

Agriculture production management solution that helps increase food production – resource optimization and higher management control



RELATED SDGS GOALS



SDGS 169 TARGETS

- 12.2 Achieve the sustainable management & efficient use of natural resources
- 2.3 Double the agricultural productivity
- 2.4 Ensure sustainable food production systems

PRIMARY COUNTRY

Brazil

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

HydroControll is a high technology platform that helps connect workers on the field to their own tillage, using meteorological data, satellite images, artificial intelligence and specialized technical support.

It has 3 modules:

- analytics, to manage intelligence data about water needs, soil, weather and equipment;
- data analysis of localized rainfall and vegetation, soil moisture (through satellite images) and wetness index; and
- automation, with complete and integrated automation of all equipment.

2 IMPACT ON SOCIETY

- H**elps increase food production by using high-end technology of field monitoring;
- Creates environmental sustainability by reducing resource use;
- Can reduce energy consumption by 30%.



URL

<https://stefanini.com/pt-br/trends/noticias/ihm-e-hidrofert-lancam-solucoes-tecnicas-para-segundo-agricola>



URL

<https://www.youtube.com/watch?v=X6KfknBwROs>



Bioenergetic Technologies in Forest Industry



RELATED SDGS GOALS



SDGS 169 TARGETS

- 7.2 Increase the share of renewable energy in the global energy mix
- 7.3 Double the global rate of improvement in energy efficiency
- 7.b Expand infrastructure for supplying sustainable energy services in developing countries
- 12.2 Achieve the sustainable management & efficient use of natural resources
- 12.4 Achieve the environmentally sound management of chemicals & wastes
- 12.5 Reduce waste generation through prevention & 3R
- 13.3 Improve human & institutional capacity on climate change
- 15.1 Ensure the conservation, restoration & sustainable use of terrestrial & inland freshwater ecosystems

PRIMARY COUNTRY

Russia

OTHERS

Segezha Group key assets are located in six regions of Russia and in Denmark, Netherlands, Germany, Italy, Turkey, Romania, Czech Republic. The Group distributes its products in 87 countries worldwide.

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

The process of timber production causes creation of lumber sawing byproducts, such as bark, filings and chipped wood. In 2018 the company implemented 3 projects in field of bioenergy in Republic of Karelia, Vologda Region and Krasnoyarsk Krai. Lumber sawing byproducts remained after timber processing now are being used as raw materials for two newly built pellet plants producing 12,000 and 70,000 tons per year of ecofriendly source of power – fuel pellets. In addition, byproducts are used in Pulp and Paper Mill own boiler house to generate heat and steam for the enterprise’s own needs.

2 IMPACT ON SOCIETY

53 % of waste are already either recycled or used to receive valuable components. The mill own bio-boiler will reduce consumption of fuel oil within 30%, and its emissions – up to 40%. Pellets are 1,5 more effective than wood.



URL

<https://segezha-group.com/en/press-center/news/within-the-framework-of-the-3rd-stage-of-modernization-sppm-updated-the-forest-and-wood-equipment/>



URL

<https://segezha-group.com/en/press-center/news/segezha-group-to-build-a-pellet-plant-in-siberia/>



URL

<https://segezha-group.com/en/press-center/news/pellet-production-begins-at-sokol-integrated-woodworking-plant/>



Carbon Neutral Programme



RELATED SDGS GOALS



SDGS 169 TARGETS

13.3 Improve human & institutional capacity on climate change

PRIMARY COUNTRY

Brazil

OTHERS

Argentina, Chile, Peru, Mexico and Colombia

2 IMPACT ON SOCIETY

- Since 2009, carbon emissions are considered to calculate the annual bonus paid to Natura's executives.
- The company reduced one-third of its CO₂ emissions by 2013, avoiding 480,000 metric tons of CO₂ emissions – or 83,000 trips around the Earth by car.



1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Since 2007 Natura is carbon neutral, prioritizing the reduction of direct and indirect emissions throughout the production chain, in addition to offsetting 100% of what cannot be avoided. A mandatory stage in the company's innovation process is the Environmental Calculator. This digital system uses information about packaging and formulas to calculate the environmental impact of a product while it is still at the development stage, helping on the decision to proceed or to interrupt its development. The calculator is supported by a software that assesses carbon emissions and other information, such as potential for recycling, life cycle and ingredients.

URL

<https://www.natura.com/>



CHAMPIONS 12.3

Champions 12.3

RELATED SDGS GOALS



SDGS 169 TARGETS

- 12.3 Halve per capita global food waste & reduce food losses
- 2.4 Ensure sustainable food production systems
- 17.17 Encourage effective public, public-private & civil society partnerships

PRIMARY COUNTRY

Global

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Coalition of executives from governments, businesses, international organizations, research institutions, farmer groups, and civil society dedicated to accelerating progress towards Target 12.3. The goal is to define and quantify the business cases associated with reducing food loss and waste and communicating the return on investment for companies and other organizations making investments to reduce food loss and waste. Through better quantifying food loss and waste and monitoring progress towards 12.3, the group hopes to identify, pursue, and showcase the proven strategies of success.

2 IMPACT ON SOCIETY

The group publishes progress reports and showcases best practices reaching the SDG target. The average benefit-cost ratio of investments in food loss and waste reduction is 14:1. A viable business case was developed for reducing FLW in the hotel industry:

- Hotels decreased 21% of food waste
- With an initial investment of less than \$20K, 70% of hotels had recouped their initial investment within 1 year (95% by year 2)



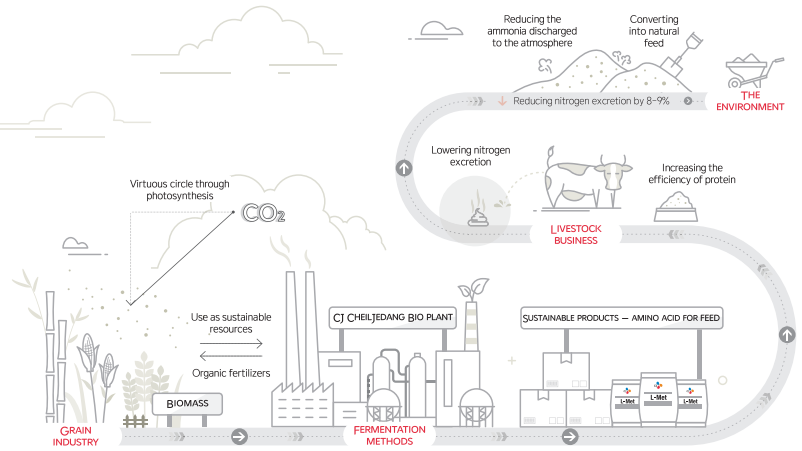
URL

<https://champions123.org/>



Changing the World

CJ Bio technologies lead to sustainable life and earth



RELATED SDGS GOALS



PRIMARY COUNTRY

Southeast Asia

OTHERS

Global

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

CJ CheilJedang's Bio business provides the best quality of amino acids and solutions focusing on world-class eco-friendly technologies. In 2016 CJ's eco-friendly amino acids achieved SMART certification of fulfilling SDGs Goal 2 and 17 by UN. CJ's amino acids alleviate farmland usage efficiency which affects future food security through enlarging human consumption. Even more it contributes on sustainable environment by substituting petroleum-based chemical materials to fermentation technology using microorganism of nature and recycled materials such as sugar cane. Lastly CJ's amino acids livestock feeds can protect earth by reducing one of the global warming factors, nitrogen excretion.

2 IMPACT ON SOCIETY

- Reduces nitrogen excretion in livestock farms by 8~9%
- Promotes the physical growth of livestock efficiently
- Prevents pollution and global warming caused by livestock business
- Enlarges efficient use of farmland to lessen global hunger
- Contributes to maintain healthy livestock ecosystem with local society



URL

<https://sustainabledevelopment.un.org/partnership/?p=11284>

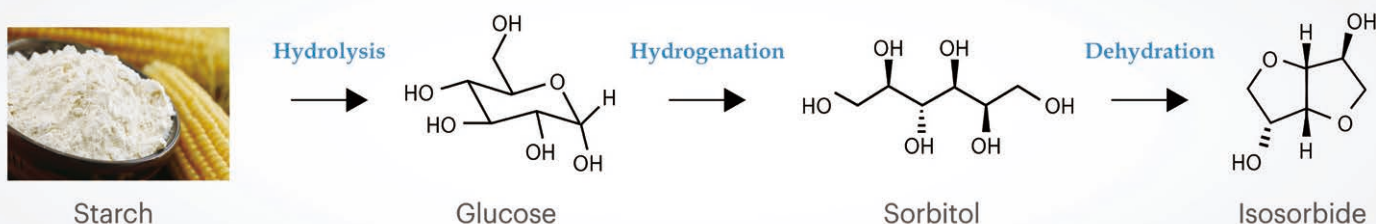


URL

[http://www.cj.co.kr/cj_files/2017%20Sustainability%20Report\[single\].pdf](http://www.cj.co.kr/cj_files/2017%20Sustainability%20Report[single].pdf)



Developing eco-friendly and functional bio-plastic material



RELATED SDGS GOALS



SDGS 169 TARGETS

- 12.4 Achieve the environmentally sound management of chemicals & wastes
- 3.9 Reduce deaths & illnesses from hazardous chemicals & pollution

PRIMARY COUNTRY

Japan

OTHERS

Republic of Korea

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Samyang used corns to develop plant-oriented polymer's monomer, Isosorbide, which is eco-friendly and sustainable, instead of using petroleum which is limited resource, in order to enhance the environmental problems that the world faces. Compared to petrochemical plastics, bio-plastics made from Isosorbide has superior environment-friendly traits such as resolvability and nontoxic trait. Also, Isosorbide-based bio-plastics have differentiated properties such as better transparency and solidity so that they could be applied to wide range of products such as exterior of electric devices, food packaging and eco-friendly building materials.

2 IMPACT ON SOCIETY

- Reduction of environmental impact through replacing petrochemicals.
- Potential sustainable supply of raw-material based on plants.
- Improvement of human health by substituting endocrine disrupting BPA and phthalate based plasticizers

APPLICATIONS



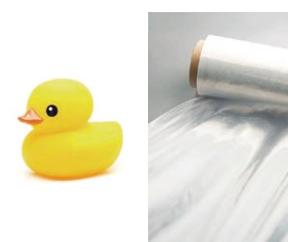
BIO-Polycarbonate



PEIT



Powder Coating



Isosorbide Diester

Gold Mould



RELATED SDGS GOALS



decreases the water consumption and energy consumption per wheel. Tungsten material also eliminates the usage of die coating. Therefore it prevents people to breathe the hazardous dust in.

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Tungsten material bottom core decreases the cycle time of the wheel production and eliminate the process downtimes caused by mould material, also it decreases the water consumption and energy consumption per wheel. Tungsten material also eliminates the usage of die coating. Therefore it prevents people to breathe the hazardous dust in. In counter gravity die casting system uses steel based on cores. In this process you need to cover core with ceramic based coating material. Since this material is a material with a high probability of abrasion, each shift must be renewed at least 2 times. Also this situation decreases our OEE ratio and quality ratio. It takes at least 1 hour a shift for one machine. Additionally coating material erodes after a certain period of time deformation occurs on the mold surface as a result of this wear. These deformations appear as poor quality and efficiency. Tungsten material bottom core decreases the cycle time of the wheel production and eliminate the process downtimes caused by mould material, also it

2 IMPACT ON SOCIETY

- Water Consumption has decreased 17L/min per wheel
- Air consumption has decreased 0.015 m³/h per wheel
- Energy consumption has decreased 1.75 kw per wheel
- Cycle time has decreased 60 sec per wheel
- Mould life has improved 3 times
- OEE ratio has improved 10 percent
- Quality ratio has improved 5 percent



Green Booster



Reduced fuel consumption and increased engine efficiency

RELATED SDGS GOALS



SDGS 169 TARGETS

12.2 Achieve the sustainable management & efficient use of natural resources
 3.9 Reduce deaths & illnesses from hazardous chemicals & pollution
 7.3 Double the global rate of improvement in energy efficiency

PRIMARY COUNTRY

Russia

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

INOIL Research and Production Group is a developer and patent holder of innovative technologies (GreenBooster fuel additives) enhancing energy efficiency in different energy sectors that use the thermal combustion energy of hydrocarbon fuel.



Green Booster finds application in a wide range of vehicles.

2 IMPACT ON SOCIETY

The GreenBooster additives significantly surpass existing global developments in the area of combustion additives. It reduces fuel consumption (down to 15%), polluting emissions (down to 60%), increasing engine efficiency (by 5.4%).



Increased automobile engine power and reduced fuel consumption

URL

https://www.youtube.com/watch?v=tGNvDPOs_EY



NEXXTO - Internet of Thing for Food Waste Prevention

RELATED SDGS GOALS



SDGS 169 TARGETS

12.3 Halve per capita global food waste & reduce food losses
3.8 Achieve universal health coverage

PRIMARY COUNTRY

Brazil

OTHERS

Uruguay

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

In 2016, NEXXTO launched a solution to reduce food and medicine waste along the distribution chain, from industry to retail. It consists of a network of small, wireless, battery-powered sensors that real-time monitors food temperature and humidity, among other variables, in order to detect when the product is at risk of spoiling and immediately alerts the users via SMS, e-mail or WhatsApp, so they can act, avoiding waste. The system also has a user-friendly web interface, an app to monitor the status of the products, and automatically generated reports to comply with quality control regulatory norms.

2 IMPACT ON SOCIETY

- Eliminate waste due to refrigeration problems
- Ensure food and medicine quality
- Eliminate manual labor on temperature and humidity register
- Real-time visibility along the whole distribution chain: from industry to retail
- Case-validated of 50% reduction on general food waste



URL

<https://nexxto.com/solucoes/solucao-nexxto/>



URL

<https://www.youtube.com/watch?v=eT9vHLY6UCM>

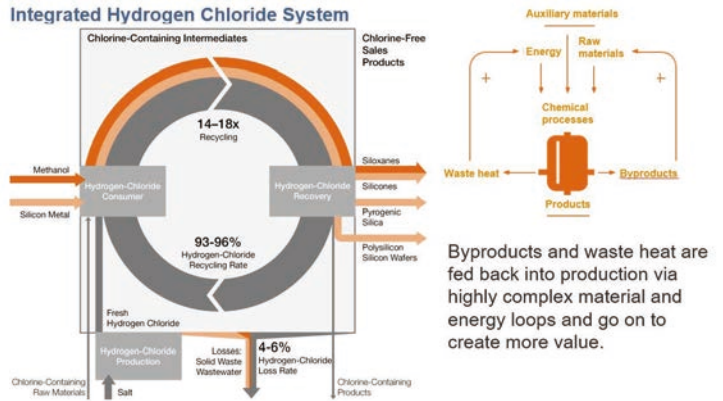


URL

<https://www.youtube.com/watch?v=OFgavPoTJD8>



Program for Closed production loops within WACKER



RELATED SDGS GOALS



PRIMARY COUNTRY

Germany

OTHERS

China

2 IMPACT ON SOCIETY

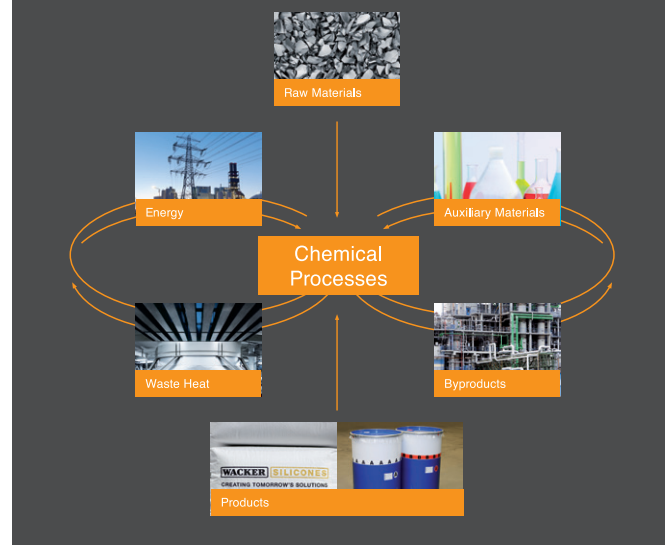
- Reduction of waste and emissions
- Energy saving
- Saving of raw materials and transportation

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

The Group's system of integrated production is like a functional loop. We enhance seamless control and coordination of the entire material loop. The system is based on the principle of multiple usage of existing raw materials – such as the reuse of auxiliary materials and the use of by-products obtained during one production process as feedstocks for parallel production processes. In this highly integrated material loop, we use custom chemical processes to provide the basis for our products. Thus, we have a unique product and production strategy that minimizes energy and resource consumption.

WACKER “VERBUND”

The strength of our environmental protection lies in our system of integrated production which we call “Verbund”



URL

https://www.wacker.com/cms/en/wacker_group/wacker_facts/sites/production-sites.jsp



Recycled PET TUB: Washer Dryer Tub With Recycled PET Flakes



RELATED SDGS GOALS



SDGS 169 TARGETS

- 12.2 Achieve the sustainable management & efficient use of natural resources
- 12.4 Achieve the environmentally sound management of chemicals & wastes
- 12.5 Reduce waste generation through prevention & 3R
- 13.3 Improve human & institutional capacity on climate change

PRIMARY COUNTRY

Turkey

OTHERS

UK, Germany, France, China, South Africa

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

In Recycled PET Tub project, PET flakes from recycled PET bottles are innovatively integrated into washing machine plastic tubs to produce sustainable and eco-friendly products with high performance. Thanks to our patented technology, PET flakes are transformed into PET fibers during the compounding process, reinforcing the plastic tub composite material. As a result, sustainable products were developed using recycled plastics without sacrificing the performance. The innovative material is being used in serial production since August 2017. So far, 250,000 washer-dryers have been produced using the material.

2 IMPACT ON SOCIETY

60 PET plastic bottles are recycled in every washing machine resulting recycling of 25,000,000 plastic bottles per year. CO₂ emissions are reduced by 885 tons and 5.7m kWh energy is saved per year.



URL

<http://www.arcelikas.com/UserFiles/file/SustainabilityReport2017.pdf>



Sustainable product optimisation tool

SPOT



RELATED SDGS GOALS



SDGS 169 TARGETS

12.2 Achieve the sustainable management & efficient use of natural resources
12.6 Encourage companies to adopt sustainable practices & report

PRIMARY COUNTRY

France

OTHERS

USA, United Kingdom, Norway, Japan, Germany, Netherlands, Belgium, Sweden, Denmark, France, Switzerland

2 IMPACT ON SOCIETY

- Improving the environmental and social profile of all new products
- Promoting sustainable innovation by reducing the environmental footprint of its product formulas
- Sourcing raw materials in a sustainable way that respects biodiversity
- Optimizing packaging



1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

L'Oréal's Sustainable Product Optimization Tool was developed to assess the social and environmental performance of all products across their lifecycle from raw materials extraction to the end of life. SPOT's methodology is the first in the industry to assess the overall footprint of a product, taking into account environmental and social criteria. SPOT allows teams conceiving products to simulate diverse design options (ingredients, packaging, sourcing), to identify potential opportunities for improvement and to follow progress. The tool includes information on almost 10,000 ingredients, all packaging materials... 100% of the products launched by L'Oréal in 2017 have been assessed via SPOT.

URL

<http://www.monthly-digest-loreal.com/en/>



Travel With Purpose

TRAVEL WITH PURPOSE

Hilton

RELATED SDGS GOALS



PRIMARY COUNTRY

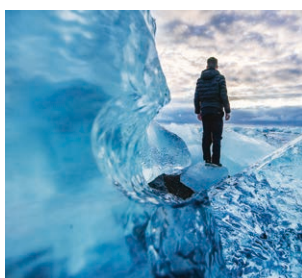
USA

OTHERS

Global footprint

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Hilton's Travel with Purpose Strategy is multi-pronged and dedicated to redefining and advancing sustainable travel globally. Hilton is the first major hotel company to institute science-based targets to reduce carbon emissions and send zero soap to landfill. Hilton has also committed to doubling the amount it spends with local and minority-owned suppliers, and doubling its investment in programs to help women and youth around the world by 2030.



2 IMPACT ON SOCIETY

- reducing carbon emissions, waste, water consumption and energy usage
- eradicating forced labor and trafficking



URL

<http://newsroom.hilton.com/corporate/news/hilton-commits-to-cutting-environmental-footprint-in-half-and-doubling-social-impact-investment>



USAGE OF TEA GRANULS AS BIOMASS AT PLASTIC MATERIALS

About Projects

About Projects

- Usage of Tea Granuls instead of Talc and PP.
- Industry and Segment first.

Success Criterias



Lighter
15%



Cheaper
10%



Lower

RELATED SDGS GOALS



SDGS 169 TARGETS

8.4 Improve global resource efficiency in consumption & production
12.4 Achieve the environmentally sound management of chemicals & wastes

PRIMARY COUNTRY

Turkey

OTHERS

Europe

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Ford Otosan is working on biomaterial mass filled plastic materials to reduce cost and weight of the vehicles to ensure effectiveness while creating nature friendly vehicles. Currently company works on natural fillers at plastic materials to replace chemical components to create efficiency, cost avoidance and weight reduction to meet fuel efficiency regulations while saving the planet.

First Project



Second Project



50% Tea Granuls Biobased Plastics

2 IMPACT ON SOCIETY

- Waste management
- Nature friendly material production and usage
- Superior performance material development
- Cost and weight save
- Fuel efficiency to save planet

URL

<http://new.msuite.com.tr/displayerBasin?GroupID=4747&ArticleID=111150710&SearchKey=&ActiveYear=2018&displayer=1&isfromghs=1&firmID=1010341&newsID=388744&linktext=Sabah&ghsHeaderID=501&newsType=1&key=89b0a1a475b892eab39211ab4ba2f2e9>



World's first responsibly sourced aluminium to be used in coffee capsules



RELATED SDGS GOALS



SDGS 169 TARGETS

- 12.6 Encourage companies to adopt sustainable practices & report
- 12.2 Achieve the sustainable management & efficient use of natural resources
- 17.17 Encourage effective public, public-private & civil society partnerships

PRIMARY COUNTRY

Canada

OTHERS

Australia

water management and low-carbon emissions during the production of aluminium.

2 IMPACT ON SOCIETY

- Protection of biodiversity, respect for indigenous peoples' rights, water management, prevention of waste and low-carbon emissions production of aluminium
- Nespresso sourcing ASI aluminium will drive demand for sustainable aluminium and encourage other producers to adopt the standards

1 OUTLINE OF A PROJECT/ GOOD AND SERVICE

Nespresso will become the first company to use responsibly-sourced aluminium, supplied by Rio Tinto, to produce its coffee capsules. The two companies have signed a Memorandum of Understanding to work together with Nespresso's capsule manufacturers to fulfill a commitment of sourcing 100 per cent sustainable aluminium by 2020, allowing customers to enjoy their coffee knowing it is packaged in responsibly produced material, as certified by Aluminium Stewardship Initiative (ASI), which sets out standards to promote the protection of biodiversity, respect for indigenous peoples' rights,

URL

http://www.riotinto.com/ourcommitment/spotlight-18130_26410.aspx



URL

<http://www.minerals.org.au/sites/default/files/St%20Barbara%20Case%20Study%20WEB.pdf>

