waste reduction initiatives such as reuse of materials (e.g. tobacco packaging) and yield improvements.

WASTE GENERATED BY TOBACCO BUSINESS

Thousand tons



BREAKDOWN OF WASTE GENERATED BY TOBACCO BUSINESS IN 2019 (%)



- Recycled including waste composted
- Incinerated with heat recovery
- Incinerated without heat recovery
- Landfilled

Case studies

Sustainability is deeply embedded within our operations. We work hard to minimize our environmental impact by focusing on energy efficiency, GHG emission reduction, water efficiency, and waste reduction.

In Japan

Case study

A greener approach to procurement

In our Japanese operations, we have introduced 'green procurement guidelines' to ensure that the products and services we purchase cause minimal environmental impacts.

Based on these guidelines, our procurement system gives employees a list of green products and services they can purchase, including stationery, computers and other office equipment, and transportation services. We review and update this list periodically, based on the availability of new products and services, and monitor how many products and services are purchased based on these guidelines.

In 2019, we extended our green products and services list. For example, a green vehicles option and paper envelopes with a more environmentally friendly design were added. We also enhanced our internal control measures to further increase our green procurement rate.

Our procurement initiatives do not only include our own operations, but also our supply chain. We encourage our suppliers to establish an environmental management system, and monitor the implementation on a regular basis.

Case study

Building environmental awareness and expertise

We strongly believe in raising awareness of environmental issues among all of our employees. All employees receive environmental awareness training at least once per year, and we regularly publish updates and articles on our Company intranet.

To improve the environmental performance of our Japanese domestic business operations, we have appointed people responsible for environmental management at each of our business sites. These employees are trained in environmental management systems and the relevant regulatory requirements. We also offer a more advanced course for staff who are responsible for internal auditing and reporting environmental data. In 2019, around 200 employees took part in these training programs.

In addition, our internal auditors go through a certification process to ensure that we apply a consistent approach across all of our business sites.

Case study

Recognition of our GHG emissions reduction efforts

Our efforts to address climate change in Japan are recognized externally.

We are certified as an Eco Rail mark company by the Ministry of Land, Infrastructure, Transport, and Tourism in Japan. This group of companies is reducing GHG emissions through techniques such as modal shift – changing from trucking to container transportation via rail and sea – and improving truck-loading ratios.


The JT Kansai factory (tobacco manufacturing) received two awards from Kyoto City and Kyoto prefecture government for its emission reduction initiatives. The factory is proactively tackling the reduction of GHG emissions through implementation of projects such as high efficiency freezer installation and eco-friendly compressor use.

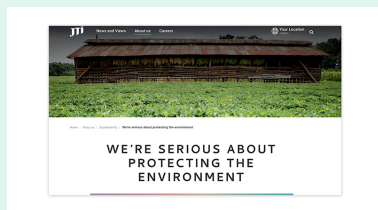
In December 2019, Nihon Syokuzai Kakou, a subsidiary of our processed food business, was selected as a leading company and awarded by Miyazaki prefecture government for its effort on GHG emissions reduction. Japanese way of working Kaizen, which involves all employees and keeps improving the day-to-day operations, helps us to achieve impressive results.

We continuously strive to further reduce our environmental impact by combining the Japanese way of Kaizen and innovation driven by technology.

In our international tobacco business

Case study

There are lots of programs and initiatives on both a global and local level, from the way we source raw materials to the way we ship finished products. Read more on [JTI.com](https://www.jti.com). 



Related links

Environment

Environmental
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Environment and
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Environment and
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Environment and our products

We strive to further reduce environmental impacts along our value chain, through improved product design and development, responsible procurement, efficient delivery of our products and services, and by adopting innovative technologies and approaches.

As a key part of the [JT Group Environment Plan 2030](#), we are working to establish targets and action plans relating to the appropriate use and responsible disposal of materials used in our products and packaging, including plastics.

Within the R&D functions in our Tobacco business we have colleagues dedicated to packaging strategy, innovation and sustainability. They have a focus on improving the sustainability of packaging, whether it be through reduction, simplification or substitution, to improve reuse and recyclability, and to reduce the overall amount of fossil-fuel derived plastic that we use in our packaging. For example in the Germany market, we recently launched new containers for our Winston Make Your Own offering. We have reduced the amount of plastic used in the boxes by between 10% and 16%, which is a first step in improving the sustainability of our Make Your Own packaging.

We have already launched various initiatives, including the following examples.

Responsible recycling and disposal schemes for Reduced-Risk Products

To offer consumers a wider choice, we are launching Reduced-Risk Products (Products with the potential to reduce the risks associated with smoking.) in many markets. In contrast to traditional combustible products, Reduced-Risk Products present new and specific challenges from an environmental perspective, such as electronic waste.

We take our responsibility to protect the environment very seriously, and we want our recycling and disposal schemes to meet the specific needs of each market. In 2019, we published internal guidelines for Waste Management and Recycling across the Company. This guidance helps markets to determine and implement the appropriate initiatives.*E

To encourage consumers to safely recycle or dispose of our products, we offer convenient return

schemes in some of our markets. These are adapted to the local needs, as the following best practice examples show.

Case study

PLOOM - Return scheme in Japan

In some parts of Japan, we have introduced recycling boxes at shops selling Ploom so that consumers can return their used devices, capsules, and cartridges conveniently.

This program was a significant extension of a 2017-2018 pilot scheme, in which we sent out recycling boxes to more than 250,000 people.

In 2019, we started collecting used Ploom devices in addition to used capsules and cartridges. Our aim was to respond to increasing consumer interest in recycling, and to reduce the environmental impact of the growing Reduced-Risk Product market.



Key achievements in 2019

Recycling boxes introduced in around 300 shops

Following positive feedback from consumers, we will continue to explore a more holistic approach to recycling and waste management.

Case study

Logic - Return scheme in Switzerland

In Switzerland, online customers can order a Logic recycling box, made from FSC-certified paper, to collect their used pods. They can then send these boxes to us free of charge for recycling.

We also set up 'pod points' in shops selling Logic products across Switzerland, giving consumers the option to return their used products in person.

After collection, the items are recycled according to Swiss standards at the Dagmersellen recycling plant.



Key achievements: March-December 2019

- + 3,600 individual recycling boxes ordered
- + 440 recycling boxes returned

Reducing the environmental impact of ready-made cigarettes

Litter from tobacco products is an issue that calls for collective action to educate adult consumers to act responsibly. To approach this, we have rolled out various initiatives, including the following.

Case study

'Pick up and you will love your city' in Japan

In Japan, we run the 'Pick up and you will love your city' campaign in collaboration with over 4,000 organizations, including local governments, NGOs, and volunteer groups, as well as local citizens.

Since the launch of this initiative in 2004, we have organized more than 2,000 litter-picking events, involving 1.9 million participants.

We want to change participants' mindsets to 'I will not throw anything away', through their experience of picking up litter.



Key achievements since 2004

- + 2,000 events
- + 1.9 million participants
- + 4,000 organizations

Case study

Ambassadors for a clean environment tackle attitudes to littering in Switzerland

Read about [our pocket ashtray campaigns in Switzerland](#).

AMBASSADORS FOR A CLEAN
ENVIRONMENT TACKLE
ATTITUDES TO LITTERING IN
SWITZERLAND

Packaging

Read about reducing [the environmental impact of packaging](#).

The EU Single-Use Plastics Directive

Read about [our approach](#).

Our referenced guidelines(GRI), notes on data (BoR), and scope of our data (*A-E).

[Read more >](#)

Related links

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Environmental
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Environmental
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Environmental data / External verification

Energy



GHG



Water



Waste



ISO 14001



Environment data verification statement

[Independent Assurance Statement for the JT Group](#)

Environmental data

Group-wide Scope 1 and 2 GHG data, some Scope 3 GHG data, energy consumption, which includes renewable electricity, water withdrawal, and waste-related data have been externally assured. The calculation methodology and scope are outlined in our [Basis of Reporting](#).

Energy

Energy Consumption (Terajoules)	2015	2016	2017	2018	2019
Fossil fuels purchased and consumed	6,160	6,426	6,234	6,070	6,040
Electricity (non-renewable) purchased	3,455	3,075	2,976	3,018	2,862
Steam / heating / cooling and other energy (non-renewable) purchased	133	103	78	77	70
Total renewable energy purchased or generated	701	898	1,064	1,127	1,176
- Total renewable electricity purchased or generated	94	227	379	417	462
- Total renewable energy purchased or generated excluding electricity	607	671	685	710	714
Total energy sold	-105	-107	-112	-114	-133
Total	10,344	10,394	10,240	10,177	10,014

Energy Consumption Breakdown (Terajoules)	2015	2016	2017	2018	2019
Non-renewable fuel consumed	6,141	6,382	6,168	6,023	6,040
Renewable fuel consumed	606	669	684	709	713
Electricity, heating, cooling and steam purchased for consumption	3,699	3,448	3,494	3,537	3,375
Self-generated electricity, heating, cooling and steam	2	2	5	22	19
Electricity, heating, cooling and steam sold	-105	-107	-112	-114	-133
Total	10,344	10,394	10,240	10,177	10,014

Proportion of renewable electricity (%)	2015	2016	2017	2018	2019
Total	3%	7%	11%	12%	14%

GHG

GHG emissions (1,000 tons CO ₂ e)	2015	2016	2017	2018	2019
CO ₂	363	369	358	352	346
HFCs	33	37	32	27	23
Total (Scope 1)	396	406	390	379	369
Scope 2	483	434	398	399	384
Total (Scope 1 + 2)	879	839	788	778	753
Purchased goods and services	5,686	6,278	5,449	5,965	6,197
- Purchased tobacco	3,830	4,591	3,735	4,292	4,591
Direct leaf supply	2,220	2,846	2,107	2,606	2,617
Third-party tobacco materials	1,610	1,745	1,628	1,686	1,974
- Others	1,856	1,687	1,714	1,673	1,606
Capital goods	391	358	422	481	393
Fuel-and-energy-related activities (not included in Scope 1 or 2)	129	120	126	122	119
Upstream transportation and distribution	315	343	358	313	337
Waste generated in operations	25	23	25	26	24

GHG emissions (1,000 tons CO ₂ e)	2015	2016	2017	2018	2019
Business travel	265	264	242	232	223
Employee commuting	54	54	57	51	47
Upstream leased assets	0	0	1	1	1
Downstream transportation and distribution	295	248	283	305	286
Processing of sold products	2	1	2	1	1
Use of sold products	32	33	43	43	42
End of life treatment of sold products	89	75	105	106	108
Downstream leased assets	1	1	1	1	1
Franchises	1	1	1	1	5
Total (Scope 3)	7,285	7,798	7,114	7,648	7,785

Water

Water withdrawal by source (1,000 m ³)	2015	2016	2017	2018	2019
Fresh surface water	1,398	1,575	1,466	1,570	1,631
Brackish surface water/seawater	0	0	0	0	0
Rainwater	46	47	53	47	41
Groundwater	5,757	5,774	5,595	5,690	5,662
Produced/process water	0	0	0	0	0
Municipal supply	3,590	3,327	3,323	3,362	3,114
Wastewater from another organization	0	0	0	0	0
Total	10,791	10,724	10,436	10,669	10,448

Water discharge by destination (1,000 m ³)	2015	2016	2017	2018	2019
Fresh surface water	2,455	2,439	2,686	2,837	2,888
Brackish surface water/seawater	0	0	3	18	30
Groundwater	1	2	1	0	1
Municipal/industrial treatment plant	3,359	3,113	2,998	3,024	2,836
Wastewater from another organization	0	0	0	0	0
Total	5,816	5,554	5,688	5,879	5,755

Waste

Waste generation (1,000 tons)	2015	2016	2017	2018	2019
Recycled including waste composted	99	96	96	96	97
Incinerated with heat recovery	10	9	8	9	10
Incinerated without heat recovery	7	5	5	7	5
Landfilled	18	17	18	17	14
Total	134	128	127	129	126

ISO 14001 certified (Scope: Cigarette and tobacco-related factories {including Group factories})

	2015	2016	2017	2018	2019
Total factories	41	40	43	43	46
Certified factories	34	32	33	34	36
Certified (%)	83%	80%	77%	79%	78%

Related links

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