Ingredients for Sustainability

Sustainability Report 2009/10

DANISCO

First you add knowledge...

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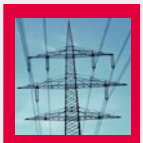
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SUSTAINABILITY
Balancing environmental, social and economic factors throughout the value chain

We have launched a new sustainability strategy addressing impacts throughout the value chain

We have invested over USD 140 million in innovation

80% of our employees feel that Danisco has a vision of the future that motivates them

We have decreased our lost-time injury frequency by 28% with a current value of 3.5 injuries per million working hours

100% of our plants consuming palm oil are certified by RSPO to produce sustainable palm oil

We have reduced environmental impacts at our manufacturing sites since 2007 by:
21% for energy
15% for CO2
30% for water

Imagining a new reality

What if ...

Food was efficiently and responsibly produced, distributed, consumed and disposed of – with little to no waste. All of us – in every region of the world – had enough nutritious, safe and affordable food to sustain healthy lives. Energy was renewable, plentiful and environmentally neutral. The chemicals and materials that make life easier, more comfortable and more convenient were based on non-toxic, biological components – and safe for all living things.

This may sound like a vision of utopia, but such a world is within our reach. Breakthrough technological innovation, coupled with leadership and the shared commitment of individuals and organisations worldwide, can drive the change we need. At Danisco, we find tremendous inspiration in the possibility of a truly sustainable world and apply ourselves to the challenges that must be overcome to imagine – and create – this new reality. In fact, sustainability is our key driver for innovation.

By 2050, the global population is projected to reach 9 billion

Our business and products

With a rich and innovative portfolio, Danisco is a world leader in food ingredients, enzymes and bio-based solutions on a business-to-business level. Using nature's own materials, science and the knowledge of our 6,800 people, we design, produce and deliver bio-based ingredients that meet market demand for healthier and safer products.

Danisco's ingredients are used globally in a wide range of industries – from bakery, dairy and beverages to animal feed, laundry detergents and bioethanol – to enable functional, economic and sustainable solutions. Headquartered in Denmark and operating from more than 80 locations, including 49 manufacturing sites, Danisco's key focus is to become our customers' first choice and a truly market-driven global business.

Food ingredients

Danisco delivers bio-based food ingredients to more than 10,000 customers globally, including the world's leading food manufacturers. We strive to be the first-choice provider for a global food industry that is continually seeking healthy and safe natural ingredients founded on sustainability. Our key focus areas include BioActives (cultures and natural sweeteners) with a clear health and nutrition profile and Enablers (emulsifiers, pectin, gums and systems) that offer increased functionality to processed foods.

Enzymes and bio-based solutions

Today, major application areas for enzymes include industries as diverse as animal nutrition, detergents, bioethanol, textile treatment, carbohydrate processing and food and beverages.

As the world's second-largest developer and manufacturer of industrial enzymes, Danisco holds prominent market positions in all major segments.

Danisco's Genencor division is a top 10 leader in global biotechnology. As a leading force in innovation in the white biotech space, Genencor addresses previously unmet needs within and beyond its current business areas.

Raw materials

Danisco uses more than 3,000 raw materials, and most of them come from agriculture. Our key raw materials include vegetable oils (such as palm oil, soya bean oil, rapeseed oil and castor oil), citrus peel, seaweed, locust beans, guar seeds, corn, wood pulp, soy meal and sugar. Using nature's raw materials, the knowledge of our people around the world and the latest scientific methods, we create sustainable solutions that help people lead healthier, safer and more convenient lives.

To learn more about Danisco's ingredients business, please visit **www.danisco.com**.

Forging the path to 2050

There is no doubt our collective journey will be a difficult one, perhaps demanding more of us than any other challenges in human history.

By 2050, the global population is projected to reach 9 billion (UN 2008). The Earth's carrying capacity will be severely strained if we continue our current patterns of inefficient and environmentally damaging agricultural practices, wasteful food distribution and consumption, dependence on non-renewable energy sources and unchecked use of petrochemicals.

To be sure, we live in a time of daunting challenges. At Danisco, we have identified four challenges – food, health, energy and chemicals – that are especially critical and that we feel we are uniquely positioned to help address.

FOUR GLOBAL CHALLENGES

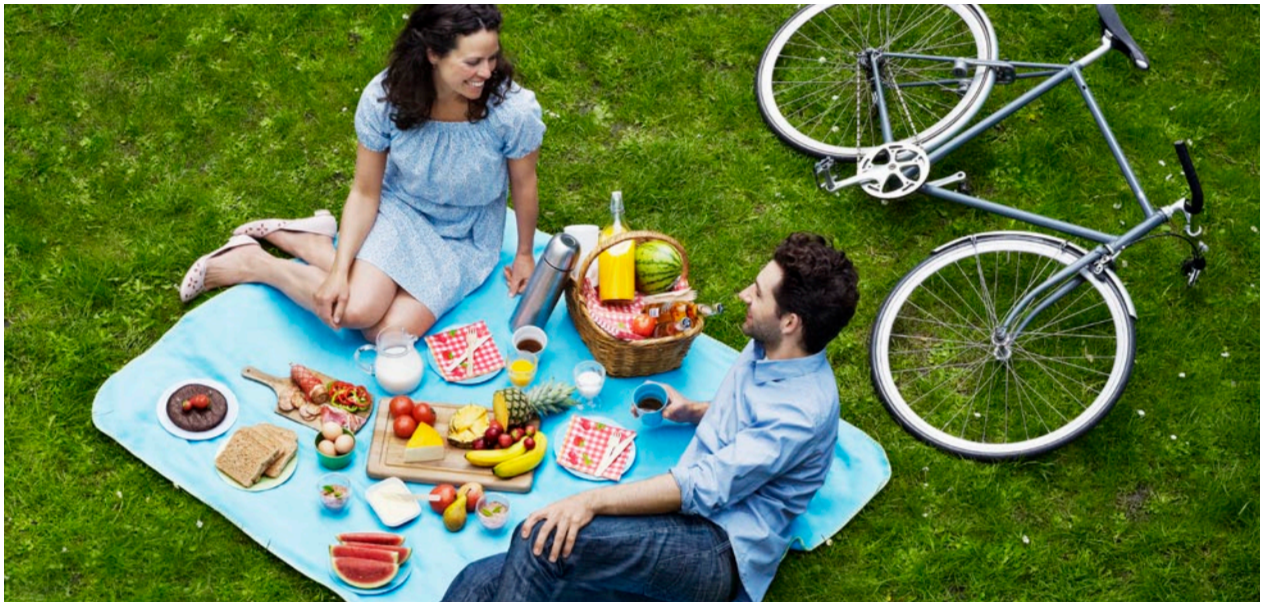
Population growth	2010: 6.8 billion		2050: 9 billion
 FOOD	Wasteful, inefficient, environmentally degrading	→	Efficient, environmentally neutral, waste-free in production, distribution and consumption
 HEALTH	Population that is ageing, overweight and undernourished	→	Resources, foods, medicines that promote lasting health
 ENERGY	Fossil fuel dependence, climate and security issues	→	Renewable energy solutions to replace oil and gas supplies
 CHEMICALS	Largely petroleum-based substances in products	→	Efficient, biobased alternatives to petrochemicals

Food challenges – inefficiency, waste, cost

Although the global population will increase by 32% between 2010 and 2050, global food production must nearly double to meet demand. And, despite agricultural advances that have increased crop yield, food production remains wasteful. Losses between "field and fork" may be as high as 50%[2].

Inefficient growing, harvesting, transport, storage and packaging all reduce food availability, as do wasteful food processing, sales and consumption. In parts of the developed world, up to one-third of all food purchased by consumers is discarded. Every tonne of food waste is responsible for 4-5 tonnes of CO2 equivalents produced[3]. And with global food costs trending upward, this represents food we cannot afford to waste.

The environment is harmed by agricultural practices such as clearcutting forests for arable land, energy-intensive farming practices, and chemical applications. Water use is also significant, with approximately 1,300 litres of water used to produce a kilogram of wheat, and 15,000 litres of water used to produce a kilogram of meat[4]. Just as food production must double by 2050, the amount of water needed to produce that food will also increase.



Between 2010 and 2050, global food production must nearly double to meet demand

2 Lundqvist, J., C. de Fraiture and D. Molden. Saving Water: From Field to Fork – Curbing Losses and Wastage in the Food Chain. SIWI Policy Brief. SIWI, 2008.
3 Quested T and Johnson H (2009): Household Food and Drink Waste in the UK. WRAP, Banburry
4 www.waterfootprint.org

Four major challenges – food, health, energy and chemicals

Health challenges – an ageing, overweight population

Unless we make significant changes, global health by 2050 may be marked by extremes and contradictions, in part due to differences among developed and developing nations. As many as 40% of people worldwide are forecasted to be obese. Some 20% of us will be over 60 years old. At the same time, undernutrition, already the leading cause of death among young children, is predicted to worsen[5]. Without interventions, the health challenges associated with these situations will be staggering. The costs to provide adequate health care may well extend beyond the reach of individuals, communities and governments.

Energy challenges – dependence on finite resources

Climate change mitigation and global security depend on widespread use of alternatives to fossil fuels. Given that our energy use today comprises 60% petroleum and natural gas – both limited resources – the current approach and consumption are unsustainable. Global oil production in 2050 is expected to be less than 20% of current rates, with natural gas production less than 25% of current rates[6]. Renewable and bio-based solutions such as advanced biofuel technologies are urgently needed to reduce our dependence on fossil-based energy sources.

Chemical challenges – petroleum-based and unhealthy

Many of the industries we depend on to serve our basic needs for clothing, shelter, transport and household products rely on non-renewable petroleum-based chemicals that in many cases are toxic and can be persistent in our environment.

The demand for chemicals will remain and will expand along with the growing population, however, requiring that we turn to newer, environmentally responsible alternatives, such as bio-based polymers, solvents and other biological alternatives.

Towards healthier products

Food that promotes better health

5 Laura E Caulfield, Mercedes de Onis, Monika Blössner, and Robert E Black. Undernutrition as an underlying cause of child deaths associated with diarrhea, pneumonia, malaria, and measles. American Journal of Clinical Nutrition. 2004. http://www.ajcn.org/cgi/reprint/80/1/193.pdf http://www.un.org/News/Press/docs/2009/gaef3242.doc.htm
6 http://www.theoildrum.com/node/3222

Leading the way through innovation

As a global bio-based company dedicated to making the world a better place through science and innovation, we view sustainability as both a responsibility and an opportunity. We are responsible for our operational sustainability performance, of course, but we also feel a keen responsibility to apply our knowledge, innovative development capabilities and core technologies to the world's most pressing issues wherever we can.

Becoming first choice

In this way, we create value for our customers – and the communities they serve – through products that enable them to be more sustainable and more competitive while contributing to the greater good.

This means helping them to get more from less, developing safer products and reducing waste. It means meeting previously unmet human needs through innovations that promote health, sustainable food production and consumption, sustainable energy development and biochemicals.

Sustainability as opportunity

We see sustainability as a powerful catalyst for developing and delivering breakthrough technologies; for recognising and working to meet market needs for healthier, safer products; for focusing our thought leadership, research and development on the most pressing needs of our customers and society. It pushes us to discover new applications for existing Danisco technologies and to pioneer still newer ones. It drives our efforts to reduce wastefulness in the use of all our resources, thereby making us a more efficient, more responsible, more competitive company. Sustainability aligns our vision, strategies and organisational structure for long-term success.

We view sustainability as both a responsibility and an opportunity

Our ingredients are used in many dairy-based products

Highly advanced research drives our product development

Looking ahead to an even brighter future

The path to 2050 is long and fraught with formidable challenges. But we are on our way. And although Danisco's work is just one piece in a much larger puzzle, we can help address some of the world's most urgent challenges. Already we are leveraging bioinnovation to foster sustainable food production and consumption. We are promoting greater health. And we are devising and developing alternative energy and biochemical solutions.

As you will see in this report, our ninth, Danisco's sustainability journey is inextricably linked with our journey as a company. And, if it is true that the best way to predict the future is to create it, then our business will create a future in which the world's population is healthy and strong, its ecosystems rich and stable and its resources plentiful and renewable. In this report you will also learn about our successes and failures, our challenges and opportunities, and the ways our stakeholders shape our path forward.

Please join us …

Looking ahead, we are excited about our plans to:

- Provide an even broader range of value-adding ingredients for healthier, safer foods developed through highly efficient and sustainable agricultural practices
- Help our customers move towards renewable, bio-based resources that extend product shelf-life, eliminate waste and protect the environment
- Develop breakthrough innovations in biotechnology that revolutionise industrial processes, replace petrochemicals and deliver abundant renewable energy
- Accelerate the pace of progress by using sustainability as a driver for innovation and transformative collaboration
- Protect our employees, the environment and consumers by controlling risks and delivering safe, streamlined and environmentally and socially responsible products

Stakeholder perspective

Is communication in external publications clear, and does it tell the story adequately?

Carsten Ingerslev
Danish Government

Our response:
We will both simplify our communications around sustainability and leverage the bio-based platform concept

From our CEO

It is perhaps due to Danisco's long-held high standards for quality, ethical behaviour and responsibility that our commitment to being a sustainable enterprise has evolved somewhat organically. So when a broad recognition of environmental and social responsibilities emerged among our customers and society at large, and we began taking our first steps to transform our vision and our company, it felt right. Even when we acquired Genencor, a world leader in biotechnology, and divested our century-old sugar business, communicating our rationale required no leap of logic. We simplified our company structure, allowing a greater focus on the sustainability of our business and on enabling our customers to be more sustainable in their product offerings and operations. We began developing measurable targets for our environmental performance with a view to becoming our customers' first choice for bio-based solutions. Today, sustainability is at the heart of our value proposition, and we are positioned to make a fundamental difference in our customers' businesses, on their environmental footprints and social performance and, ultimately, in the world.

Leveraging our strengths

This report outlines our efforts to address some of society's most difficult challenges. As a global leader in bio-based solutions, Danisco already possesses the core technologies that allow us to have an impact in these areas. For many of us, using our strengths and knowledge to create a more sustainable world makes our work even more meaningful. But of course, Danisco cannot do this alone; the new reality we imagine will not come to fruition without a shared commitment and collaboration among diverse leaders and the many players throughout our value chain.

Setting ambitious goals

I am proud of our accomplishments to date. Since 2007, we have reduced our water consumption by 30% per tonne of product, beating our 5% reduction target six-fold. We have lowered energy consumption per tonne of product by 21% – more than double our target of 10%. And we have reduced CO2 emissions by 15% per tonne of product. While these improvements are impressive, we recognise they are largely due to efficiency initiatives, which are just the first steps on our sustainability journey.

Going forward, we will further streamline processes and expect to invest more in low-carbon renewable energy as better, more cost-effective technologies emerge. More importantly, we will stretch ourselves to address those sustainability challenges that are harder to reach – such as those in our supply chain – by implementing strategies that advance our performance. Our customers expect it of us and we expect it of ourselves.

Because we achieved our current sustainability targets ahead of schedule, we have developed new, longer-term targets in water, energy and CO2 emissions. We aim to meet these targets by 2020, with Danisco's 2009/10 financial year as the baseline. Our new targets are based on revenue.

- Water – 20% reduction
- Energy – 10% reduction in energy consumption and 20% increase in renewable energy
- CO2 – 20% reduction

Tom Knutzen, Chief Executive Officer

Towards a new reality

Stakeholder perspective

Is the "growth story" linked adequately with sustainability?

Carsten Ingerslev
Government

Our response:
We will improve how we communicate the linkage between the future growth of the company and our sustainability vision and strategy

Mainstreaming the challenge

Meeting these new targets will demand the best of each of us. But, in time, our sustainability efforts will no longer be considered a corporate programme or initiative; rather, sustainability will be looked at as a strategic imperative inseparable from any other key business challenges we face. For example, further reducing energy consumption will mitigate climate change while minimising the impact of a carbon-constrained future on our business. Continuing to develop innovative, cost-competitive products that minimise resource consumption, we will move towards our vision of becoming our customers' first choice. Further decreasing our water use will preserve it for future generations and reduce Danisco's risk at the same time. Achieving true sustainability requires an understanding of the interconnectedness of the many factors at play. We will continue to build on that knowledge as we set new targets, looking throughout our value chain for opportunities to better manage our risks and improve our performance and seizing those opportunities wherever we find them.

Innovating for success

Just as we do in product development, we will continue looking to our strengths in technical innovation to identify and implement the science, engineering and process solutions needed to meet these ambitious sustainability targets. I have been consistently impressed by the commitment to sustainability demonstrated by employees across the organisation. Our progress to date is due largely to their ideas, enthusiasm and initiative.

Within the next year, Danisco's strategy groups will develop the initial roadmap to meet our interdependent goals for sustainability and business growth. Future sustainability improvements will evolve over time as we leverage new market opportunities and technologies to build our business through strategies that foster environmental stewardship and citizenship while ensuring we become first choice. I am confident that by applying our technical knowledge and expertise, making the most of available technologies and partnering with other thought leaders in sustainability, we will not only devise sustainable, competitive solutions for our own business, but will support our customers in doing so as well.

Continuing the journey

Looking ahead, we will continue leveraging bio-innovation to foster sustainable food production and consumption. We will devise new solutions that support health. We will develop innovative, affordable and environmentally responsible energy and biochemical solutions. We will enable our customers to make a difference. But we also know we will face challenges along the way, both operationally and in our products. We know our sustainable solutions must be cost-conscious and valued by customers. Although Danisco is just one piece of a larger puzzle, I am confident we are uniquely positioned to help address the world's most pressing challenges. It is our business imperative.

Tom Knutzen
Chief Executive Officer

Key impacts, risks and opportunities

In planning our strategies, we have focused on material issues that will enable us to steward our resources and communities while enabling our business to grow.

By re-examining and improving how we determine what is material for our business, we have identified key impacts, risks and opportunities which were used to develop our new strategies. But to determine how and where we should focus our efforts and resources, it is essential for us to develop strategies in a value chain context.

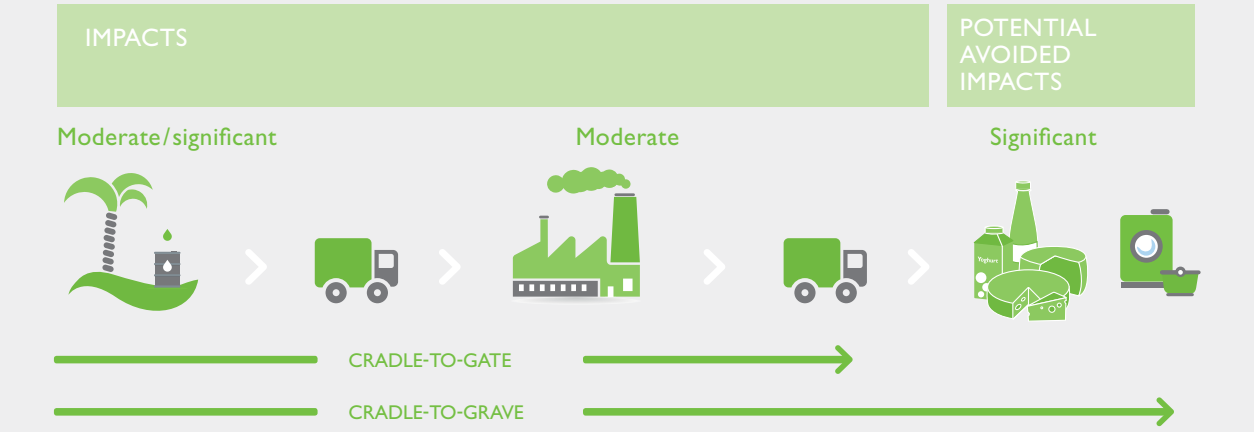
The Danisco value chain is complex and international. We are in the process of developing a complete life cycle assessment (LCA) for our business from the field to the use of our products. This year we employed life cycle thinking to estimate the relative impact contribution of the three main areas in our value chain, which are raw material sourcing, manufacturing and customer use. While we are focused on our entire value chain when developing our overarching strategies, we have used this preliminary evaluation alongside our materiality assessment to define and design them to address the material impacts, risks and opportunities moving forward.

Key impacts

The principal areas of concern with respect to the sustainability of our products from cradle-to-gate lie in our raw materials and the processing at our own plants. Important environmental impacts at these stages can contribute to global warming, land use issues, nutrient over-enrichment, acidification, smog, toxicity and depletion of resources, such as water, metals and fossil fuels.

We have not assessed impacts associated with all our products, but our work with life cycle assessments indicates that using our products allows our customers and consumers to avoid environmental impacts by saving energy, water and raw materials. Consequently, we believe our products have an overall positive impact on sustainability from a life cycle perspective.

KEY SUSTAINABILITY IMPACTS IN THE VALUE CHAIN (ESTIMATED)



Towards a new reality

Climate change

Aspects of our business impact climate change at various points in the value chain. Sourcing raw materials from agriculture, for instance, brings multiple challenges. Climate change impacts associated with our raw material sourcing stem primarily from the use of fertilisers, energy and land for agricultural production.

Our operations require energy to enable manufacturing processes. Maximising process efficiency and making smart decisions when sourcing energy will help us reduce CO2 emissions from our operations. Although transport of materials contributes relatively little to global warming, it should not be disregarded. By strategically locating our warehouses and identifying the most efficient transport options, we can decrease emissions and lower costs while increasing our responsiveness to customers.

Land use

The impact of indirect land use, for instance in the cultivation of palm and soya, can contribute to deforestation in other parts of the world. With competing demands for food, wood and energy putting increasing pressure on our land resources, the impacts of direct and indirect land use must be taken seriously. To reduce the potential impacts associated with our supply chain, we will continue our efforts to source responsibly by participating in sustainable agriculture initiatives such as the Roundtable for Sustainable Palm Oil (RSPO) and the Round Table on Responsible Soy Association (RTRS).

Water scarcity

Water is crucial in the operation of our plants and has been the focus of efficiency investments and behavioural training for years. However, beyond the low-hanging fruit are more opportunities to conserve water. Our 10-year plan for reducing water use in our operations will target those regions and operations where impacts are greatest.

Of course, water is also essential for growing the bio-based raw materials from which we make our products. It is consumed through evaporation, plant transpiration and incorporation in products or crops. Agriculture is a major user of ground and surface water in the United States, accounting for 80% of the nation's consumptive water use and over 90% in many Western States[7].

In the future, we would like to play a role in defining standards for sustainable agriculture, particularly in the developing world.

Water is crucial in the operation of our plants

7 Agricultural Resources and Environmental Indicators, 2006 Edition, Keith Wiebe and Noel Gollehon. Economic Information Bulletin No. (EIB-16), July 2006

Key risks

Sustainability of agricultural practices

As the population grows, the need for productive, arable land for food crops and for crops used to produce raw materials for Danisco's food ingredients will increase. As a bio-based producer, we are dependent upon the continued security and sustainability of agricultural feedstocks for our continued operation and ability to serve growing markets.

While the efficient use of agricultural raw materials in our manufacturing processes will help, we continue to promote more sustainable agricultural operations over the long term by strengthening our public policy activities. We do this currently through forming groups like the European Commission's Sustainable Food Production and Consumption Roundtable and the Roundtable on Sustainable Biofuels.

We support solid international agreements on land use in the context of climate change negotiations, the implementation of regional monitoring and certification systems and capacity building and training in farming communities.

However, we will also need to find alternate sources for our raw materials such as crops that grow on marginal land with low water needs and also by using enabling technologies to convert waste biomass into building blocks for our products. We envision using closed loop production techniques as we have demonstrated in our Lenzing, Austria plant where we reuse process water from a nearby pulp mill as a raw material to produce xylitol, a natural sweetener.

The challenges of food and agricultural security are formidable, but a business-as-usual approach will result in insecurity in the availability and cost of our raw materials.

Many of our raw materials come from agricultural sources

Sustainability of agricultural practices must increase

Towards a new reality

Operation in a carbon-constrained world

We anticipate that carbon emissions will be severely limited in the next 40 years. The Intergovernmental Panel on Climate Change (the advisory body to world climate leaders) contends that global CO2 emissions would need to decline by 50-85% by 2050 to prevent average global temperatures from rising by more than 2°C. Pursuing this ambitious goal will mean higher taxes on carbon emissions and increased prices for energy, raw materials and ecosystem services such as water.

A cohesive strategy for reduction of CO2 emissions in our operations will be needed in order to produce ingredients that are both affordable and competitive. We will need to reduce the direct and indirect energy emissions from our production and use as defined in the Greenhouse Gas Protocol (GHG). We will also need to reduce CO2 emissions generated from our raw material sourcing and from the use of our products in our customers' processes and in the carbon footprints of their consumer products.

Food safety

Food safety and quality in all aspects of our supply chain are fundamental to Danisco's production approach and the responsibility we demand of our suppliers. We accept no compromise with regard to our compliance with regulations and food safety standards.

The consequences of the recent global food incidents, such as the melamine contamination of milk powder in China, have forced food manufacturers and retailers to strengthen their requirements for third-party food safety certifications. A focus on the safety of our food supply by the general public will continue to increase and force suppliers to the food industry to maintain systems that prevent safety lapses and provide traceability.

At Danisco, we are enhancing our already robust systems with additional scrutiny of our food ingredient manufacturing sites through audits against third party standards like the British Retail Consortium (BRC) standard and the Food Safety Standard Certification (FSSC 22000) standard.

Food safety is an imperative for our customers and consumers

Key opportunities

Impact reduction through innovation

We see tremendous opportunities to drive innovations that minimise climate change. By applying our technologies and capabilities, we can help address the effects of a growing population on the global demand for clean and efficient energy, food security, better health and nutrition and safer, bio-based chemicals.

It is estimated that one-third of the food we purchase is wasted in the home. Each kilogram (kg) of food wasted results in 4–5 kg of CO2 equivalents produced. By better preserving food with the help of natural and bio-based ingredients such as enzymes, cultures and plant extracts, we can reduce food waste and spoilage significantly.

Using enzymes to increase the shelf life of bread could prevent around 80 tonnes of CO2 per 1,000 tonnes of bread[8]. Similarly, another type of enzyme in chicken feed can potentially reduce CO2 emissions by 20 kg per tonne of feed[9].

Through cellulosic biomass conversion technologies, our joint venture with Dupont – Dupont Danisco Cellulosic Ethanol – enables the use of plant biomass and waste cellulosic material as feedstock. Emissions related to fuel ethanol based on this technology would be 50-90% lower[10] than petrol-related emissions.

Innovations such as these will shape Danisco's future, allowing us to grow stronger as a company as we help find solutions to some of the most important environmental and societal challenges of our time.

Innovation will drive the future of Danisco

Maximising the shelf life of food helps reduce CO2 emissions

8 WRAP study UK
9 WWF biotechnology study
10 IPCC 2007, Climate change 2007: Forth Assessment Report, working group 3, chapter 5

Stakeholders and strategies

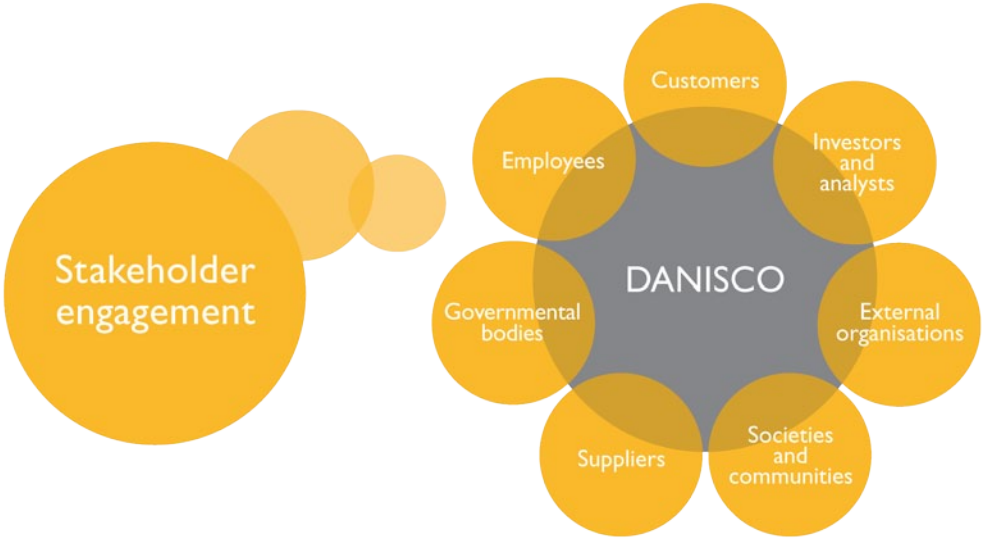
As a responsible company, we take an active role in the world around us. We talk with our stakeholders so we understand their sustainability concerns. Then we work together to find the right solution.

Stakeholder engagement

Stakeholders play an important role in our sustainability journey. Without their existence, and more importantly the dialogue and interaction in which we actively engage, we risk making the wrong decisions – or missing important opportunities. We have found it essential to use a systematic approach in understanding who our stakeholders are and providing a venue for constructive dialogue.

This engagement process helps us identify potential weaknesses in our approach, recognize opportunities and guide our strategy. We listen, learn and hopefully build trust and mutual understanding.

Stakeholders have the ability to influence the success or failure of our business at various levels. We do not choose our stakeholders and cannot anticipate their perspectives without a direct exchange of ideas. We must listen to our stakeholders, weigh their input against other critical factors, determine the appropriate course of action, then incorporate that into our approach.



Stakeholder analysis

In 2009, we re-examined our previous stakeholder engagement efforts and realised that we needed to go back to the drawing board.

While we have demonstrated leadership in meeting stakeholder needs through our inclusion in important investor indices like the Dow Jones Sustainability Index (DJSI) and FTSE4Good, and have ranked high in our disclosure to important investor-driven projects like the Carbon Disclosure Project (CDP) and the Forest Footprint Disclosure Project (FFDP), we realised that our overall engagement with stakeholders should be more proactive.

We found that, while we were providing answers to the many questions asked by key stakeholders, we were missing the benefits of a two-way discussion.

Identifying relevant stakeholders

As with any stakeholder process, identification crucial. We recognise that we risk the effectiveness of our efforts if we do not enable discussion with key stakeholder groups that are important to our business success.

We carried out a process whereby we asked ourselves questions such as:

- Who does Danisco positively or negatively affect by our decisions or activities?
- Who do we hear from on a regular basis?
- Who can help us address specific impacts of our business?
- Who would be disadvantaged if they were left out?
- Who in the value chain is affected?

Redefining our approach

In a new process, we analysed our stakeholders on the basis of their influence on our organisation. This helped us to identify how to engage them more effectively, yet more importantly to ensure shared value on both sides of the table.

We mapped stakeholders according to their interest and influence on today's and tomorrow's business and defined engagement approaches.

With some stakeholder categories such as investors, employees and major customers, we will engage closely, providing forums for their input and incorporation of their needs into our sustainability strategies. With other stakeholders such as trade unions, academia, Non Governmental Organisations (NGOs) and suppliers we will engage on specific issues as needed.

Stakeholders play an important role in our sustainability approach

Stakeholder Advisory Board

To test our stakeholder identification and analysis process and related assumptions, we developed our first Danisco Stakeholder Advisory Board (SAB). The focus of the board is to improve the engagement experience and to allow participants to directly influence decision-making and sustainability strategies.

Our target outcomes from this process were defined as:

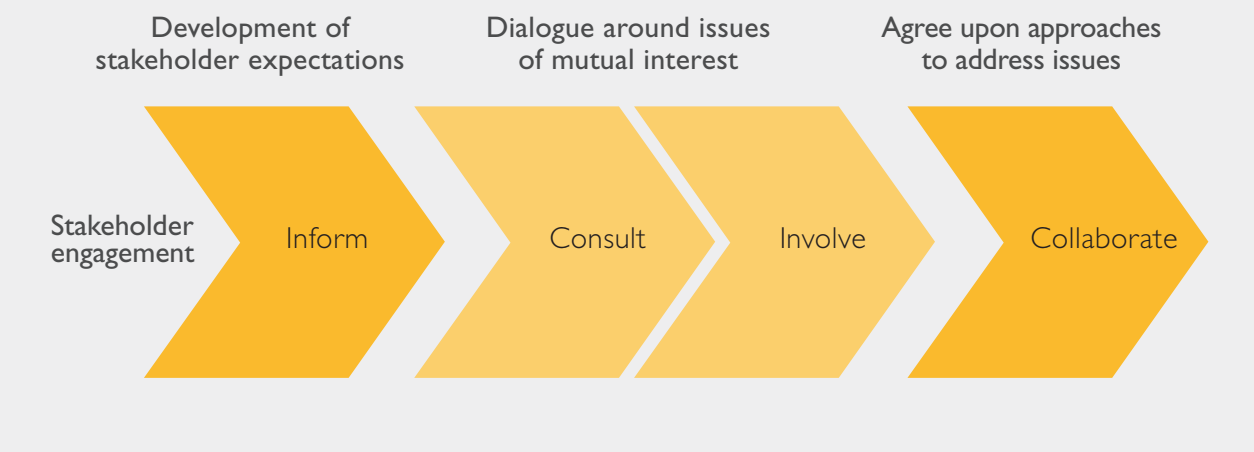
- Generate discussion on sustainability issues of importance to our industry and our particular business context.
- Obtain feedback on our sustainability strategy, material risks, impacts and opportunities.

We also hoped to build relationships with stakeholders that could adequately represent the broader stakeholder pool in a respectful, thoughtful environment.

In March 2010, we held the first SAB meeting at our corporate headquarters in Copenhagen, attended by 13 stakeholders representing investors, NGOs, government, retailers, employees and customers. Tom Knutzen, our CEO, also participated. Participants were not remunerated for their participation.

During the meeting, we discussed the scope and impact of our worldwide business and value chain, Danisco's new sustainability strategies, our performance over the past eight years, and the challenges and opportunities that we face as we approach 2050. The meeting included a facilitated dialogue in which participants shared the issues that they perceived to be most important to Danisco.

STAKEHOLDER ENGAGEMENT PROCESS



Stakeholder responses

Six key points arose from this meeting that we agreed to address further with SAB members directly and in our reporting for 2009/10.

1. How does Danisco align time horizons to reap the sustainability benefits in innovation?

The discussion centered on the long-term focus of Danisco in light of 2050 challenges, and whether this timeframe is too long to grasp opportunities that arise in the market around food, chemicals, health and energy. We discussed that our approach to innovation is guided by the ideation processes both internally and externally – and in shorter timeframes – normally on an annual basis. However, to be agile in our innovation around sustainability, Danisco needs to develop 3-5 year targets for sustainable innovation to drive measurable performance. These targets will be developed over the next year in an innovation focus group.

2. How are risks managed in the supply chain?

The main point of the discussion on supply chain risks was whether Danisco systematically addresses risks to ensure that non-conformities are remedied to minimise impacts on the food and drink manufacturers that we supply. It was agreed that supply chain risk control is a fundamental element of a robust sustainability programme and is an important requirement of our customers. In response, we agreed that our previous communication regarding how we control supply chain risks was not clear enough and that our new supplier management system will further build a robust, systematic approach. The supplier management system implementation target is 2010 and we are on track to meet the deadline.

3. How will Danisco operate in a carbon restrained/ regulated world?

While we have been recognised for our climate strategy by leading international bodies, we heard from stakeholders that we should improve our communication by clearly describing how our targets have been set for carbon dioxide emissions, renewables and energy consumption. We should better convey the business relevence of these decisions.

4. How does Danisco use sustainability indexes?

The point of discussion for this theme was whether we benefit from participating in the variety of indexes by which we have been ranked as a leader. We believe that it is essential to continue to participate in these initiatives as they provide us with important stakeholder information and allow us to benchmark our approach with our customers and competitors. We discussed that our participation in the Carbon Disclosure Project has guided our climate strategy and performance, whereas we expect the same type of benefit from starting our work with the Water Disclosure Project.

5. Is the communication in our external publications clear, and does it tell the story adequately?

This comment, echoed by several stakeholders, was in relation to the use of complex language to describe our sustainable solutions. Stakeholders felt that the impact of the message was lost in the use of scientific terminology to describe how a product delivers a more sustainable benefit. The group also agreed that our previous message, strategies and actions were not clear enough for the reader to understand. In this report we have specifically aimed to improve the clarity of the message and the readability of the content. We need to improve the way we translate technical mechanisms, processes and terms into easy-to-understand messages.

6. How is Danisco engaging NGOs on a regional or local basis?

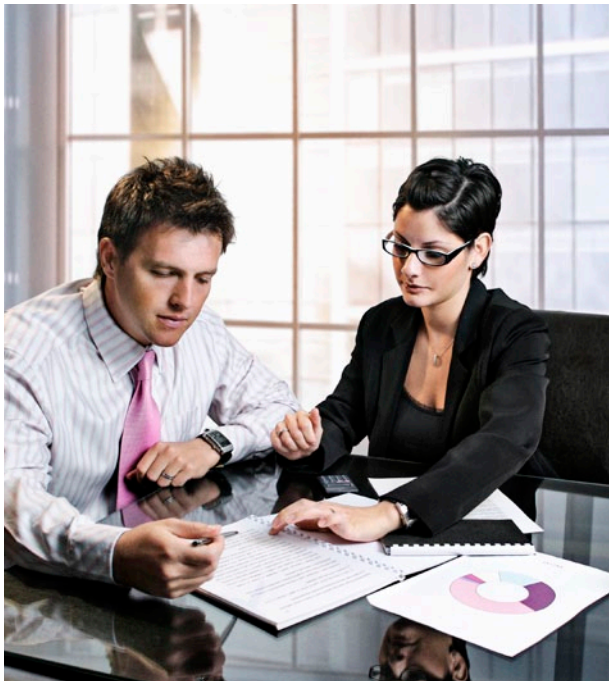
When we discussed this item with our board we focused on whether we were able to attain the untapped benefit of local NGO engagement to increase our performance in local communities. We discussed that in our past engagements with local groups to build capacity with Ugandan vanilla farmers, Mexican citrus farmers and Chilean seaweed farmers, there has been no systematic NGO engagement at local or regional level. At this point, we agree that it makes sense to engage locally without overall coordination at a group level.

These six themes, raised by stakeholders, are highlighted on the relevant pages of this report. Look for the "stakeholder perspective" balloons in the relevant sections.

Future Stakeholder Advisory Board engagement

Although we established the board specifically as part of our 2009/10 reporting process, we do not intend to engage them solely for this purpose. We have built the SAB with the agreement that the members will continue to participate unless we mutually agree to suspend our relationship. We also agreed that we will add new members when new stakeholders become relevant to our discussion.

In the future we will continue with an annual meeting of the SAB, supplemented by virtual team work throughout the year. All board members have been encouraged to bring issues to our attention as they arise.



Stakeholders play an important role to us

Stakeholder Advisory Board Members

Investor

Ole Buhl
Senior Socially Responsible Investment Advisor, ATP

Government

Carsten Ingerslev
Head of Department – Danish Commerce and Companies Agency

Retailer

Roland Wardenberg
Global Head of Corporate Responsibility – Royal Ahold

NGO

Kim Carstensen
Leader of WWF Global Climate Initiative – WWF International

Mark Lee
Executive Director – SustainAbility

Customers

Sanne Vinther
Stakeholder Relations Manager – Arla

Dr. Peter White
Director of Sustainability – Procter & Gamble

Employees

Kaustuv Bhattachary
Application Specialist – Danisco Brabrand

Ian Fairs
Group Manager Confectionery – Danisco Brabrand

Sustainability Leadership

Tom Knutzen
CEO – Danisco A/S

Jeffrey Hogue
VP of Corporate Sustainability – Danisco A/S

Annette Hansen
Sustainability Manager – Danisco A/S

Facilitator

Preben Sørensen
Partner Corporate Responsibility – Deloitte

CASE

MERCURY EXPOSURE CASES AT FORMER PLANT

The National Board of Industrial Injuries is processing a number of claims from former employees of Grindstedværket. The claims concern worker exposure to mercury, which was used as a catalyst in the plant's vitamin production in the 1960s, 1970s and the beginning of the 1980s until the production of vitamins was taken over by BASF in 1982.

As mentioned in our last sustainability report and annual report, Danisco wishes to handle the situation in a proper manner and has encouraged all former and current employees who believe they may be suffering from work-related injuries or diseases to contact the National Board of Industrial Injuries and submit a claim for compensation.

Even though Danisco is not under a legal obligation to offer any form of compensation, it was announced at Danisco's annual general meeting in 2008 that Danisco is prepared to live up to its social and ethical responsibility. Once all the claims have been processed, Danisco will announce its plans for offering additional compensation for claims where medical experts and the National Board of Industrial Injuries have recognised work-related injuries resulting in a loss.

To be recognised, claims have to be related to mercury and have to have occurred as a consequence of claimant's employment at Grindstedværket during the period in which Grindstedværket engaged in vitamin production.

Materiality

We have catalogued and assessed stakeholder input from a variety of sources and indexed the issues raised according to their impact on our business to determine whether they are truly material to Danisco.

This analysis will drive our sustainability agenda, shaping our strategies and actions as we approach 2050.

The vast number of issues and questions that arise in our customer request system

In our North American region alone, we catalogued more than 15,000 customer requests, 70% of which dealt with key issues such as quality and food safety systems, supply chain management, labour law and health and safety compliance, human rights, climate strategy and environmental performance.

Questions asked by various investor-related initiatives and indexes

These include the Sustainable Asset Management (SAM)/Dow Jones Sustainability Index (DJSI), the Carbon Disclosure Project (CDP), the Forest Footprint Disclosure Project (FFDP), the UN Global Compact Communication on Progress and the EIRIS/FTSE4Good questionnaires.

Internal key performance indicators

These include information regarding violations and non-conformance incidents, resource pricing trends for critical raw materials, energy and water, carbon taxation trends and industry association involvement trends. Issues emerging from the data were ranked according to their impact on the business and the degree of importance to stakeholders, forming the basis for our Materiality Matrix.

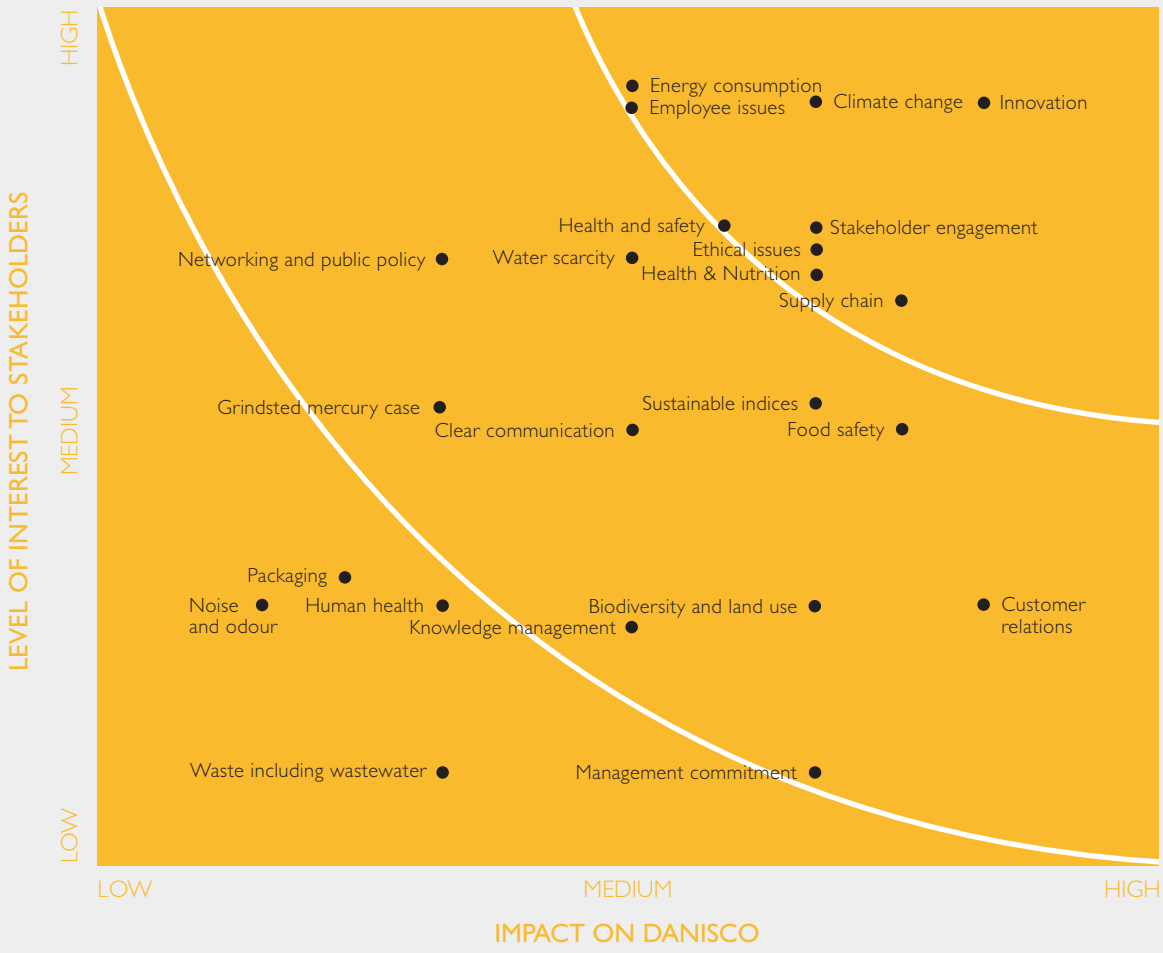
In this report, we address sustainability risks and opportunities identified as having medium-to-high impact on our business and being of medium-to-high interest to our stakeholders. A complete list of material risks related to business strategy, markets, operations, finance and accounting is included in our annual report for 2009/10. While material sustainability risks cannot be separated from those identified in our financial report, this report focuses on those that combine financial, environmental and social relevance.

Management of material issues

Strategies for addressing material issues in our value chain are managed by the Danisco Executive Committee for all company divisions and corporate functions including Legal, Finance, Human Resources and Sustainability. Strategies for driving performance and leadership in each of the material areas have been developed at the group level, and responsibility for executing the strategies is owned by divisional management. Group-level sustainability leaders head three sub-teams which formulate specific plans to achieve performance.

Quantitative targets are developed as needed and progress is reported quarterly to the Executive Committee. In 2009/10, more than 20 meetings were held at the group level to discuss performance in material risk and opportunity areas.

MATERIALITY ASSESSMENT



Between 2010 and 2050, global food production must nearly double to meet demand

Sustainability strategies

Based on a review of our long-term sustainability challenges, key impacts along our entire value chain and input from stakeholders, Danisco has defined strategies and targets for addressing these challenges.

New targets

In the development of our 2009/10 strategies, we took into account input from a wide range of sources, including our materiality assessment, stakeholder feedback and consultations with Danisco's Board of Directors, Executive Committee, divisional leaders, heads of operations and line management. The strategies, which are owned by the Danisco Executive Committee, are designed to drive performance in areas of opportunity that we believe are material.

We have also developed new long-term targets with an eye toward where we want to be in 2020. In developing strategies for sustainable sourcing and innovation, our next step will be to conduct focus groups to help define short-term milestones, resource needs, and short- and long-term targets.

Measuring performance

We will use our existing sustainability performance management database to help monitor progress in executing each new strategy, and progress will be reported to our Executive Committee on a quarterly basis. Our performance also will be published in our quarterly, annual and sustainability reports. Danisco employees worldwide have direct access to the most up-to-date sustainability performance data available via our company intranet; this is one important means of engaging our global workforce in the effort to achieve our defined targets.

SUSTAINABILITY STRATEGIES TO ADDRESS VALUE CHAIN IMPACTS

Sustainable sourcing

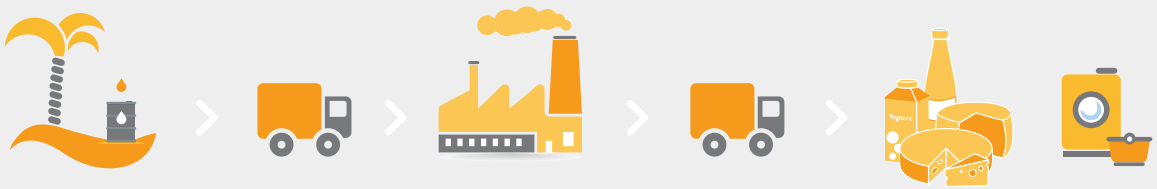
Protect our resources and ecosystems and enable our business to contribute to a more sustainable future

Operational efficiency

Improve resource efficiency to create value for our stakeholders

Sustainable offerings

Provide innovative, bio-based product offerings that improve the overall sustainability profiles of our customers



Strategies, targets and progress

Each year, we evaluate progress towards our targets and assess the need for new targets. This year, we will achieve all of our environmental targets ahead of schedule and have made plans to establish additional – and more ambitious targets – for 2020.

TARGETS AND PROGRESS 2009/10

Category		Target	Target date	Baseline year	Progress
Energy	●	Reduce energy consumption by 10% per kg product	2010	2007	Energy consumption was reduced by 21%
Water	●	Reduce water consumption by 5% per kg product	2010	2007	Water consumption was reduced by 30%
CO2 emissions		No formal target, but reduction through energy and process optimisation	2010	2007	CO2 emissions were reduced by 15% per kg product
Health and safety	●	Achieve fewer than two lost-time injuries per million work hours	2012	N/A	LTI frequency was reduced to 3.5
Employee engagement survey	●	To conduct an annual employee engagement survey and become best in class for external benchmarking	Ongoing		Danisco Spirit was conducted in June 2009. The response rate was 91%, which is 5% higher than in 2008. The overall employee engagement rate was 4.29, and is higher than the external benchmarking, which is 3.94
Danisco Dialogue	●	To ensure all employees complete the Danisco Dialogue process (appraisal and development interview annually)	2009/10: 60% of all employees with on-line access 2010/11: 70% of all employees with on-line access	N/A	72% of employees with on-line access completed the Danisco Dialogue process
Code of conduct	●	To implement the code of conduct to 90% of our employees	2009	N/A	35% of employees have been trained. The target will be modified to reach high-risk employee categories in 2010
Sustainability assessment	●	To conduct sustainability assessments at 95% of our production sites over the next three years	2012	2009	Travel was restricted during the global economic crisis. New approaches will be developed in 2010
Food safety	●	To achieve food safety certifications at 50% of our food ingredient production sites that supply an external customer	2010	2008	56% of the plants have been certified

STRATEGY
Improve resource efficiency to create value for our stakeholders

NEW TARGETS – OPERATIONAL EFFICIENCY

Category	Target	Target date	Baseline year
Energy	Reduce energy consumption by 10% per revenue	2020	2009/10
Renewable energy	Increase renewable energy by 20%	2020	2009/10
Water	Reduce water consumption by 20% per revenue	2020	2009/10
CO2 emissions	Reduce CO2 emissions by 20% per revenue	2020	2009/10
Health and safety	Achieve fewer than two lost-time injuries per million work hours	2012	N/A
Social responsibility / Code of conduct	To readdress training needs based on risk and ensure 100% of high risk employees are trained	2011	2009/10
Employee engagement survey	To conduct an annual employee engagement survey and become best in class for external benchmarking	Ongoing	
Danisco Dialogue	To ensure all employees complete the Danisco Dialogue process (appraisal and development interview annually)	2009/10: 60% of all employees with on-line access 2010/11: 70% of all employees with on-line access	N/A
Sustainability assessment	To develop a sustainability assessment programme based on a risk assessment approach	2010	N/A
Life cycle assessment	To develop tools to make quick life-cycle decisions in innovation, chemical and process selection without the need for comprehensive LCAs	2011/12	2009/10
Life cycle assessment	To conduct at least six peer-reviewed LCAs for pectin, locust bean gum, freeze-dried and frozen cultures, textile bleaching and xylitol	2012/13	2010/11
Food safety	To achieve food safety certifications at 60% of our food ingredient production sites that supply an external customer	2011/12	2008

STRATEGY
Protect our resources and ecosystems and enable our business to contribute to a more sustainable future

NEW TARGETS – SUSTAINABLE SOURCING

Category	Target	Target date	Baseline year
Sustainable sourcing	To develop focus groups and set up targets for sustainable sourcing	2010/11	2009/10
Palm oil	To complete conversion of our palm oil consumption to sustainable sources	2015	2009/10
Soya	To complete a strategy plan for conversion of soyabean oil to sustainable sources	2010/11	N/A
Supplier management	To develop and implement a system to manage supplier and raw materials including approval processes and risk assessment	2010/11	N/A
Packaging	To complete a strategy and identify focus areas for conversion to more sustainable packaging	2010/11	N/A

STRATEGY
Provide innovative, biobased product offerings that improve the overall sustainability profiles of our customers

NEW TARGETS – SUSTAINABLE INNOVATIONS/OFFERINGS

Category	Target	Target date	Baseline year
Sustainable offerings	To develop focus groups and set up targets for sustainable offerings	2010/11	2009/10

Sustainability throughout the value chain

As an ingredients supplier to major industries, Danisco can influence virtually every link in the value chain. But recognising opportunities to do so requires that we adopt a sustainability perspective that shapes our daily practices and guides our approach to business challenges.

Our strategies must be devised with an eye toward how they will affect the sustainability of our business and that of our customers. By fully integrating a sustainability mindset into the way we do business, we can make a difference throughout the entire value chain – from materials sourcing to final product disposal or reuse and everything we do in between.

We strive to develop relationships with suppliers who share our values and who adhere to high ethical standards in their business practices. We work closely with our customers to help them create products that deliver the quality and sustainability profiles their customers demand.

Advancing the sustainable value chain

When we create enzyme breakthroughs that reduce sugar or salt in foods, minimise water and energy use in textile processing, convert agricultural waste to bioenergy or help customers eliminate unhealthy fats in their products, we are working to embed sustainability in every step of our value chain. Along the way, we strive to balance environmental, social and economic factors in our decision-making. Life cycle assessments (LCA), by which we determine the full environmental impacts of our products anywhere in the value chain, are critical to our ability to make well-informed decisions.

Stakeholder perspective

How are supplier risks managed in the value chain?

Roland Waardenburg
Ahold - Retailer

Our response:
We will need to demonstrate that we manage risks adequately and provide stakeholders with supporting quantitative data.

Danisco uses LCA as a decision support tool that focuses on key life cycle stages while addressing the most important types of impacts

Life cycle assessment (LCA)

The environmental and social impacts – and benefits – of a product or service are not limited to their manufacture, use or disposal. Rather, impacts can occur throughout a product's life cycle – from raw material acquisition to production (cradle-to-gate) and encompassing all life cycle stages, including use and end-of-life (cradle-to-grave). Life cycle assessment (LCA) is a tool for understanding a product's overall environmental profile.

Key life cycle considerations

For most of Danisco's products, enzymes, enablers, cultures and sweeteners, significant environmental impacts occur in the agricultural raw material stage and in processing so it is important for us to focus on opportunities for sustainability gains between "cradle and gate." From a life cycle perspective, however, it is equally important that we further develop sustainable solutions that reduce the impact of our customers' products, because 'avoided' impacts in the use stage are often significantly larger than 'induced' impacts from the production of our products. One example could be Purafast™ enzymes, which allow efficient cold-washing of textiles or Excellase™ enabling cold water dishwashing. Screening LCAs suggest that these enzymes, in the use stage, avoid about 30 times more greenhouse gas (GHG) emissions than are induced in the production of the enzyme.

An ingredient's overall contribution to global warming is only a part of an LCA. Life cycle assessment also encompasses depletion of the ozone layer, nutrient over-enrichment, acidification, smog, land use, depletion of non-renewable resources and more. Danisco uses LCA as a decision support tool that focuses on key life cycle stages while addressing the most important types of impacts.

Documentation

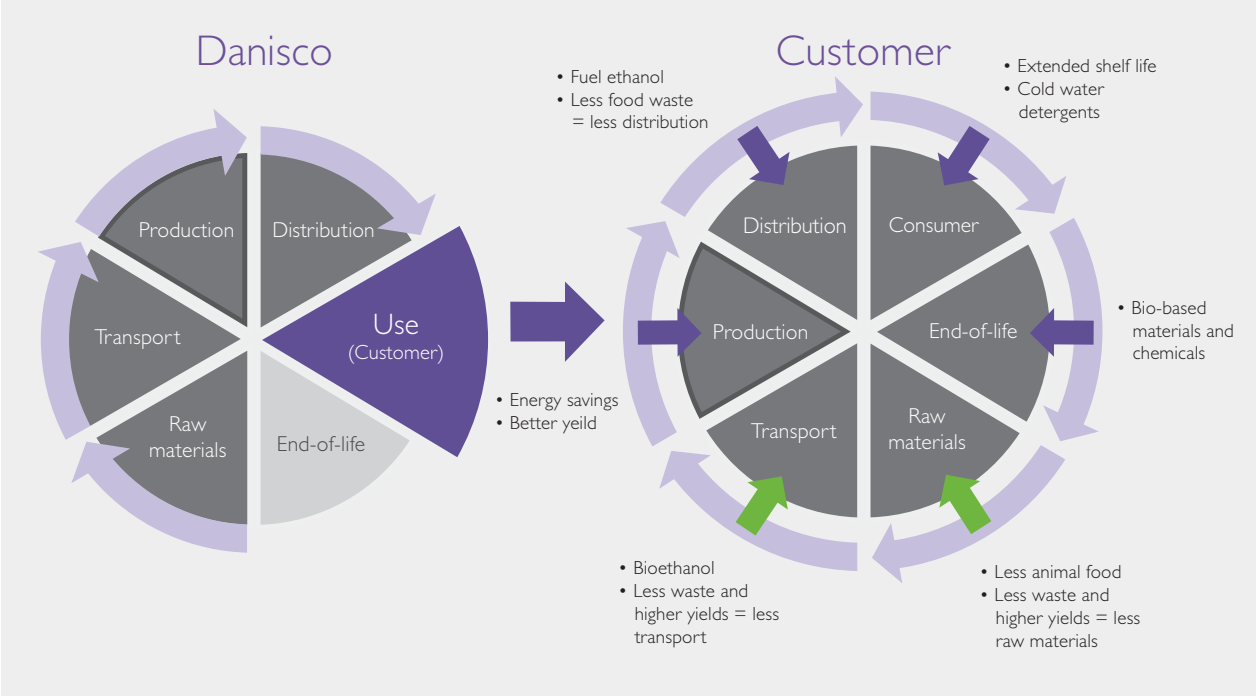
Examples of products for which Danisco has conducted LCAs include:

- Xylitol – a natural sweetener with an extremely low carbon footprint (in review)
- Huntsman Gentle Power Bleach™ to provide low temperature textile bleaching (in review)
- Excellase™, short cycle and low temperature dishwashing enzyme

Danisco also has assessed grenhouse gas (GHG) emissions for two plants, and two more are participating in a road test of WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development) standards for Scope 3 emissions. Going forward, we will conduct LCAs of selected ingredients within all major product groups (including different types of enablers and cultures) and make the results publicly available as peer-reviewed reports or scientific articles.

Value chain

LIFE CYCLE IMPACTS OF DANISCO'S PRODUCTS AND SERVICES



Use stage impacts

Danisco products are typically sold to food companies or producers of biofuels or bio-based chemicals and materials. Hence, the use stage for our products is the production stage for our customers, and our products' end-of-life stage corresponds to our customers' products.

In many applications, our enzymes and ingredients save energy and materials, helping our customers to make more from less.

Our products have the potential to reduce the use of energy and chemicals in the production stage of other food and non-food products (large dark purple arrow). They also have the potential to increase yield, thereby reducing upstream impacts related to raw materials and transport. For example, enzymes applied in fruit juice production can increase the amount of juice extracted from the fruit, by 20% thus increasing yield while reducing waste (two green arrows).

In some cases, we can even reduce our customers' downstream impacts (small dark purple arrows) with ingredients for laundry detergents that enable cold-washing and shorter washing cycles.

Similarly, our green tea extracts increase shelf life and reduce food waste during the distribution, use and end-of-life stages. By reducing food waste at the end of the life cycle, we can have a positive impact on all upstream processes; less food is produced and transported to meet the same need while less is wasted. Such indirect contributions to reducing transport needs is highly valuable, but we can also contribute more directly. Our enzymes enable more efficient production of biofuels, even helping to turn waste and non-food crops into raw materials for the biofuels industry. And in the end-of-life stage, our biobased materials arguably have a better environmental profile than fossil-based alternatives.

CASE

REDUCING LIFE CYCLE IMPACTS THROUGH CLOSED LOOP MANUFACTURING

Industrial symbiosis

Preliminary results of our LCA study of the natural occurring sweetener xylitol (from our xylose-based process) show a remarkably low environmental footprint. This dramatic difference is due to a combination of more efficient technology and industrial symbiosis: Our Lenzing, Austria, xylose plant uses the side stream from the neighbouring pulp and paper mill as raw material, because it is high in carbohydrates in hydrolysed form – an ideal basis for the production of xylose. Wastewater from the process is returned to the mill for treatment.

The collaboration reduces the waste challenge for the mill, while providing an excellent raw material (with a very low environmental impact) for our xylose production.

Using waste products from other industries or our own processes where such opportunities exist is a powerful means of reducing our footprint. However, these opportunities can only be identified when thinking in terms of life cycles and the possible synergies between life cycles across different types of processes and industries.

Sustainability in our raw materials

Procuring sustainable materials is one way Danisco can protect the world's shared resources and ecosystems and contribute to a more sustainable future.

The complexity of our supply chain

With thousands of global suppliers located in more than 40 countries, we must adopt a proactive approach to managing raw material sustainability risks. In our upstream supply chain, we have focused for many years on addressing raw material sourcing risks including management of single-source suppliers, potential human rights and labour issues in farming and raw material suppliers in the developing world, loss of biodiversity due to cultivation, food safety and quality and climate change impacts. We will improve our processes through the development of a supplier management system.

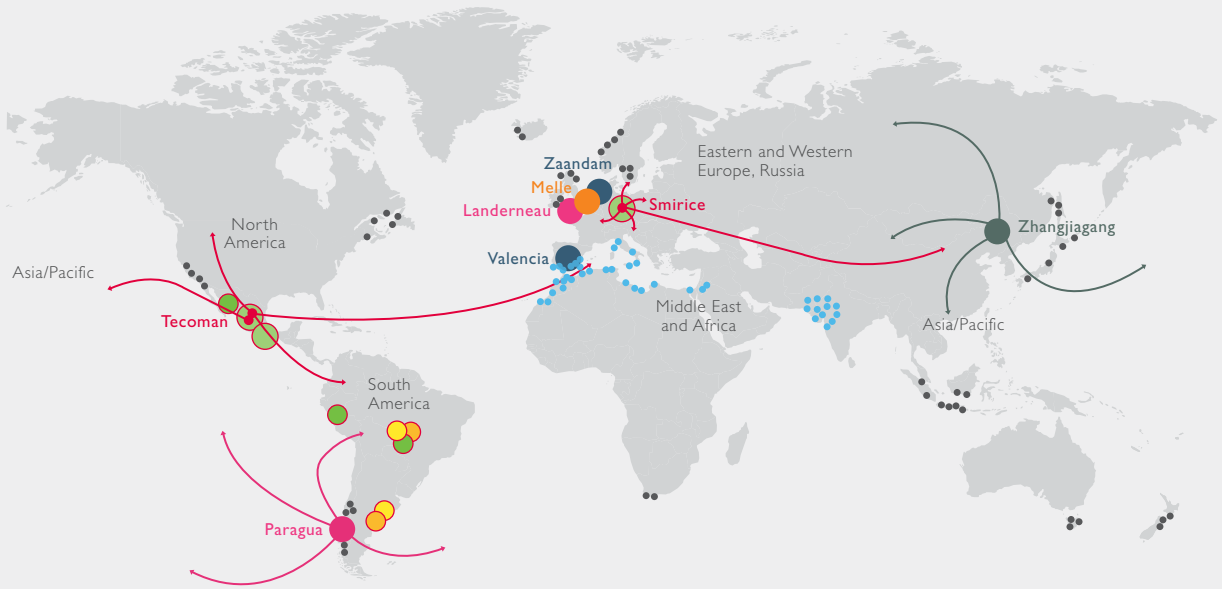
In addition, we are building capabilities to further assess our environmental impacts using life cycle assessment (LCA) for critical raw material sources. By 2013, we plan to conduct at least six peer-reviewed LCAs for pectin, locust bean gum, freeze-dried cultures, frozen cultures, textile bleaching and xylitol.

As a global business, purchasing from local sources is not always possible given the availability of raw materials. For example, our Enablers division sources major raw materials globally from a variety of sources including waste citrus peels from juice production in the Americas, locust beans from wild Carob trees in the Mediterranean and Northern Africa, farmed and wild seaweeds off the coast of Chile, Japan and Europe and palm oils derived from oil palm trees in South East Asia. However, a great part of our materials are sourced from locally based suppliers, as our manufacturing sites are strategically located in regions where we source our raw materials to minimise transport impacts and costs.

We also support impact reduction through participation in multi-stakeholder organisations such as the Roundtable for Sustainable Palm (RSPO) and the Roundtable for Responsible Soy (RTRS). We will continue to proactively work with our suppliers to further improve their productivity and reduce their environmental impacts through capacity-building efforts, collaboration, incentives and guidance.

Waste lime peel plays an important part in pectin production

MAIN IMPACTS FROM OUR MAJOR BIO-BASED RAW MATERIALS



Pectin production | Galactomannans | Seaweed extracts | Fermented products
Commercial peel supply | Kernel/split supply | Red/brown seaweed supply | Cellulose, starch, sugars etc.

Raw material	Impact/risk	Solution
General (agricultural products)	Use of land increases the pressure on natural habitats directly as well as indirectly. This may cause loss of biodiversity, water pollution, water use, release of greenhouse gases and pesticides. Social impacts and conflicts, e.g. land rights, and rural migration, indigenous peoples rights.	Evaluation of suppliers' environmental performance – preference to most sustainabe suppliers. Collaboration with suppliers, NGOs, and experts about identification of improvement options.
Soya meal and oil	Significant amounts of soy are grown in areas with high biodiversity e.g Cerrado savannah and tropical forrests.	Danisco is a member of the Roundtable on Responsible Soy Association (RTRS) – which apart from addressing environmental aspects, also is concerned with social aspects.
Palm oil	Significant amounts of palm oil are grown in areas with high biodiversity e.g. tropical forrests. This involves peat land, which also causes significant greenhouse gas (GHG) emissions.	Danisco is member of the Roundtable on Sustainable Palm Oil (RSPO) and it is our objective to source sustainably from 2015
Corn starch	No additional special concerns.	Our newest types of enzymes enable the use of crops grown with little water on marginal land to replace sugar/starch as feedstocks for our enzyme production, cellulostic fuel and biochemicals.
Locust beans	No additional special concerns.	No additional special concerns.
Guar	No additional special concerns.	No additional special concerns.
Seaweed	Seaweed production does not involve land occupation or transformation, with related impacts.	Working with farmers to improve farming practices and productivity. Restoration of seaweed habitats and replanting of stocks. Collaboration with competitors and local governments through the Chilean Fishery Development Institute.
Peels	Peels from citrus fruits are waste or byproducts from juice production and arguably does not cause land use.	Working with farmers to improve citrus farming agricultural practices and productivity.

CASE

SUSTAINABLE SOURCING APPROACH – PALM OIL

One example of our responsible sourcing approach is palm oil, a key component in our emulsifiers, which binds oil and water and makes it possible for our customers to offer lower-fat, healthier and longer-lasting foods.

In response to the urgent and pressing global call for sustainably produced palm oil, the Roundtable on Sustainable Palm Oil (RSPO) was formed in 2004 with the objective of promoting the growth and use of sustainable palm oil products through credible global standards and engagement of stakeholders. RSPO is a not-for-profit association that unites stakeholders from seven sectors of the palm oil industry – palm oil producers, palm oil processors or traders, consumer goods manufacturers, retailers, banks and investors, environmental or nature conservation NGOs and social or developmental NGOs – to develop and implement global standards for sustainable palm oil.

While we do not grow our own crops, we see the need to influence farming through our participation in sustainable agriculture initiatives like the Roundtable for Sustainable Palm Oil. The issues related to palm oil production include deforestation, CO2 emissions from the draining of peat lands, loss of biodiversity and habitats and land conflicts. Our participation in the RSPO since 2004 (in a multi-stakeholder approach) has resulted in standards and certification processes to address these issues.

Danisco sources only from RSPO-certified suppliers and we currently have a target of sourcing 100% certified sustainable palm oil supply by 2015.

More recently, we have begun applying our experience in sustainable palm oil to help shift the food industry towards sustainable soya. We are participating in soya working groups and will develop additional related strategies in 2010. As of May 2010, all production sites consuming palm oil are certified by RSPO to produce sustainable emulsifiers and blends and poducts can be claimed accordingly.

Cows in the surrounding area are fed with residues from our pectin production

We keep finding new ways to improve our processes, and we are especially looking to reduce our water and energy consumption

Our Tecomán plant is situated in the middle of a plantation area west of Mexico City

Waste lime peels from juice production play an important role in pectin production

From peel to pectin in a sustainable cycle

Our pectin plant in Mexico is located in the heart of a citrus growing region. Here, our key raw materials are close to our manafacturing site, making transport efficient and less impactful because of the distances. We make pectin from waste citrus peel and convert the waste from our process into animal feed. Pectin is used as a gelling and thickening agent for jam, yoghurt, juice and other beverages.

Supplier and raw material management

Danisco maintains an ongoing dialogue with suppliers regarding key sustainability performance factors such as food safety, quality, environmental performance and social responsibility through a systematic review and performance monitoring process. Given our many raw material sources and the nature of our supplier base, regular audits of all Danisco suppliers is simply not practical, and audit capabilities must be used strategically.

Suppliers are selected on a professional business basis, which includes consideration of the supplier's environmental and social responsibility. Our sustainability guidelines determine which aspects we use when assessing our suppliers from an environmental and human rights point of view. In principle, all our significant suppliers are assessed in these areas, but the data is not consolidated on a global level. In the next reporting period we will improve our data tracking and consolidation process.

A new supplier management system, expected to be launched in 2010, will strengthen our global supplier and material assessment programme through better audit portfolio management tools, detailed assessments, prioritised audits and improved collection of supplier and raw material data.

By better equipping us with what we need to know about our suppliers and raw material sources, globally harmonized supplier and raw material management, risk assessment and audit processes will enable us to take precautionary actions more swiftly and effectively.

Centralising important components of current systems will enhance our overall supplier management capabilities. Key elements of the global system include:

- A corporate audit and risk assessment policy, including business and human rights risks
- A shared IT platform for supplier and raw material management, risk assessments and audit management
- Necessary interfaces with current systems
- Criteria for managing supplier audit frequency based on volume, location and other factors
- A sustainability knowledge database on suppliers and raw materials

DANISCO SUPPLIER AND RAW MATERIAL SYSTEM

CASE

SUSTAINABLE SOURCING APPROACH – SEAWEED FOR CARAGEENAN

After developing a new sustainable technology, Danisco's Chile plant is now successfully harvesting black and red seaweed, which are the primary raw materials in the production of a gelling agent called "carrageenan."

Our new technology is benefiting the local economy: the mussel farmers and fishermen in Pargua, Chile now look to sustainable seaweed farming for an alternative source of income.

Seaweed repopulation

Since we built a factory in a small city 58 km southwest of Puerto Montt, we have witnessed the development of a new technology called repopulation.

The process involves impregnating stones with seaweed seeds and placing them on the seabed. Developed onsite in collaboration with people who normally handle sea products, the technology eliminates the need for investing in hatcheries and long-line materials.

Work began in June 2005, and the technology started showing positive results at the end of 2006. The seaweed farming project was completed in July 2008 by Danisco Chile when the team handed over their seaweed repopulation work to the local community for further development. A total of 40 metric tonnes of dry seaweed (250 metric tonnes of fresh seaweed) were harvested.

Sustainability in our manufacturing and operations

We currently manufacture products in 49 sites worldwide in over 25 countries. From these 49 sites we produce over 10,000 products and distribute them to customers globally. We have estimated that the environmental impact from our manufacturing processes is moderate compared to avoided end-use impacts. Impacts from our manufacturing processes may sound low, but it remains a focus of our operational excellence. For example, we were able to reduce our water consumption by 30%, energy consumption by 21% and CO2 emissions by 15% in the past three years.

Ensuring that we can consistently achieve resource reduction and stewardship is not a one-size-fits-all approach. Our manufacturing is very different from product line to product line and each plant has its own challenges to consider when driving their performance at a local level. In some cases, we have focused on the plants with the highest impacts to improve our overall company performance.

Throughout our sustainability journey, we have found that the art of sustainability in our manufacturing is to balance the need for companywide efforts with the creativity and enthusiasm at the local level.

Our production site in Paragua, Chile

OUR SEVEN MAIN PRODUCTION PLATFORMS		
Ingredients	**Production process**	**Use**
Cultures	Production of yoghurt and cheese cultures through the fermentation of micro-organisms, grown on appropriate bionutrients.	Used to acidify milk in the production of cheese, set milk and yoghurt, probiotics for gut, immune, respiratory and digestive health. Also used as feed protecton.
Emulsifiers	Extraction of fatty acids in vegetable-based oils like palm and soya.	Used to bind oil and water. Often used in bread, cakes, margarine and ice cream and to reduce fat and salt or to remove trans fat.
Enzymes	Production of biocatalysts by bacteria and fungi using corn, sugars, soya and other nitrogen sources as major raw materials.	Used in detergents, textile processing, animal feed and bioethanol. Also used in feed, bread, juices and wine to promote natural processes and to remove carbohydrates.
Gums	Extraction of hydrocolloids from wild plant seeds like locust beans and guar beans, fermentation beet sugar and wheat starch or chemical modification of cellulose.	Used as thickening, gelling and stabilising agents and to bind water, making it viscous or gel-like. Also used to reduce sugar, fats and carbohydrates. Used in chocolate milk, drinking yoghurt and jam.
Stabilisers	Extraction of carrageenan and alginates from farmed and collected red, brown and black seaweeds, pectin from waste lime, lemon and orange peels from juice production.	Used as thickening, gelling and stabilising agents and to bind water, making it viscous or gel-like. Used in chocolate milk, drinking yoghurt and jam.
Sweeteners	Production of non-sugar based sweeteners like xylitol using wastewater from a local pulp mill, rich in carbohydrates.	Used to replace sugar and add or enhance the taste of dairy products, ice-cream and low-calorie products. Sweeteners are often used for oral health or prebiotics and fibres for improved gut health and digestion. Danisco is particularly known for xylitol.

Stakeholder perspective

How will Danisco operate in a carbon-constrained world?

Kim Carstensen
WWF - NGO

Our response:
We have developed concrete strategies and targets to reduce carbon impacts across our value chain.

Sustainable solutions

Products to meet the world's greatest challenges

The world faces challenges of unprecedented dimensions. In the next 40 years, the world's population will grow from 6.8 to 9 billion people, and the climate will change as a result of global warming. In consequence, we need sustainable initiatives to significantly change consumer habits. Without this change, society cannot avoid significant impacts on the well-being of the global community.

We must look at every step in the value chain in pursuit of solutions that address today's biggest challenges: inefficiency and waste in food production and distribution, growing health concerns and the need to limit petroleum-based energy and chemicals.

Just as consumers increasingly seek healthy, affordable and eco-friendly options, our customers ask us for new ways to help them promote health, improve efficiency and minimise environmental impacts.

We respond to those needs by applying our knowledge and capabilities, taking a "life cycle" approach and collaborating with leading external scientists and institutions, bringing innovative solutions and sustainable products to market in food and beverages, animal nutrition, household care, energy, biotechnology, plastics and industrial processing.

We see some of the world's greatest challenges as opportunities for Danisco to make a positive difference, adding tremendous value for our customers and for consumers, while growing our business in a sustainable way. Our ability to deliver solutions that save energy, increase food availability and reduce CO2 emissions and dependence on oil is, in itself, a sustainable value proposition.

Consumers are looking for healthy solutions

Stakeholder perspective

How does Danisco align time horizons to reap the sustainability benefits in innovation?

Kim Carstensen
WWF - NGO

Our response:
We will embed sustainability thinking into how future products are conceived and developed to meet short- and long-term needs

Sustainability in our innovation and products

Danisco develops innovative solutions by engaging the talents of our employees, collaborating with our suppliers and customers and investing in strategic partnerships with academia and other industry leaders to devise breakthrough technologies.

Understanding our customers and their needs is a crucial part of the innovation process as it enables us to select and prioritise our investment in projects. The Danisco Innovation Coordination Committee launched a major new initiative in 2009/10 called "Market Driven Innovation," to ensure that our innovation processes are focused on the present and anticipated future needs of our customers and of consumers. Sustainability principles are key drivers of this process.

Additionally, Danisco Innovate was initiated to enable all employees globally to contribute to the innovation process by describing their needs as consumers as well as ideas for solutions.

1059 employees from 87 of our sites participated in the first Danisco Innovate campaign, which was launched in October 2009. Of the 521 ideas received, 11 pre-projects have been initiated for business evaluation by a panel comprising business and innovation leaders from across the company. Many of the ideas have direct sustainability benefits. It is expected that at least one or two new projects will be launched as a consequence of this process.

"Doubling-up" to meet commercial time horizons

Meeting market needs for sustainable solutions requires agility and foresight. It also requires prioritising opportunities and 'doing the right things right' for optimum efficiency and effectiveness in our business. Initially launched in Western Europe in 2007 and rolling out regionally, Danisco initiated "Double-Up," an ambitious programme that has given us a well-defined, well-managed customer opportunity handling process.

Today, Double-Up is implemented throughout most of Danisco, helping us to prioritise our use of resources and become more market focused. Communication between our sales, innovation and divisional teams is faster and smoother, as the same global language is used when determining appropriate actions. The programme has also enabled us to measure and follow up on our performance.

Collaboration to decrease fossil fuel dependency

By working together we can overcome sustainability challenges that no single entity can solve on its own. For example, Danisco's partnership with DuPont is producing turnkey solutions for bioethanol production using both crop residues and bioenergy crops. The approach uses our award-winning Accellerase® enzymes to convert biomass into sugar, supporting an environmentally responsible alternative to fossil fuels without detracting from the global food supply. Likewise, with Goodyear we are co-developing an integrated process to manufacture BioIsoprene™ at industrial scale. The high-purity, bio-based, renewable alternative to petroleum-based isoprene will enable Goodyear to produce synthetic rubber for tires without the dependency on petroleum. Between 2009 and 2013, we will invest approximately USD 50 million to continue development.

As a world-leading biotech company, Danisco is constantly looking for high-potential innovation projects that lead to more sustainable products and processes

Product accountability

Addressing stakeholder concerns

Although our products are biologically based, support health and help our customers conserve resources or avoid petrochemically-based alternatives, we recognise that some of our stakeholders have concerns about certain ingredients, processes and outcomes.

We have identified four issues that are the subject of controversy among some stakeholders.

- E numbers
- Genetically modified organisms
- Food ingredients that help combat obesity
- Fuel ethanol

Below we have outlined the concerns expressed by some stakeholders and the ways in which we work to address them.

E numbers

Food ingredients, innovation and E numbers

Danisco believes in the potential of innovation within food technology to feed a hungry world. We are dedicated to furthering development of new ingredients and applications in order to provide customers with solutions that are not only beneficial and novel, but also sustainable. Our solutions improve the quality, safety and shelf life of processed food, while reducing the amount of raw materials required and waste produced. Our food ingredients (e.g. emulsifiers, enzymes, cultures, gums, antioxidants, extracts) have many different uses. They can act as stabilisers, gelling agents, flavour enhancers, antioxidants as well as maintain and improve a product's sensory properties, such as texture, consistency, taste, aroma and colour. They aid in the manufacturing process of a food product, its packaging, transport or storage.

Our food ingredients are derived from different sources (fermentation, plant, animal, mineral or seaweed) and are produced through many different processes. Without exception they are assessed for safety and will be labelled according to local jurisdiction requirements.

Some of Danisco's food ingredients have an E number. This E number is simply an internationally recognised European code which indicates that a particular ingredient used as a food additive has passed the stringent safety assessment procedures set down by the European Commission and the EFSA. Some additives have long technical names and E numbers provide a system of identification that is the same in all languages, easy to fit on a food label and guarantees the safety and compliance of the ingredient for the consumer.

Danisco's commitment

Danisco meets the needs of the marketplace, labelling products according to regulatory requirements and the needs of the consumers. We are sensitive to the needs of our customers and respect that concerns can exist about the use and labelling of food ingredients, e.g. E number labelling. We are committed to transparency and will provide the necessary information about our products to our stakeholders through product literature, product labels and our employees.

Danisco also interacts in a pro-active way with other stakeholders that include legislators, regulators, customers, consumers, and academia, either directly and/or through our leadership in external organisations.

Genetically modified organisms (GMOs)

Modern biotechnology uses genetic engineering to develop genetically modified organsims (GMOs) or genetically modified microorganisms (GMMs). Danisco believes in the potential of modern biotechnology to provide our customers with solutions that are innovative. This technology can create competitive solutions, offering new opportunities both for the customers' industry performance and our environment. Danisco uses biotechnology in a responsible and appropriate manner in accordance with laws and regulations.

Danisco is sensitive to perceptions regarding the use of modern biotechnology. We therefore label our products according to customers' needs and, of course, always in accordance with regulatory and safety requirements.

A specific approval is needed before GM plants (e.g. GM rapeseed) or GM foods (e.g. GM rapeseed oil) can be used in Europe. Only those that have been assessed as safe to health and the environment are authorised for use on the European market.

In addition, legislation provides requirements for labelling and traceability of food and feed produced from GMO/GMM sources, or containing or consisting of ingredients produced using GMO/GMMs.

Danisco utilises modern biotechnology where appropriate and beneficial to support the principles of sustainable development and to provide cost-effective solutions to our customers. As an example, GMMs and non-GMMs are used under controlled conditions to produce enzymes and other biochemicals. In more than 20 years of large-scale enzyme production using GMMs, no environmental safety problem has occurred with these GMMs or their waste products. When GM techniques are applied to develop a production microorganism used for enzyme production, this is clearly identified in the product literature as part of our transparency policy.

Danisco seeks new ingredients to replace GMOs and has used non-GMO substitutes for some products. However, this remains an ongoing challenge because it is not always possible to avoid GMOs in every ingredient. Although we are confident that GMOs are safe and nutritious, we will continue to address stakeholder concerns by furthering our research into effective non-GMO formulations and implementing non-GMO alternatives where possible.

Food ingredients that help combat obesity

As the global rate of obesity and associated health impacts increase and obesity reaches epidemic proportions in some regions, consumers have turned to a variety of solutions, including alternatives to fats and sugars in the diet.

Over the years, some stakeholders have expressed concern that sugar and fat substitutes are not healthy. Some of these fears are based on outdated information and confusion about products. For example, early studies that linked saccharin to health issues continue to taint the reputations of today's biobased sweeteners, even though they are found to be safe by relevent authorities.

In addition, some sugar substitutes have E numbers, adding to the confusion about their use and safety. Concerns also arose over the use of olestra, a fat substitute found to have unappealing digestive side effects and ultimately banned in several countries.

Our sweeteners offer a variety of plant-based solutions, such as polydextrose (Litesse®) which helps to reduce sugar and fat in many food products such as baked goods. We also provide probiotics and prebiotics that have the potential to improve digestive health and immunity, and even counter the effects of microflora linked to overweight.

Sustainability is embedded in every step of the value chain

Fuel ethanol

One solution to global dependence on finite fossil fuels is fuel ethanol, which is made from plant sources. We believe strongly that biofuels represent a valuable part of the solution to fossil fuels. They readily biodegrade without harm to the environment, use agricultural waste that would otherwise be discarded, and meet strict emissions standards during use. In addition, unlike oil, ethanol has a positive net energy balance, meaning it provides more energy than is needed to produce it.

The discourse about fuel ethanol is multifaceted. Despite the many benefits of this renewable energy alternative, some stakeholders have expressed concerns that:

- Switching to renewable fuel is better than fossil fuel, but still promotes use of private transportation (i.e., cars) rather than more sustainable public alternatives.
- Biofuels could create agricultural competition between growing crops for food and for fuel and potentially increase the price of food.
- Tropical lands could become deforested to grow crops for biofuels.
- The energy used to produce biofuels could offset their environmental benefits.

Today, commercial technology provides for the development of a biofuel, fuel ethanol, using corn starch to produce what is known as first-generation fuel ethanol. The starch used is not intended for human consumption. Through Danisco's Genencor division, we have developed best-in-class enzymes that convert biobased feedstocks into fuel ethanol.

We continue to invest technologically in these first-generation fuels because of the critical role they play in creating a market for ethanol and promoting energy independence. When the next generation of biofuels is commercially ready, the infrastructure and demand will be in place. Until then, Danisco is reducing the environmental impacts and cost of first-generation fuel ethanol with better enzymes. The enzymes we recently launched for second-generation fuel ethanol decrease water and energy production requirements and reduce the cost of enzymes by 80%.

Even more important over the long term is the fact that we are well on the way to developing second-generation bio-based fuels that are not food-based. At Danisco, we are implementing two strategies to make advanced fuel ethanol commercially available.

1. We formed a joint venture with DuPont to convert hard biomass into bioethanol. The process can use various biomass sources – wheat straw, wood chips, switch-grass, agricultural residues and others – depending on local availability. As a result, these cellulosic biofuels do not compromise food security and have consumed less energy and water in production. Cellulosic fuel ethanol is also expected to reduce greenhouse gases by around 80% compared to fossil fuels.

2. We have also made our Accellerase® DUET product available to customers worldwide for pilot projects to convert biomass into fuel ethanol. Accellerase DUET offers greatly improved performance in cellulose conversion, resulting in higher ethanol yields and effective operation in a wider variety of processes.

Contributing to solutions:
Food challenges

In the UK, more than 8.3 million tonnes of food is thrown away each year, yet 61% of that waste could have been avoided through better management. Globally, the issue is even greater, with food waste producing large amounts of methane as it rots in landfills. For every tonne of food waste, nearly 4-5 tonnes of CO2 equivalents are released into the atmosphere (WRAP 2009).

Danisco's bio-based solutions, using enzymes, emulsifiers, antioxidants and antimicrobials, extend the shelf life of foods and have the potential to reduce both food waste and energy consumption.

Getting more from less

In the UK alone, more than 320,000 tonnes of bread is discarded each year because it has lost its freshness. Methane produced by that waste equates to more than 1.4 million tonnes of CO2 equivalents. By adding various enzymes, GRINDAMYL® POWERFresh can keep bread fresher up to seven days longer, potentially saving two million tonnes of flour per year and making more bread available with no increase in flour.

Helping poultry and pigs get more from their feed – and reducing phosphorus and nitrogen in their manure

Danisco enzymes significantly improve the digestibility of energy, protein and phosphorus in the raw materials used in animal feeds. This means feed costs can be reduced and, at the same time, less phosphorus and nitrogen are released to damage the environment.

Enhancing food safety and spoilage of dairy products

In the developing world the lack of proper refrigeration of dairy products is the main cause of spoilage in storage and transport.

To address this, Danisco produces HOLDBAC® YM to enhance food safety and extend shelf life through our protective cultures. We will be able to protect dairy products against yeast and mould, naturally preserving dairy even in unfavourable conditions such as high temperature and humidity, lack of refrigeration and poor transport or processing conditions. Other bioactives, such as our Care4U™ products, further support health by ensuring food safety.

Reducing the carbon footprint of food production

Danisco has more than 70 ways to help the food and beverage industry reduce carbon emissions and natural resource consumption. In one example, our FoodPro® Cleanline enzyme reduces the number of cleaning cycles required in UHT (ultra-high-temperature) milk processing, eliminates the need for harsh cleaners, reduces water consumption and boosts processing capacity by up to 15%.

Danisco ingredients are in many consumer products

CASE

BOTTOM OF THE PYRAMID STRATEGY TO PRESERVE RAW MILK IN KENYA

The challenge – 20% of milk in developing countries is wasted due to lack of refrigeration.

In 2007, worldwide milk production is estimated to be 655 million tonnes with over 30% produced in developing countries. The UN Food and Agriculture Organization (FAO) forecasts that demand for milk in the developing world will double by 2030. Developing countries are not self-sufficient with milk, and dairy imports to developing countries in value terms grew by 43% between 1998 and 2001.

The vast majority of the milk in developing countries is produced on small-scale farms (fewer than five milking cows), without cooling systems. The FAO estimates that 25-50% of the milk from small-scale farmers is wasted. Major problem areas include:

- Lack of cooling systems at the farm level where only morning milk can be provided.
- Huge seasonal fluctuations in milk production.
- Lack of an effective milk industry.

The small amount of milk produced per day in the dominant smallholder dairy sector in Kenya and other developing countries cannot justify investment in on-farm cooling equipment. In many cases, even electricity would not be available.

Solutions whereby the farmer can deliver milk in the evening to the market system will prevent much of the spoilage that occurs when milk must be stored overnight and will enable increased production and improved economics for the individual farmer.

The solution – development of enzyme technology to increase shelf life.

A natural processing aid to preserve raw milk without cooling for 12-15 hours would present an economically viable way to improve overall milk quality and give small farmers access to the market.

In 2009 a project was funded by the Danish International Development Agency (DANIDA) for exploring a Danisco technology for natural preservation of raw milk in Kenya.

The technology employs an enzyme system that would be added to raw milk at the point of production to increase the natural biostatic properties inherent in milk. The enzyme increases milk's existing properties to minimise bacterial growth in the milk when not refrigerated.

The study began this year and the full project will commence in October 2010. The project will also focus on community development efforts through capacity building in milk production techniques. Additionally, the project will indirectly improve the market infrastructure and distribution system for milk.

This is an ingredient for sustainability that reflects Danisco's core business proposition.

Contributing to solutions:
Health challenges

The World Health Organization (WHO) considers obesity to be one of the top 10 causes of preventable death worldwide. They estimate that two billion adults will be overweight and more than 700 million will be obese by 2015. Given this projection and the fact that obesity is one of the most important modifiable risk factors for chronic diseases like diabetes and heart disease, it is no wonder food ingredient providers like Danisco play an important role.

We offer an array of probiotics, emulsifiers, fibres, enzymes, starter cultures, pectin, gums, vitamins and speciality sweeteners that allow people to manage weight, improve digestive health, strengthen immunity and reduce intake of salt, sugar and unhealthy fats.

Helping consumers avoid trans fats

The consumption of trans fats increases the risk of coronary heart disease by raising levels of "bad" LDL cholesterol and lowering levels of "good" HDL cholesterol. Health authorities worldwide have recommended that trans fat be reduced to trace amounts in people's diets. In fact, it is estimated that between 30,000 and 100,000 deaths per year in the US are directly related to trans fatty acid consumption.

The trans fatty acid debate has also led to an emerging demand in some markets to eliminate the use of hydrogenation in food products. In Montgomery County in Maryland, trans fats have even been banned, and the trend to restricting trans fats is increasing globally.

We have responded to this concern with the proactive development of DIMODAN NH 100, a non-hydrogenated monoglyce-ride for use in industrial margarines for breads and cakes without hydrogenated trans fats. It also allows for a longer shelf life, resulting in less spoilage and food waste.

Supporting immune health through probiotics

The thought of eating bacteria is unappealing to most of us. However, there is increasing evidence that the consumption of "good bacteria" can alleviate a variety of conditions. The use of bacteria to treat illness is not as illogical as it seems. The human gut is home to over 500 different species of living microorganisms. In fact, they help keep the "bad bacteria" at bay, assist in digestion and nutrient uptake, and contribute to the function of our immune systems.

Some digestive disease experts recommend using probiotics for conditions like irritable bowel syndrome. Clinical studies from the mid 1990s to date have demonstrated that probiotic therapy can help treat several gastrointestinal ills, delay the development of allergies in children, and treat and prevent a variety of infections.

This is why we produce HOWARU® Bifido. A new immune-boosting probiotic that can be added to fruit juices to enhance the body's immune response. Especially effective for children, the elderly and those who are lactose intolerant, this is just one of our many health-promoting probiotics.

CASE

PROMOTING ORAL HEALTH WITH XYLITOL

Xylitol is a naturally occurring sweetener found in small quantities in many fruits and vegetables and it is even produced in the human body during normal glucose metabolism. It is a five-carbon polyol (or "sugar alcohol") that has a number of unique properties that bring added value to food, oral hygiene, pharmaceutical and cosmetic applications. Xylitol, with a sweetness equal to that of sugar, is the sweetest of the sugar-free bulk sweeteners, and in crystalline applications it provides a pleasant cooling effect as it is consumed.

As with other polyol sweeteners, xylitol is not fermented by oral bacteria and therefore does not cause tooth decay (dental caries). For this reason, polyol sweeteners are often described as being "non-cariogenic." However, xylitol is more than just a non-cariogenic sweetener. It is also cariostatic. Numerous in vitro, in vivo and clinical studies have demonstrated that xylitol actively inhibits the formation of tooth decay and represents a significant beneficial factor in the improvement of oral health. Xylitol has also been shown to reduce the amount of dental plaque and the numbers of caries-causative bacteria found in plaque. No other sugar substitute has been shown to function in this way.

The powerful cooling effect of xylitol gives initial impact and freshness to the end product. A number of cooling agents try to mimic this rapid cooling onset, but the majority are based on menthol compounds which produce a chemical cooling sensation rather than the physical cooling offered by xylitol.

Xylitol itself is by no means a new ingredient, as it is a well-known food additive that has been extensively used as a sugar-free sweetening agent in food applications since the 1960s.

Xylitol is widely approved for use in food around the world, in the EU under the Sweeteners Directive and Miscellaneous Additives Directive as E967 and in the US under FDA regulation 21 CFR 172.395. Numerous scientific studies have shown clear health benefits following the consumption of xylitol.

Xylitol was awarded one of the first health claims targeted at children in the EU. This was published in the Commission Regulation 1024/2009 on 29 October 2009. The approved claim is "Chewing gum sweetened with 100% xylitol has been shown to reduce dental plaque. High content/level of dental plaque is a risk factor in the development of caries in children." This means that the critically renowned European Food Safety Authority (EFSA) has acknowledged that xylitol offers health benefits in the area of oral health.

Xylitol

Contributing to solutions:
Energy challenges

Breaking down cellulose to make second-generation bioethanol

There has been heavy debate on the merits of bioethanol and its impacts on the environment and biodiversity. While the debate continues to evolve around issues related to life cycle impacts like indirect land use change (ILUC) and input-to-output energy ratios, the use of bioethanol is steadily increasing due to the benefits of reducing the amount of CO2 produced per kilometre travelled by car.

Analysis of alternative scenarios in a current World Wildlife Fund (WWF) study indicates that the use of fuel ethanol has significant potential to deliver emission reductions when compared with a world with no fuel ethanol.

Despite differing views, major economies including the US, Brazil, China and Germany have mandated blends of fuel ethanol for 2020 and beyond. First generation bioethanol is a step towards driving emission reductions required to prevent the rise of average global temperatures by 2°C.

Our Genencor division maintains a strong level of expertise in methods for improving the effectiveness of enzymes to break down the various parts of agriculture crops into sugars, which are used as building blocks for bio-based materials.

For the blending of fuels in the transportation sector, these sugar building blocks are fermented into ethanol. First-generation bioethanol is made from sugar cane, beet or starch plant material and second-generation is made from cellulose plant material. This alternative ingredient for sustainable energy is expected to reduce overall CO2 emissions from the transportation sector by around 50% respectively, compared with traditional petrol used for gasoline.

Renewable engergy solutions to replace oil and gas suppliers

CASE

CLIMATE-FRIENDLY SOLUTIONS

Functional ingredients enable food manufacturers to lower their carbon load

Danisco has more than 70 ways to help the food and beverage industries combat climate change by reducing carbon emissions and consumption of natural resources. All are now found on the new Danisco Climate Friendly website, aimed at giving manufacturers a fast route to a greener business.

As consumers express growing concern about the climate, the first products with carbon labels are appearing on supermarket shelves. Danisco's website is designed to help manufacturers find solutions that boost sustainable production within their food sector.

Climate competition

Sustainability is becoming a competitive parameter. We can show manufacturers how to make direct savings in resource consumption using our ingredients. The website guides food manufacturers to relevant opportunities within five climate-friendly categories – those that reduce energy, water or raw material consumption and those that enable material substitution and waste reduction.

Targeted solutions

Among the solutions, the website highlights CREMODAN® IcePro, as its special functionality cancels out the need for an energy-swallowing hardening tunnel in ice cream production. Others include GRINDSTED® Carrageenan, for lower-temperature caramel production, and GRINDSTED® Meatline, which creates the desired texture in a meat batter without nitrogen or carbon dioxide cooling.

Higher priority

At Danisco, we continue to work on the development of climate-friendly ingredients. From our dialogue with customers, it is clear that climate change has gained a higher ranking on their list of priorities.

The climate focus is not restricted to ingredient functionality. To reduce packaging waste, for instance, Danisco has long delivered its coagulant enzymes for cheese production in refillable pallet tanks. Packaging is a major source of food industry waste, which we can help reduce by ensuring that the packaging we use is recyclable. See all Danisco's climate-friendly solutions at: **www.danisco.com/climate**

Contributing to solutions:
Chemical challenges

It has been almost 45 years since the noted biologist, author and mother of the modern environmental movement, Rachel Carson wrote the book *Silent Spring*. Yet studies still find banned chemicals and pesticides like DDT in mothers' breast milk.

Given concerns about toxic substances in the environment and finite supplies of oil for making petrochemicals and plastics, speciality chemicals and other materials may be severely limited in 2050. Clearly, society will need to find other alternatives to enable the chemistry sector to progress/evolve to deliver sustainable solutions.

Our demonstrated leadership in synthetic biology and metabolic pathway engineering will poise us to lead the development of microbes and processes for manufacturing biochemicals and other molecules that will replace their petrochemical counterparts. We are confident that the difference will benefit the environmental benefit.

A study by Herman in 2007 estimated that if biotechnology-derived chemicals replaced petrochemically-based chemicals, the greenhouse gas emission reductions could reach 500 million tonnes CO2 equivalents, based on 1999/2000 production levels. If cellulosic materials were used as a feedstock, for instance, the entire chemical industry could remove 820 million tonnes CO2 equivalents from the atmosphere.

Converting biomass to renewable biochemicals

Isoprene is an important chemical for the production of the synthetic rubber used in tires. Currently, about seven gallons of oil is required to make each of the roughly one billion tires produced annually, according to the Rubber Manufacturers Association trade group.

Danisco is addressing this major societal and environmental challenge by using its leadership in modern biotechnology to create a sustainable means of to producing BioIsoprene™. Our BioIsoprene™ product will be used in a wide range of industrial applications including: synthetic rubber in tires, adhesives and elastomers. The biorefinery concept (biomass conversion processes) that Genencor initially will use to produce a BioIsoprene™ monomer eliminates the need for oil as a raw material source, by using renewable raw materials as the feedstock. Second generation processes for producing BioIsoprene™ may use biomass-derived feedstocks.

A solution is urgently needed to address the current market for high-purity isoprene which is about two billion pounds per year.

In March 2009, we delivered our first batch of BioIsoprene™ product to The Goodyear Tire & Rubber Company to begin larger scale polymerisation reactions to produce synthetic rubber, with success. We displayed one of the concept tires as an example of a cleantech solution at events during the UN Climate Conference in Copenhagen in December 2009.

In February of 2010, we were very proud to learn that our research collaboration partner Goodyear was honored with the "Environmental Achievement of the Year" by the Tire Technology International Awards for Innovation and Excellence. As well, Goodyear's concept tire made with BioIsoprene™ technology made its auto show debut at the 80th Geneva Motor Show.

Product responsibility

Our ingredients are assessed for health and safety standards in both raw material and finished good states

Danisco ingredients meet legally required and other agreed-upon standards for health and safety, including health warnings and product safety and information labels. We provide accurate and clear information regarding content, safe use, maintenance, storage and disposal of our ingredients so that our customers can also operate with due care and safety. Our product information complies with regional or national requirements. All nations have agreed to use the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) (United Nations, 2007), which will be implemented in Europe in 2015. Today, a product with hazardous properties must be labelled accordingly depending on the region and applicable regulations.

Information about product safety ensures that employees, transporters, customers and even the final users of our ingredients can use them in full knowledge of handling requirements, risks and due care for safety and health.

Product safety

Product assessment is a complex scientific process to determine the probability that exposure to a product during any stage of its lifecycle will lead to an unacceptable impact on human health or the environment. The assessment includes hazard evaluation, which is made for all products whether for food, feed or non-food. This involves analysing the biological, physical and environmental properties of a substance or blend of substances. Examples of human health hazards are irritation and respiratory sensitisation, and long-term effects such as the potential to cause cancer. Environmental hazards include the inability to be degraded in water or soil, to accumulate in biological materials, or to be acutely toxic to fish or other aquatic organisims. Physical or chemical hazards include flammability, corrosive effects due to low pH and dust explosion properties.

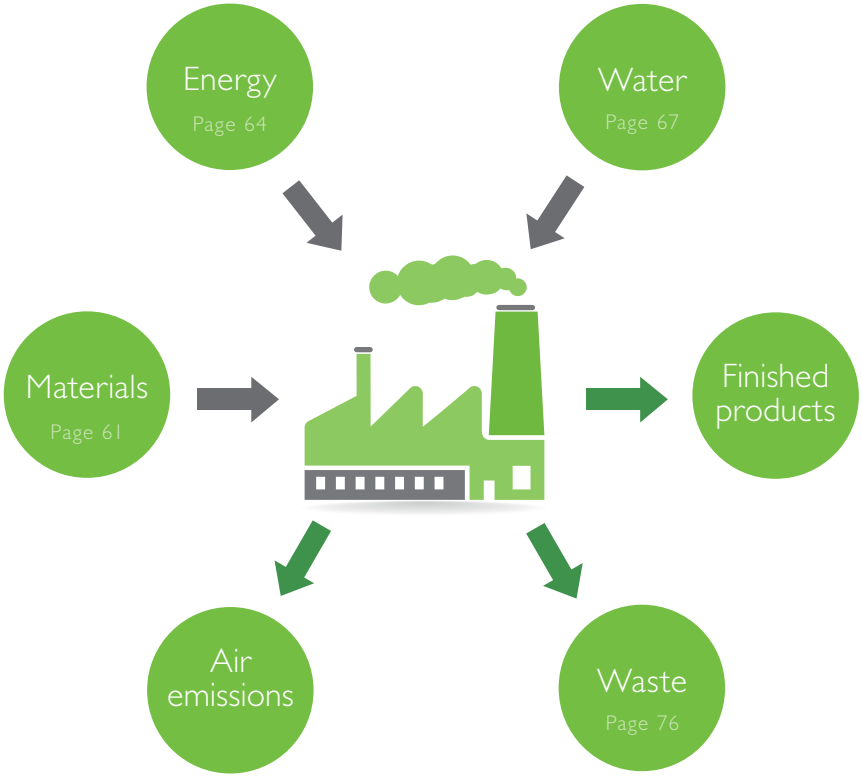
Safety instructions and information are also communicated through safety data sheets (SDS), which are mandatory for hazardous products and voluntary for non-hazardous products. The SDS is a key source of information on first aid measures, handling and storage, personal protection and waste handling requirements. We have implemented a global SDS system, helping us to share knowledge throughout the organisation and comply with requirements.

Danisco has not received notice of violations or fines for non-compliance with laws and regulations concerning the provision and use of products and services during the reporting period.

Product safety is a business imperative

Environment

For each of us as individuals, our environment is a beginning point for living a secure and healthy life. For Danisco as a supplier of bio-based ingredients, it is also the source of raw materials on which our business depends. We cannot choose between meeting the long-term financial needs of our business and safeguarding the health and sustainability of the environment because they are inextricably linked; each priority is essential to the achievement of the other. Consequently, we work to minimise the adverse impact of our activities on the environment and offer solutions that help our customers and suppliers make more efficient use of natural resources.



Our environmental approach

We continue to focus heavily on those aspects of our business where we can make the most immediate and significant improvements in the way we affect the environment, in particular: energy consumption, greenhouse gas emissions and water management. Return on the investments required to make progress in these areas comes, in some cases, in the short term; in others, the reward will take longer to realise. But all are intended to ensure that there is a "long term" for Danisco by making our business more sustainable.

Reducing our consumption of resources increases our cost-efficiency. Minimising climate-changing emissions lessens the cost burden of adapting to the effects of climate change. Through best-in-class practices that help us optimise resource use and decrease our environmental footprint, we can enhance our operational performance and, in turn, contribute to stronger financial performance. As part of our commitment to sustainability, we will:

- Optimise the use of natural resources, including raw materials, water and energy through process improvements and technological advances;
- Reduce, recycle and reuse waste;
- Set and review targets, assess and report environmental performance quarterly;
- Conduct an Executive Committee review of progress towards established targets each quarter.

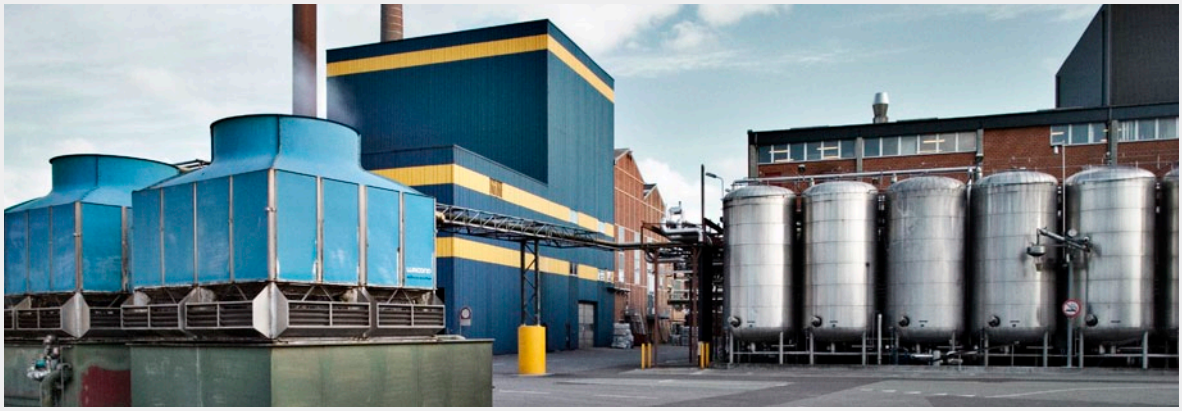
AN ACTIVE PLAYER IN THE DEBATE ON CLIMATE CHANGE

CASE

In 2009, Danisco and Nordic signatories of the UN Global Compact "Caring for the Climate" initiative met with UN Secretary General Ban Ki-moon to discuss how businesses can be part of the solution to the climate challenge. Danisco is not only prepared to confront climate challenges, it is well-positioned to help deliver real solutions. To do that, says CEO Tom Knutzen, the company will apply its knowledge and capabilities in industrial biotechnology: "Through strategic collaborations with other industry leaders, we are opening new frontiers in the emerging bio-based economy." These efforts include: second-generation biofuels based on biomass through the joint venture DuPont Danisco Cellulosic Ethanol and finding bio-based routes to chemicals through our work with The Goodyear Tire & Rubber Company.

CASE

POLLUTION IN GRINDSTED, DENMARK



The former Grindstedværket was founded in Grindsted in 1924, and in 1989 it became part of a three-way merger under the name of Danisco. Since the founding of Grindstedværket, many different kinds of production have taken place at the plant. For more than 50 years, the main products were pharmaceuticals and subsequently vitamins. Only later, and under the Danisco name, did the plant's main focus become food ingredients.

In the early days at Grindstedværket, knowledge of wastewater treatment and disposal of hazardous chemicals was limited and procedures were not comparable with those of today.

This led to contamination of the ground and water around the plant, which has since then been contained, mapped and is the subject of continual investigation.

Danisco works with The Region of Southern Denmark, and other local authorities, in the ongoing surveillance of the area. In 2010, testing and drilling in the town of Grindsted includes an old railway cutting pit, the plant site itself, a catchwater ditch and Grindsted County's old waste disposal site.

Water reduction in Landerneau

At our alginate production plant located in Landerneau, France, we have decreased our water consumption by more than 30%. In the same time we have also significantly improved the quality of the outlet water by reducing the COD (chemical oxygen demand) by 30%.

The reduction was achieved by replacing a flotation process step with cloth filtration filters. The filtration process reduced the water consumption significantly and improved the quality of our outlet water.

"The cloth filter is a great equipment which improves the quality of the product and also the quality of our outlet water thanks to a better extraction of residues. We are permanently on improvement tracks for the whole process" says Rachel Dant, SHEQ manager of the site.

Management systems

As a matter of Danisco policy, our facilities around the world operate in accordance with ISO 14001 standards for Environmental Management Systems. These systems help to ensure continuous improvement, implementation of environmental policies and fulfilment of our strategic goals. Our dedicated environmental professionals work closely with operating teams to maintain and improve our environmental performance, conducting regular internal audits, sharing best practices and facilitating external audit processes.

We also work closely with our suppliers and contractors to ensure that their principles and practices are in alignment with ours. Only through collaborative efforts with our suppliers can we effectively reduce both our direct and indirect impact on climate change, material consumption and broader environmental footprint throughout the entire value chain.

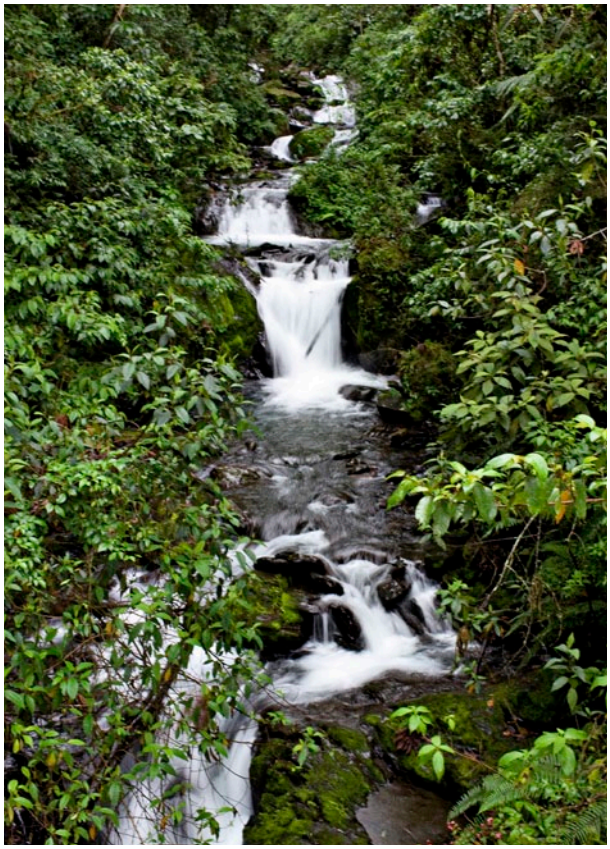
Downstream, we help our customers minimise their environmental footprint, realise process efficiency gains and reduce the impact of their consumer products through our innovative, climate-friendly ingredient solutions. For more information, see *Sustainable solutions*.

Improving environmental performance calls for investments. About 34% of all investments have been related to Sustainability issues. Examples of major investments are:

- GMP upgrades
- Wastewater treatment plant upgrade
- Change of a boiler from heavy oil to natural gas
- Ion exchange regeneration system optimisation
- New liquid packaging station

Climate change

We take responsibility for any contributions we make to climate change and are firmly committed to reducing our carbon footprint. But as an ingredient supplier, we also look for, find and pursue opportunities to develop new products and ingredient solutions that can lead to carbon footprint reductions at any point in the entire value chain. Whether those opportunities lie in our supply chain, in our manufacturing processes, in the customer's use of our products or in consumer use, Danisco views the climate change challenge as an important catalyst for business growth. Our engagement in the challenge has been demonstrated and evidenced in a variety of ways. Our climate strategy and outlook is explained later in this text.



Climate change challenges are a catalyst for business growth

Carbon Disclosure Project

In November 2009, Danisco was once again recognised for its efforts in climate change reduction by the Carbon Disclosure Project (CDP), an organisation which acts on behalf of 534 institutional investors, holding USD 64 trillion in assets under management. In 2009, Danisco was ranked number three in Denmark and number 14 within the Nordic countries. Danisco will participate in the CDP's new Water Disclosure Project in the financial year 2009/10.

As climate change is ranked in our materiality assessment as having a high impact on Danisco's business opportunities, we are responding to the Carbon Disclosure Project (CDP) for the fourth time this year.

As something new the CDP has developed a system that will be used to assess a company's performance in relation to climate change. Originally the CDP rated disclosure only, assessing the comprehensiveness of the company's response. This year companies with top scores for disclosure qualify to be listed both in the Carbon Disclosure Leadership Index (CDLI) as well as in the Carbon Performance Leadership Index (CPLI). We are aiming to be listed on both indexes.

We are using the CDP report to benchmark against other companies and as a tool for directing part of our sustainability strategy as well as developing energy and emission targets.

In addition, we will also participate in the CDP's Water Disclosure Project in the financial year 2009/10.

COP15

At the UN Climate Conference of Parties in December 2009 in Copenhagen, Danisco teamed with other industry leaders to raise awareness of the potential of advanced biofuels to help meet the climate change challenge. Through a variety of events, displays and presentations sponsored and organised by Danisco, attendees learned more about our company's vision for a low-carbon future with biotechnology and sustainable solutions.

In addition, we formed a delegation of four employees to attend the conference as Business and Industry Non-Governmental Organisation observers for the Confederation of Danish Industry. The delegation focused on participation in side events and provided informal perspectives to delegates outside of the conference proceedings.

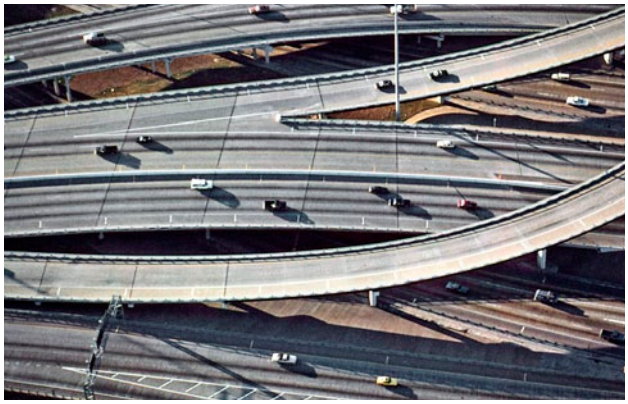
Internally, we created awareness among our employees through a series of eight blog posts on our company intranet, aimed at educating and informing our employees on progress towards the Copenhagen Accord, information about the process and issues discussed, providing an inside view of the negotiations.

Danone Carbon Pact

Danisco has actively partnered with customers for the reduction of carbon emissions throughout the value chain. In 2010, Danisco partnered with Danone, a leader in fresh dairy products, to assess and help reduce their carbon footprint. In the project, Danisco agreed to provide carbon footprint data for the top five product categories we supply to Danone.

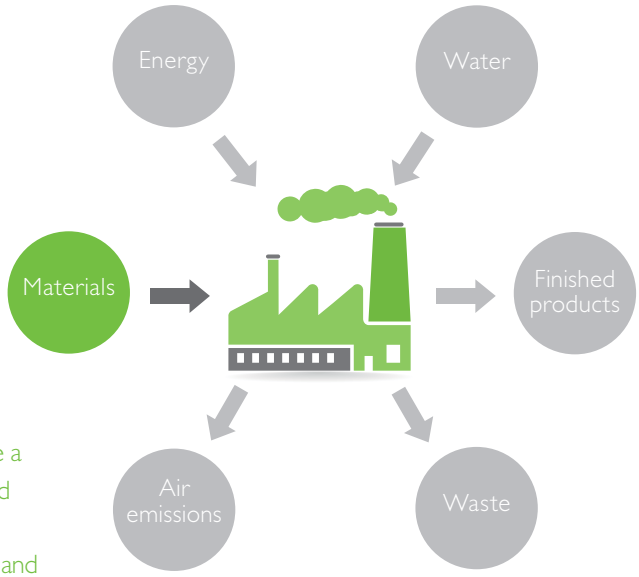
The Danone Carbon Pact (DCP) targets are in alignment with our aim to reduce CO2 emissions by 20% in 2020. We have developed a three-year action plan towards achieving our commitments to the DCP.

This year, we will begin by conducting two peer-reviewed LCAs for the two most important products we supply to Danone. We will also provide a summary report of our progress towards reaching our 2020 carbon dioxide, renewable energy and energy consumption targets.



Our goal is to reduce our CO2 emissions by 20% per revenue

Materials



Without a sustainable supply of raw materials, there would be no future for Danisco. Our business depends on our ability to source a wide variety of natural compounds from which we create a broad portfolio of functional ingredient products. We look for the most efficient, renewable and sustainable sources of these compounds and find them in citrus peels, seaweed, locust beans, guar seeds, sugar beets, palm oil, wood pulp, switchgrass, biomass and many other sources.

Material input and sources

One of the keys to achieving a sustainable supply chain is reducing material intensity and making the most efficient use possible of raw materials. At Danisco, the ratio of material input to output has held steady over the past three years.

Another important aspect of improving material performance is increasing the proportion of recycled materials used compared to virgin materials used, thereby contributing to the conservation of the global resource base.

The use of recycled materials has decreased from 43% to 35% in the financial year 2009/10. As we suspended xylose production in Anyang and the resulting use of waste corn cobs to produce xylose, the proportion of recycled materials and our raw material input have decreased.

A consequence of the decrease in usage of recycled matrials results in a corresponding reduction in the total materials input in 2009/10.

Locust beans are one of our raw materials

We use red seaweed to produce carrageenan

MATERIALS

Material input	Unit	2009/10	2008	2007
Direct material input [1]	1,000 tonnes	595	612	650
Recycled materials[2]	1,000 tonnes	353	542	476
Non-renewable materials[3]	1,000 tonnes	75	107	113
Total material input	**1,000 tonnes**	**1,023**	**1,261**	**1,239**
Recycled materials	**%**	**35**	**43**	**38**

[1] Direct materials used = raw materials (not recycled)
[2] Recycled materials = materials replacing virgin materials, e.g. citrus peels for pectin production
[3] Non-renewable materials = associated product materials
Material input reported in 2007 and 2008 have been corrected to eliminate previous errors and are described in our Performance section on page 94.

The use of renewable materials increases every year

Packaging

Danisco's packaging policy reflects our commitment to the principles of sustainability and resource preservation, encompassing responsible selection, use and disposition of packaging materials. Our aim is to minimise the environmental burden on customers and society by reducing, reusing and recycling these materials. Several packaging initiatives have led to a strong increase in the percentage of reusable materials in our product packaging.

PACKAGING

Packaging	Unit	2009/10	2008	2007
Reusable	1,000 tonnes	6,400	3,991	3,929
Non-reusable	1,000 tonnes	19,233	23,075	20,874
Reusable packaging	**%**	**25.0**	**14.7**	**15.8**
Reusable packaging per kg product	**%**	**14.22**	**7.53**	**7.42**

Project Beagle

In 2008, Danisco launched Project Beagle, a procurement initiative for non-strategic materials.

A key component of the project involves looking afresh at how we buy and use packaging from an economic and environmental standpoint. One outcome will be a catalogue of alternative packaging that is environmentally superior to current solutions.

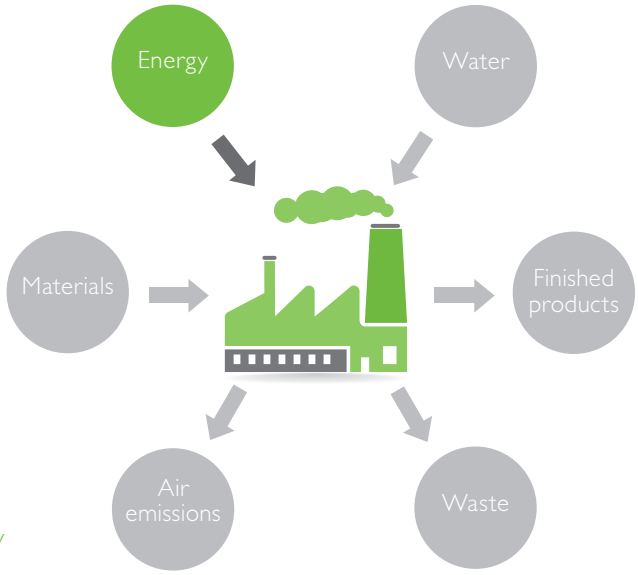
Our site in Haderslev, Denmark, which uses almost 600,000 paper bags each year to package Danisco products, recently switched from white bags to brown bags. This change eliminates an environmentally unfriendly bleaching process and produces a stronger bag.

As of 2009, our St. Joseph (Missouri) facility relies on used pallets only. Results of the conversion have been positive, and now our nearby New Century (Kansas) site is planning a similar change.

The New Century and St. Joseph plants, too, have successfully converted to using brown paper bags. Other sustainable packaging alternatives tested at these sites include a new high-performance paper bag that is actually stronger while eliminating a layer of paper, and a so-called fibre drum that could replace plastic drums for liquid or semi-liquid applications.

Boxes have also been a target for improvements at New Century, where a new single-wall box has been tested in production. Steps are now underway to convert all boxes to this construction, which could reduce paper consumption by around 43 metric tonnes annually. And project participants are looking into the development of "green films" to replace current liners for cartons and drums with a new compostable material that could break down in about 18 months.

Energy consumption



Finding new ways to increase energy efficiency has long been an integral part of the way we manage our business. But because energy is an indispensible input to our business, reducing the impact of energy consumption on climate change and on our finances requires a broader approach. In other words, success may depend on complementing or replacing non-renewable energy with alternative renewable and low-impact energy sources.

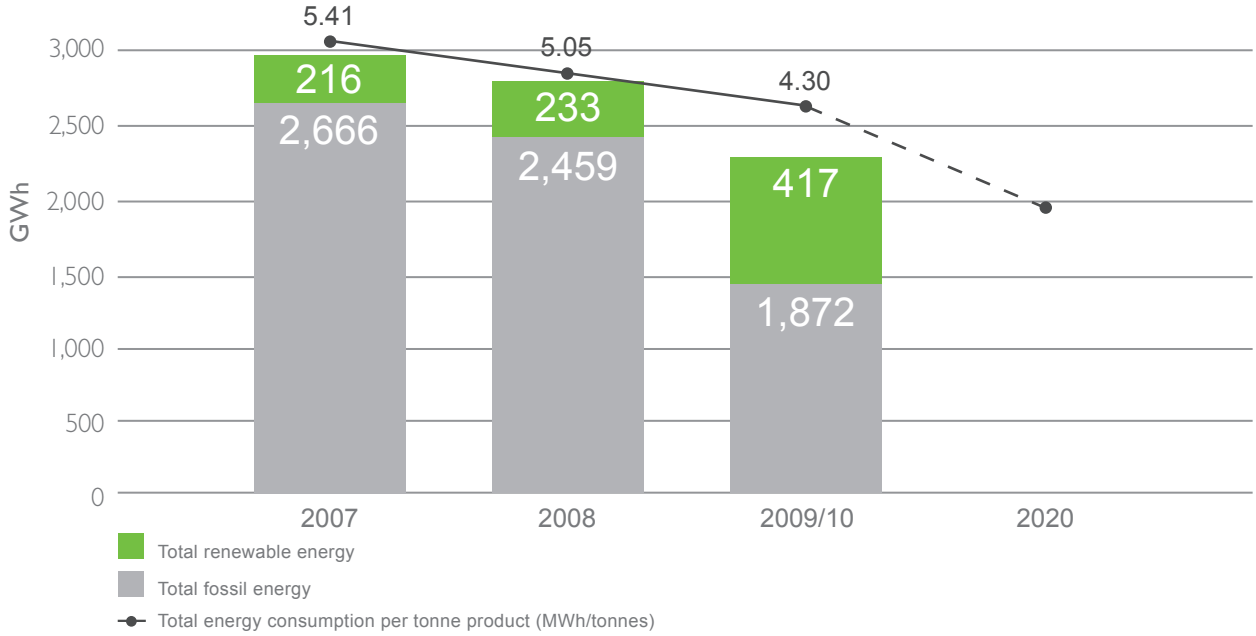
We report our direct energy consumption (energy purchased for own consumption), indirect energy consumption (energy purchased in forms of electricity, heat and steam) and the percentage of that energy that comes from renewable resources.

Energy reduction status

The total energy consumed per tonne of product we produce decreased significantly during 2009/10. Energy-saving programmes implemented at our largest energy-consuming sites, such as our Grindsted (Denmark) plant, have been key contributors to this reduction. A new ultrafiltration process for thickening pectin juice at our Smirice (Czech Republic) facility now uses electricity more efficiently than the previous evaporation process consumed steam energy. The improvement is an outcome of the global energy efficiency ring team established in the Genencor division. Some reductions can also be attributed to the shutdowns and/or production capacity reductions at our Sweeteners plants in Anyang (China), Thomson (Illinois) and Lenzing (Austria).

The closure of our xylose operations in Anyang, China, has resulted in a reduction of renewable energy by 36.8 GWH in FY 2009/10, as the waste biomass produced by the plant was the sole energy source used for heat and steam.

ENERGY CONSUMPTION



While these figures are a useful indicator of our progress in increasing energy efficiency, they should not be viewed as an accurate measure of it. Energy consumption varies widely with product type, mix and concentration, so comparing the total energy consumed per kg of product produced for different products is a difficult comparison. But given the enormous variety of food ingredients and technical enzymes produced by Danisco, we believe there is value in using this broader perspective to gauge the effectiveness of our efforts to improve.

ENERGY

Direct energy consumption	Unit	2009/10	2008	2007
Direct energy consumption, fossil	GWh	909	1,186	1,311
Direct energy consumption, renewable	MWh	7,738	46,614	58,151
Total direct energy consumption	GWh	917	1,232	1,367
Direct energy, renewable	%	0.84	3.78	4.25

Indirect energy consumption	Unit	2009/10	2008	2007
Indirect energy consumption, fossil	GWh	963	1,273	1,355
Indirect energy consumption, renewable	MWh	409,652	186,385	157,570
Total indirect energy consumption	GWh	1,372	1,460	1,512
Indirect energy, renewable	%	29.8	12.8	10.4

Total direct and indirect energy consumption	Unit	2009/10	2008	2007
Total energy consumption	**GWh**	**2,290**	**2,692**	**2,881**
Total energy consumption per tonne product	**MWh/t**	**4.30**	**5.05**	**5.41**

Energy consumption figures for 2007 and 2008 have been corrected to eliminate previous errors and are described in our Performance section on page 94.

Energy reduction outlook

As we invest in efforts to reduce energy consumption and reach our short-term environmental targets, we must also keep an eye to the future, anticipating the future energy needs of our business. With Danisco's top management engaged in quarterly reviews of progress towards those targets, the investments required to improve our environmental performance are considered in the context of other key components of the company's overall economic health. Funds invested in order to achieve a 10% improvement in energy efficiency in 2009 are expected to be recouped in a two- to three-year period.

Our internal "energy champions" and external consultants analyse site-specific environmental performance data and work closely with site management and staff in identifying opportunities for improvement. In most cases, successful efforts to reduce energy consumption also deliver benefits in terms of lower CO2 emissions.

In 2009, energy audits and programmes were undertaken at our facilities in Beloit (Wisconsin), Penang (Malaysia), New Century (Kansas), Hanko (Finland), Jamsankoski (Finland) and Naantali (Finland). These ongoing audits build on improvement efforts initiated in past years (2006-2008) at Danisco sites in Beaminster (U.K.), Grindsted (Denmark), Kotka (Finland), Lenzing (Austria), Melle (France), Niebüll (Germany), Pargua (Chile), Tecomán (Mexico), Terre Haute (Indiana) and Thomson (Illinois). Danisco will conduct audits in 2010 to identify further energy improvements for our sites in Epernon (France), Niebüll, Smirice (Czech Republic) and Zhangjiagang (China).

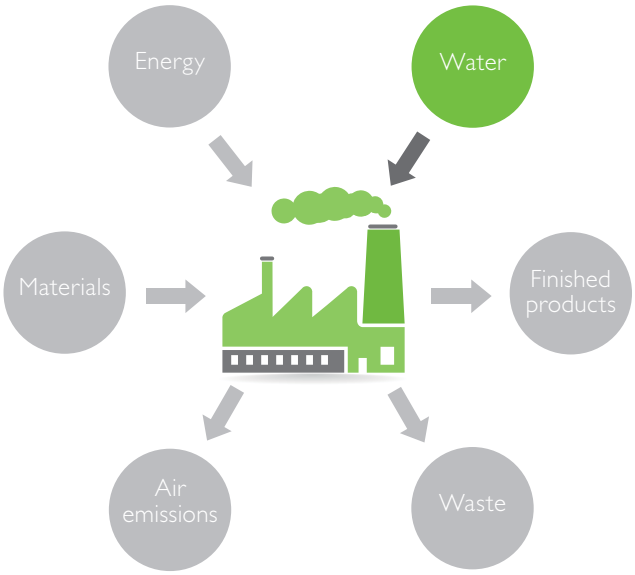
Conservation measures have reduced Danisco's energy consumption by about 21% since 2007. While this gain increases our efficiency and decreases our carbon footprint, we recognise that it merely offsets the greater energy needs that will come with the continued growth we expect to see over the next few years. Continuing and expanding these efforts over time will be a long-term business imperative. Danisco's heritage of innovation will play an essential part in our move away from a reliance on fossil fuels towards more renewable energy sources as these alternatives become financially viable.

Total energy consumption in Beaminster has been reduced by 19% from 2008 to 2009, and CO2 emissions by 20%

Simple ideas make a difference at Beaminster Cultures site

When Stanley Tucker became "energy champion" at the Cultures site in Beaminster, U.K., in 2007, he began asking lots of questions and encouraged others to do the same. Organising regular energy meetings, he invited his colleagues to put forward ideas for decreasing energy consumption at the site. He reached out to not-for-profit Carbon Trust for help in undertaking energy surveys to identify energy-saving opportunities. "I was surprised at how simple and cost-effective some of the ideas were," he says. For instance, a fresh look at business requirements for air conditioning and deep frozen storage of cultures revealed that half of the site's freezer units could be eliminated and air conditioning systems could be reduced by 30%. Monitoring of energy usage during production downtime also led to installation of motion sensors to control room lighting. Overall, "background" energy use has been reduced by nearly 50%.

Water management



Among the most serious consequences of climate change are changing global water precipitation patterns. Parts of the world unaccustomed to a scarcity of water will be faced with new challenges, while others will experience water stress and flooding as never before. The ramifications for agriculture and industry will be far-reaching and potentially devastating from an economic standpoint.

Water scarcity and declining water quality will have an affect on Danisco's business in the future. We are already seeing more stringent regulations as well as higher costs for water supply and external treatment of wastewater.

Given the volume and nature of our water use, the development of a coordinated, forward-looking global sustainable water strategy is mission-critical. The strategy we are developing will guide and support efforts across Danisco to maximise efficiency and effectiveness of our water management programmes throughout the value chain.

Finding ways to decrease water use and the need for wastewater treatment in our own operations will reduce our water-related expenses and environmental impacts, but we are also committed to developing new products that help our customers reduce their water dependency.

Water rights and scarcity will have an effect on our business in the future

Water reduction status

Danisco's overall water consumption declined by 27% during the 2009/10 reporting period, as compared with 2007 baseline values. The total water consumption per tonne of product has decreased by 30%. This impressive reduction far exceeded our 2010 target of a 5% reduction.

However, although the total volume of water consumed has decreased, this does not solely reflect significant gains in the efficiency of our water management efforts. While progress has been made, a significant portion of the reduction can be attributed to a partial shutdown of our emulsifiers plant in Anyang (China), which cut the site's water consumption by 50%.

Also contributing to the drop in overall water use was the reduction of production capacity at our sites in Lenzing (Austria) and Thomson (USA), which cut water consumption by 55% and 39% respectively.

On the other hand, investments in water-reduction technologies are beginning to show results. At our Landerneau (France) plant, the change from a flocculation process to a filtration step reduced water consumption per kg product produced by about 30% in 2009/10. In Beloit (USA), water consumption has declined by 33% over the last three years, primarily due to an increased focus on driving improvements through behavioural change.

Water consumption is the volume of all water used in our manufacturing processes, added to a product as an ingredient, or used for cooling. Cooling water that is not contaminated and is discharged from a site to its original source without loss in volume is not included in our water consumption data.

Water reduction outlook

In 2010, we are continuing our water reduction efforts, development of our water strategy and working to design and establish ambitious water reduction programmes. We plan to drive a 20% reduction per revenue by 2020 with 2009/10 as baseline.

Water usage reduction at Terre Haute plant

In September 2008, in line with goals set in conjunction with Corporate Sustainability, the Vigo plant initiated a water reduction project which has resulted in a 40% reduction in water usage, and a cost saving of around USD 750,000 per year for the plant. Demineralised water is used extensively in the process producing of Litesse® at Terre Haute, Indianna (USA), so when the water treatment system for the steam boiler had to be replaced, the team took the opportunity to implement a new reverse osmosis (RO) water treatment system. In addition to supplying water to the boiler, this water was also used to feed the process demineralisers, instead of ordinary well water. The high-purity RO water allows the demineralisers to run more efficiently with 10-times longer cycles.

As a consequence, this new procedure has resulted in a 10-times reduction in acid and caustic materials, which are used to regenerate the demineralisers. The use of these chemicals historically counted as a significant cost factor. In addition, costs for the plant's wastewater disposal paid to the municipal wastewater treatment facility have been reduced, as 40% less wastewater is being sent to the sewer, and this is normally paid for on a per litre basis.

Facts: Total water consumption has been reduced by 35% from 2008 to 2009

WATER

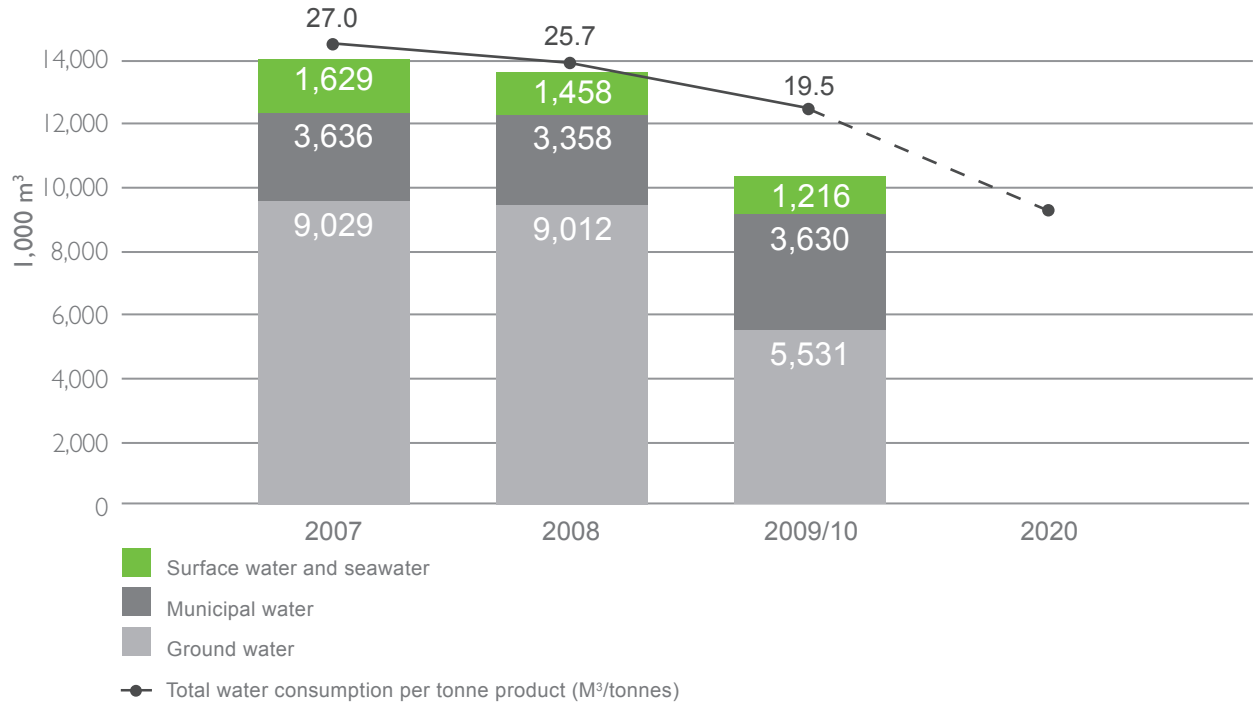
Water consumption	Unit	2009/10	2008	2007
Ground water	1,000 m³	5,531	9,012	9,029
Municipal	1,000 m³	3,630	3,358	3,636
Surface water and seawater	1,000 m³	1,216	1,458	1,629

Cooling water	Unit	2009/10	2008	2007
Ground water	1,000 m³	3,766	7,359	5,556
Municipal	1,000 m³	132	389	421

Total water consumption	Unit	2009/10	2008	2007
Total water consumption	**1,000 m³**	**10,377**	**13,828**	**14,294**
Total water consumption per tonne product	**1,000 m³/t**	**19.5**	**25.7**	**27.0**

Water consumption figures for 2007 and 2008 have been corrected to eliminate previous errors and are described in our Performance section on page 94.

WATER CONSUMPTION



Wastewater reduction status

Managing the amount and quality of wastewater discharged by our sites is a critical component of Danisco's efforts to minimise its environmental footprint. Returning the water we use back into the environment without harming it or posing risks to human health is a responsibility we unequivocally accept. Reducing the volume of our effluents is the key to mitigating the cost burden that comes with this responsibility.

The overall volume of wastewater treated in Danisco's wastewater treatment plants (own WWTP) and in external plants (external WWTP) decreased by 17% in 2009/10. This result is in part due to full or partial plant shutdowns or to reductions in production capacity at specific sites, but it can also be attributed to improvements in our water management programmes.

The process changes at our Landerneau (France) site, in addition to reducing water consumption, have delivered a corresponding decrease in wastewater volumes. Changes introduced at our Zhangjiagang (China) site have also significantly reduced volumes of washing water used.

Treatment methods and quality of water discharge

Approximately 58% of Danisco sites treat or pre-treat their wastewater prior to discharge, and 42% discharge directly to a municipal or community wastewater treatment plant (WWTP). Our internal treatment or pre-treatment processes primarily include conventional physical and biological treatment. In some cases advanced treatment techniques like membrane filtration are used to concentrate wastewater for biogas production, composting and land application.

We have improved the quality of our wastewater in the current reporting period through better
treatment technologies, diverting nutrient loads to composting, biogas production, land application and the improvement of our processes. We have decreased the volume discharged, biological oxygen demand (BOD), chemical oxygen demand (COD), nitrogen and phosphorous. A detailed description of our previous performance can be found in the wastewater quality table.

WASTEWATER

Wastewater generation	Unit	2009/10	2008	2007
Own WWTP	1,000 m^3	4,233	6,133	6,465
External WWTP	1,000 m^3	4,376	4,206	4,066

Wastewater quality	Unit	2009/10	2008	2007
BOD_5	tonnes	8,838	9,545	11,908
COD	tonnes	18,468	18,675	21,601
Fats / oil / grease	tonnes	0	61	36
Nitrogen	tonnes	1,908	2,315	1,575
Phosphorous	tonnes	106	199	118
Total suspended solids	tonnes	2,828	2,471	2,797

CASE

VALORISATION SOLVES EPERNON'S WASTEWATER

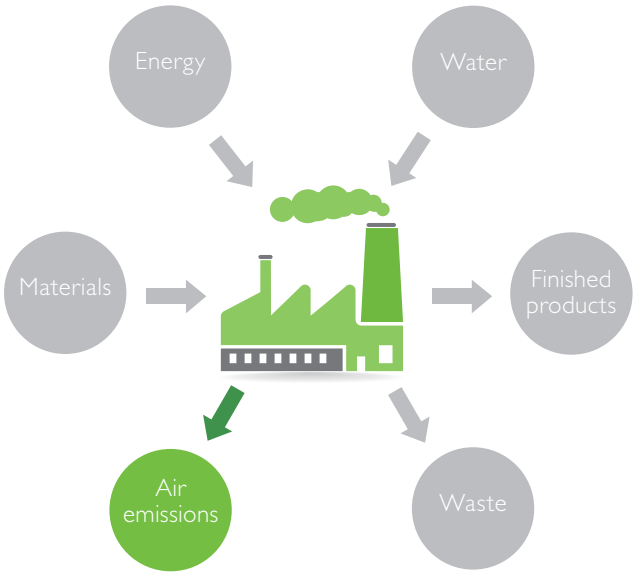
In January 2009, our Cultures facility in Epernon, France, began testing a process for the valorisation of wastewater produced there. "Valorisation" involves optimising or increasing the value of waste by treating it or using it in a way that gives it added value. By March, the Epernon team had sent 808 tonnes of process wastewater to a specialised composting station for preparation as fertiliser to be used in landspreading or to methanisation to produce usable biogas. At the conclusion of the three-month test, the new procedure was deemed a success and established as the plant's principal wastewater solution. Between April 2009 and February 2010, the site treated 3,956 tonnes of wastewater as valorised waste. Today, all process wastewater from the site is sent to valorisation.

Wastewater reduction outlook

Wastewater reductions generally go hand-in-hand with decreases in water usage. In other words, the result of effluent reduction efforts in the coming months and years should be expected to follow the trend in overall water consumption for the same period. By reducing, reusing and recycling the water needed for our processes, we will, in turn, also reduce our wastewater output.

Our controls ensure that we produce wastewater that can be safely returned to the environment. At some of our sites, such as Valencia, Spain and Epernon, France, the solid waste or sludge we produce is made suitable for use as a fertiliser or as fuel for energy production.

Greenhouse gas emissions



Greenhouse gases such as carbon dioxide (CO2) and methane (CH4) are believed to be the principal drivers of global climate change. Rising average temperatures, changes in rainfall patterns, extreme weather events and other symptoms of climate change threaten the ecosystems on which our supply chains depend. Doing our part to mitigate these changes is of strategic importance to Danisco's future.

In order to gain a comprehensive view of our greenhouse gas emissions, we must consider emissions tied to purchased products and services (upstream), from our own operations and from sold products and services (downstream).

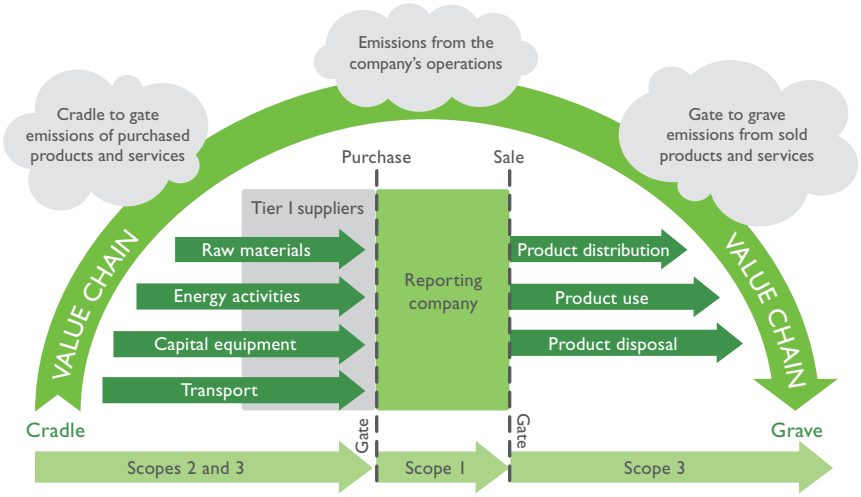
Emissions reduction status

Since 2001, Danisco has reported greenhouse gas emissions in accordance with the Scope 1 and Scope 2 protocol set forth in the World Resources Institute and World Business Council for Sustainable Development's "The Greenhouse Gas Protocol." Our total greenhouse gas emissions during the 2009/10 reporting period were reduced by 15% compared with 2007 baseline values. Given a correlation between energy use and CO2 emissions, this progress is clearly attributable in large part to our continuing efforts in energy management and the appointment of energy champions at sites where energy consumption is highest.

The ratio of energy reduction to CO2 emissions is less correlated than in previous reports. We attribute this lack of correlation to the inclusion of CO2 emissions from the sublimation of the dry ice that we use to pack our frozen cultures for shipment to distribution centres and customers. We have started to include our impacts of CO2 emissions from dry ice in the current reporting period and will investigate reduction efforts in the coming year.

We have quantified the ozone-depleting potential (ODP) and global warming potential (GWP) from emissions of refrigerants at our sites in the table below.

Emissions of refrigerants occur from equipment malfunctions or leaks in chillers, compressors and refrigeration equipment used in our processes. In the reporting period we have experienced several large leaks of refrigerants at our plants in Madison, Wisconsin and Thompson, Illinois (USA) and Niebüll (Germany). Although the CO2 equivalents only account for about 1.3% of our total CO2 emissions, we will strengthen our efforts to improve our preventative maintenance programmes and replace high ozone and global warming potential materials from our equipment. In addition to the sites mentioned above, efforts will be made to implement further controls and risk assessments globally.



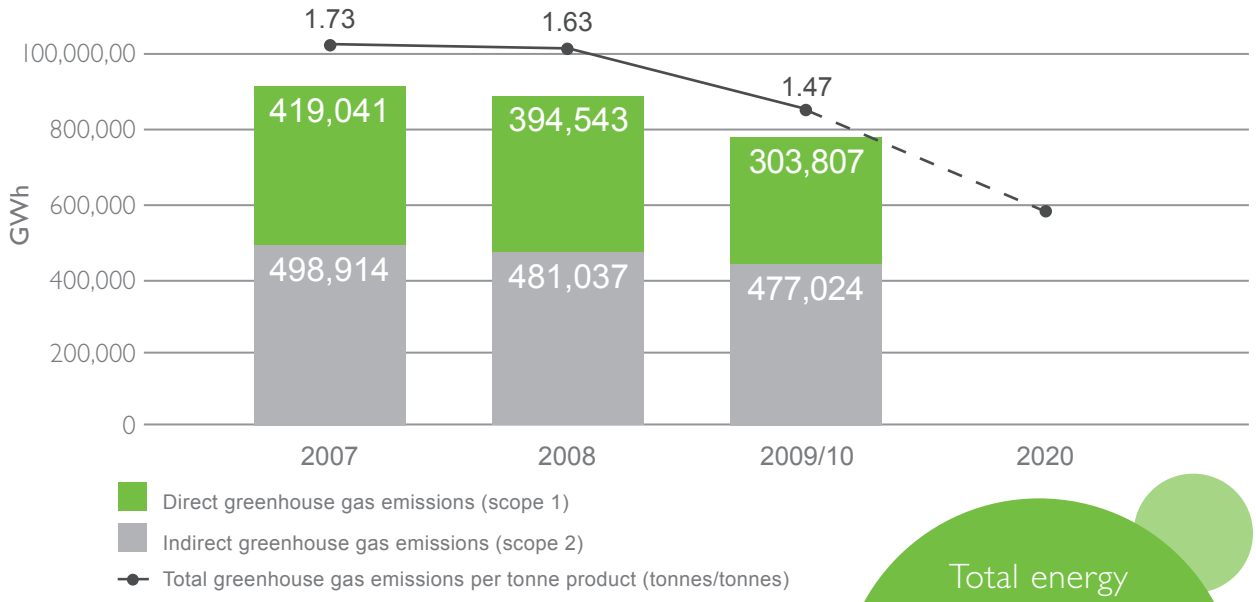
Source: Scope 3 Accounting and Reporting Standard, World Resources Institute & World Business Council for Sustainable Development, 2009 5 Laura E Caulfield, Mercedes de Onis, Monika Blössner, and Robert E Black. Undernutrition as an underlying cause of child deaths associated with diarrhea, pneumonia, malaria, and measles.

AIR EMISSIONS

	Unit	2009/10	2008	2007
Direct CO2 emissions (scope 1)	tonnes	303,807	394,543	419,041
Indirect CO2 emissions (scope 2)	tonnes	477,024	481,037	498,914
Total CO2 emissions (scope 1 and 2)	tonnes	**780,831**	**875,580**	**917,955**
Total CO2 emissions per tonne product	tonnes/tonnes	**1.47**	**1.63**	**1.73**
CO2 equivalent for refrigerant emissions	tonnes	**10,293**	**3,993**	**7,732**
Emissions of ozone-depleting substances (CFC-11 eqv.)	Kg	**433**	**105**	**420**

Emissions figures for 2007 and 2008 have been corrected to eliminate previous errors and are described in our Performance section on page 94.
The contribution to global warming from refrigerants are not included in scope 1 and 2. Refrigerants are reported separately in the table above.

ENERGY CONSUMPTION



Total energy consumption in Grindsted was reduced by 16% from 2008 to 2009, and CO2 emissions by 17%

Aiming high in Grindsted inspires engagement

At the Enablers plant in Grindsted, Denmark, employees want to go beyond the Danish government's "one tonne less" goal by producing 10 tonnes less of CO2 per person. Setting that aspiration made a big impression on employees, says Maintenance Manager Bo Høeg Olesen. "It's a big goal, and to achieve it, we have to look at all aspects of our energy management, commit ourselves to continuous improvement and engage everyone in the effort." Plant Manager Martin K. Madsen agrees that teamwork and a holistic approach are the keys to success. "We can't control increases in the cost of energy, but we can control how much we use. But energy is not the only focus; hygiene and safety, for instance, are other important issues, and we have to meld all these together and make sure they become part of the way we do business every day."

Emissions reduction outlook

In past years, we have measured and reported only emissions from Danisco operations, i.e., Scope 1 and Scope 2 emissions. However, we have now begun taking a broader "value chain" approach, looking beyond our own boundaries and developing strategies for reducing emissions throughout the entire value chain for the products we make and sell.

The development of strategies for reducing emissions beyond our own plants and throughout the entire value chain are driven by:

- A growing number of business-to-business requests for greenhouse gas data throughout the supply chain
- Increased public reporting of Scope 3 emissions
- Requests from stakeholders and investors for supply chain emissions and associated risk analyses

Danisco has joined with other businesses, governmental agencies, NGOs and academic institutions to "road test" common Scope 3 accounting and reporting standards set forth by the Greenhouse Gas Protocol Initiative. The initiative, led by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), will provide a standardised method for measuring greenhouse gas emissions that we believe will be critical to gaining a clearer, more accurate assessment of the overall impact our company, or any other company, has on the environment.

Meeting the challenge of maintaining profitable growth while minimising environmental impact requires a multi-faceted solution. An essential part of that solution involves reducing our dependence on fossil fuels and turning to more renewable energy sources.

Our Terre Haute (Indiana) sweeteners plant has already undertaken the conversion from coal to natural gas. Our Hanko (Finland) site has commissioned (partnered with Forum) the construction of a power plant fuelled by renewable woodchips instead of heavy fuel oil. These initiatives are expected to deliver major reductions in emissions and energy consumption as well as significant cost efficiency gains.

Future solutions to environmental challenges will almost certainly include alternative energy sources such as those based on biofuels and solar and wind power as technological developments make them economically viable for industrial application.

Total energy consumption in Vigo was reduced by 21% from 2008 to 2009, and CO2 emissions by 37%

Sweeteners site replaces coal with natural gas

The energy systems at Danisco's sweeteners plant in Terre Haute, Indiana (USA) now use natural gas instead of coal as a fuel source, a change that Plant Manager Charles Nichols says offers numerous advantages. "Not only does it contribute to increasing productivity at our site, but it will also play a huge role in helping us meet our medium- and long-term goals for improved cost efficiency and sustainability." Using gas as an energy source will open the door for additional energy-saving projects and yield a major reduction in air emissions, including: 40% less CO2, 90% less SO2, 80% less NOX and the elimination of particulate emissions. In addition to powering production at the plant, Terre Haute's energy systems heat the facility during winter, when temperatures often drop below freezing. The plant's energy source is now better sized to fit the plant's current and future requirements.

PILOT PROJECT

GENENCOR PILOTS GREENHOUSE GAS SCOPE 3 PROJECT

In 2009, Danisco launched a pilot project to determine the upstream emissions related to transport (part of scope 3) for two Genencor division sites in Finland. The study looked at emissions associated with:

- Manufacture of raw materials (from cradle to supplier's gate)
- Transport of raw materials from the supplier to our plant
- Transport of our products to their first destination (customer or distribution center)
- Employee business travel and transport to work

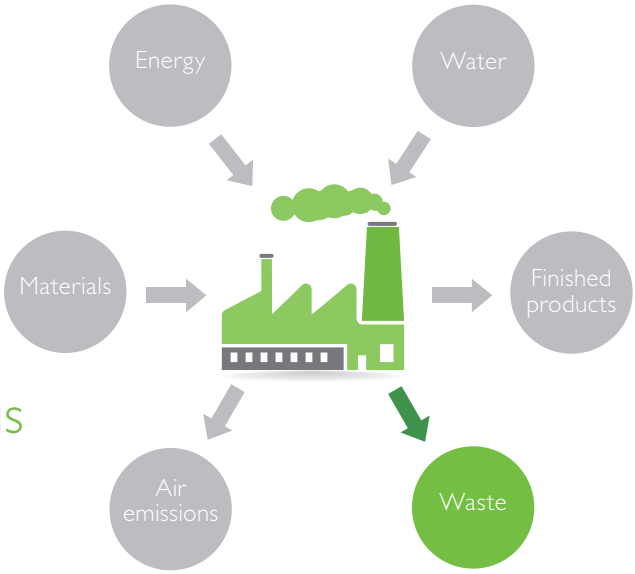
Data for 2008 and part of 2009 was obtained from multiple sources, including internal and external systems as well as manual efforts. Actual emissions were calculated via a life cycle assessment (LCA), which can also be used to evaluate other environmental impacts beyond greenhouse gas (GHG) emissions based on the same data set. The study also aimed to establish a transparent method for internal monitoring of environmental performance in multiple areas that would provide a single performance index (Environmental Index).

Results of the study show:
Scope 3 accounts for 58-65% of overall GHG emissions in one of the plants and 40-46% in the other.
Scope 3 emissions at one of the sites represented a higher-than-expected proportion of overall GHG emissions due to the plant's efficient means of generating steam energy.

- Raw material manufacture represents the greatest portion of Scope 3 emissions, although values depend greatly on how biogenic CO_2 uptake is considered for plant-derived raw materials used at these sites (e.g. glucose from corn, soya flour, etc.). For this partial life-cycle approach, there is no credit given for biogenic uptake.
- Transport of raw materials and products accounts for a smaller proportion (12-20%) of total GHG emissions, but may offer opportunities for significant reductions.

Next steps include streamlining the data capture process and extending the evaluation to other manufacturing sites. Improving the accuracy of data, particularly in regards to raw material manufacture, should be a key area of focus. Where possible, supplier-specific data – rather than generic raw material manufacturing information – should be used in order to reflect real-world differences between suppliers.

Material waste



Material waste reduction status

While waste management takes place at many levels, it is characterised by local decisions, as local conditions, criteria and preferences play an important role in defining a successful waste management system.

In Danisco, we prioritise our waste management by:

1. Waste prevention and cleaner technology
2. Material recycling
3. Utilization and energy recovery
4. Land filling

Danisco's total amount of waste decreased significantly from 2007 to 2008, mainly due to a reduction of 80% in the amount of non-hazardous waste from our sweeteners plant in Anyang, China, because an abnormal situation resulted in a production stop. Many other divisional sites, however, also contributed to the overall reduction. We see a significant reduction in the total amount of hazardous waste as well. The reduction in hazardous waste is due to the regulatory reclassification at the Cultures plant in Vinay, France.

Total energy consumption at Beloit, USA was reduced by 22% from 2008 to 2009, and CO2 emissions by 12%

CASE

BROAD VIEW AT GENENCOR PLANT YIELDS GAINS

Employees at the Genencor plant in Beloit, Wisconsin (USA) looked closely at all stages in their production process to see where capital improvements could offer significant gains in energy efficiency. "We upgraded our boiler control and condensate return system and separated our steam supply system to better align with pressure demands," according to Plant Manager Mike Vonderhaar. "We now capture more of our condensate and recover more flash steam." Operational improvements have helped reduce idle operation setpoints and increase the amount of waste heat that is reused. Enhancements to the site's preventative maintenance programme have also been integrated into the production process.

WASTE

Waste generation	Unit	2009/10	2008	2007
Landfill	tonnes	14,568	----	----
Recycling	tonnes	19,708	----	----
Energy recovery	tonnes	2,351	----	----
Composting	tonnes	11,491	----	----
Land application	tonnes	15,706	----	----
On-site storage	tonnes	212	----	----
Other disposal	tonnes	10,736	----	----
Recovery	tonnes	181	----	----
Reuse	tonnes	113	----	----
Total non-hazardous waste	tonnes	76,195	102,174	222,284
Total hazardous waste (combined)	tonnes	2,582	3,555	4,005
Total waste generation (hazardous and non-hazardous)	**tonnes**	**78,777**	**105,729**	**226,289**

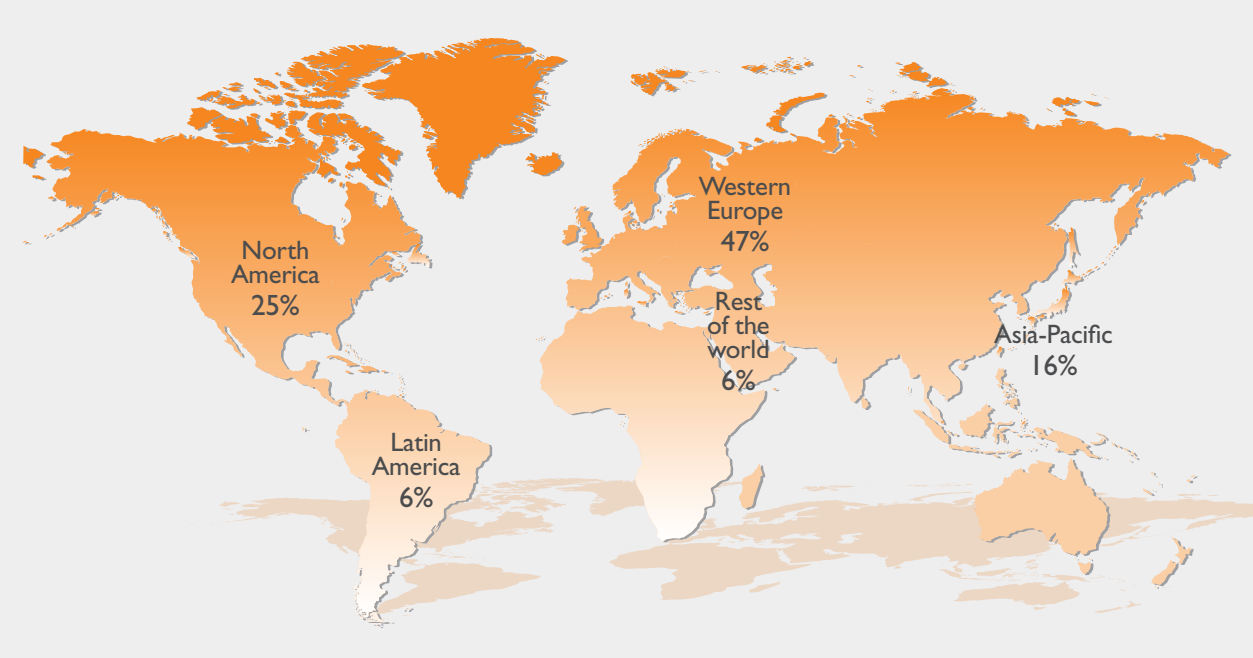
Employees

"First you add knowledge …" Those four words sum up the distinctive and powerful advantage Danisco offers its customers. But the knowledge that sets us apart from our competitors is alive only in our employees, which makes them the company's most strategic business asset.

People are the key "ingredient" in Danisco's formula for success. Attracting and retaining dedicated, and talented people across all roles in all the countries where we operate is a business imperative. That is why we work and invest to strengthen our human resource capabilities and employee programmes.

The experience, expertise and creativity our customers value is alive and well in the 6,800 people we employ in 35 countries worldwide.

EMPLOYEES BY REGION



Employment

Danisco's historical journey includes acquisitions and divestments which have affected the number of employees over time. The adjustments along the way have helped us focus our business on what we are good at. As of 30 April 2010 the number of Danisco employees is 6,876 – slightly fewer than a year prior.

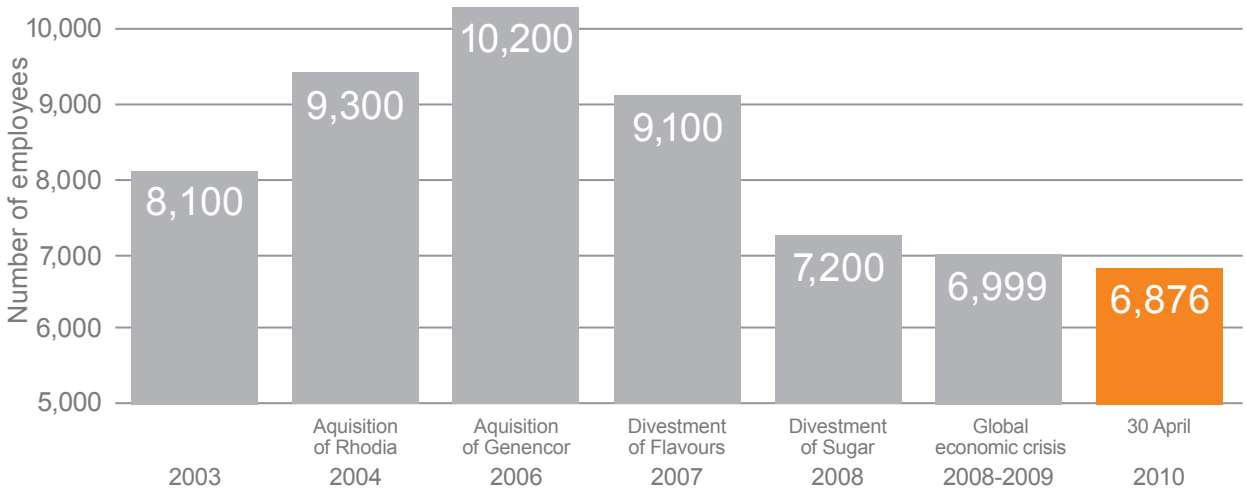
Generally, our employees are hired on a regular basis, though 4.2% have a temporary contract. Our regular employees are mainly full-time, with 8.2% working part-time. At Danisco, full-time employee works the maximum hours per week according to local regulations.

EMPLOYEE CATEGORIZATION

Our employees are categorised as follows and with the indicated percentage of each category:

Employee categories	Include	Percent
Administration	Corporate staff and Finance	11%
Direct production	Production staff	44%
Indirect production	Facility management / maintenance and site and division management	17%
Distribution/procurement	Procurement (inbound) and supply chain (outbound)	7%
Innovation	Research and development, innovation and application	13%
Sales/marketing	Sales and marketing	8%

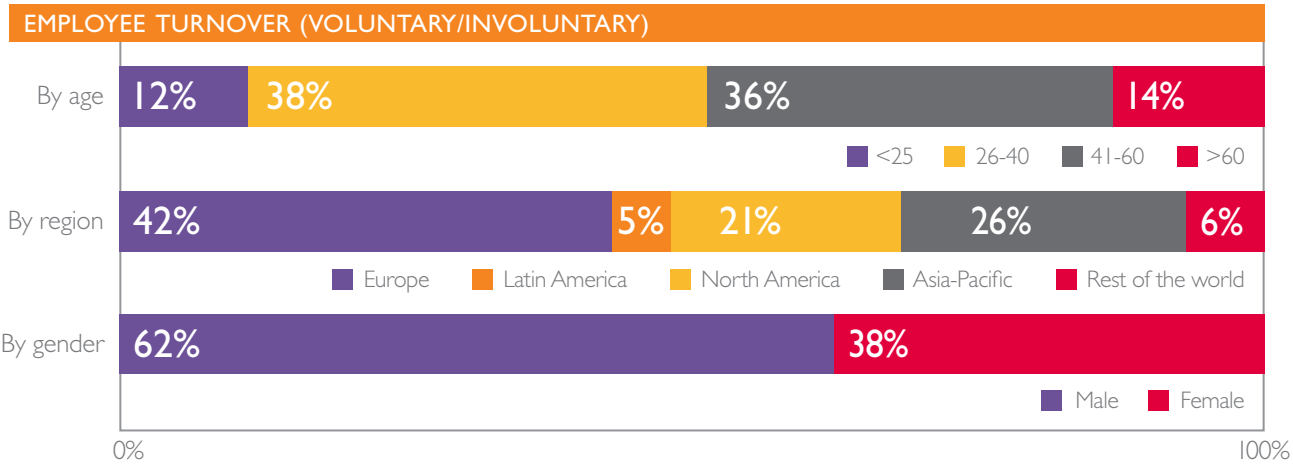
DANISCO'S HISTORICAL JOURNEY



Employee turnover

Employee turnover is natural and healthy for us, creating a dynamic environment and providing new ideas. However, we also focus on how to retain the best employees to ensure that we continue to maintain the knowledge we need to run an efficient business.

In 2009/10, the employee turnover was 8.5% versus 15.6% in 2008, almost halving our employee turnover.



Benefits and remuneration

Employee benefits and the value they add to the overall employment proposition are a key factor in any company's ability to attract and retain talented people. For all our permanent full time employees we offer pension plans, health/accident insurance, medical care for employee families, disability insurance, paid maternity/paternity leave and flexible work schemes. Providing these benefits help to ensure a viable balance between work and private life for our employees and their families. In addition to the benefits we offer to employees worldwide, we also offer additional benefits to accommodate specific local needs and regulations.

Compensation

We compensate our employees through wages and benefits that adhere to the applicable laws that govern locally. This includes providing maximum working hours, leave periods and holidays, as well as compensation for overtime hours and other required benefits.

Early in 2010, Danisco launched a global pay framework designed to bring greater consistency and equity to our compensation principles and processes in all countries where we operate. The framework is based on these five principles:

- Pay for performance
- Total pay perspective
- Market-driven pay
- Alignment and consistency
- Transparency

Pension

Danisco offers employee retirement and termination plans that vary by country to allow for differences in local standards and requirements. Where we offer defined contribution plans, we make contributions to independent pension funds and Danisco has no legal or constructive obligation to pay further contributions. Where we offer defined benefit plans, we do have an obligation to provide agreed-upon benefits to current and former employees. The defined benefit obligations comprise various salary pension plans and, to an immaterial extent, medical plans.

Employee development

Danisco Dialogue: Helping our people grow

Danisco Dialogue, our annual performance review and development process, is designed to drive stronger employee performance by aligning individual goals with team and business goals and by evaluating employees' performance against agreed-upon deliverables. It also supports employees in setting and achieving personal and professional development goals.

The review and goal-setting process coincides with Danisco's financial year to align planning cycles for individuals and the business. By providing a forum for open, focused and constructive dialogue between employee and manager, Danisco Dialogue helps ensure that performance improvement and personal development take place and go hand-in-hand with the commercial goals of the company. In 2009, 72% of employees with on-line access completed Danisco Dialogue, which exceeded our target of 60%.

Danisco Spirit

Each year, we conduct the Danisco Spirit global engagement survey to assess employee attitudes and perspectives as well as the overall work climate across the company. To make Danisco an even better place to work, we depend on employees' active participation – both in candidly expressing their views through the survey and through involvement in subsequent action planning activities to address issues raised in the survey. The response rate for the survey in 2009 was 91%, which was 5% higher than the year before.

Danisco Spirit
68% of our employees feel that Danisco provides them with the opportunity for learning and development

The 2009 survey shed light on several key themes, which will be addressed through the action planning and implementation phases of the Spirit process.

Development and training

Danisco provides a wide variety of programmes and resources to help employees build the skills and competencies that they and their managers agree are important to acquire or enhance. Whether the goal is to improve job performance or in some other way increase the employee's contributions to the business, Danisco offers online and in-person employee learning opportunities that include:

- Product training
- IT and systems training
- Language skills development
- Training in good manufacturing practices
- Safety training
- Ethics training

The Danisco Spirit shows that 78% of our employees feel that they are provided with the training they need to do their job effectively.

In 2010/11, we plan to develop standard processes, procedures and tools to administer and track training information for Danisco employees globally. Furthermore, we will implement a learning management system (LMS) that will provide a catalogue of all training at Danisco, enable on-line registration, manage e-learning content publication and delivery and the ability to generate analytical reports.

We also offer leadership development programmes to help our managers increase their effectiveness:

- Building team engagement
- Coaching and managing for performance
- Finance for non-financial managers
- Management skills for new managers

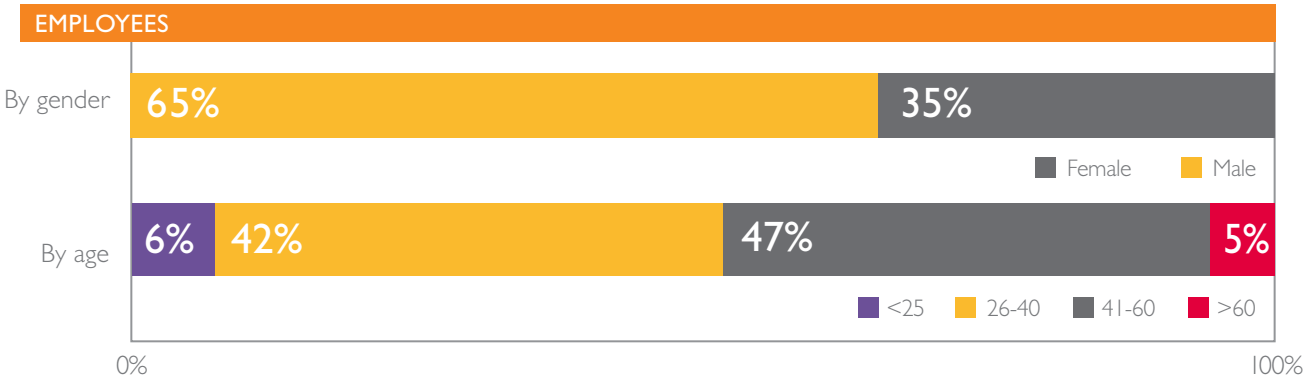
Danisco Spirit
78% of our employees feel that they are treated as individuals, regardless of age, race, gender and physical capabilities

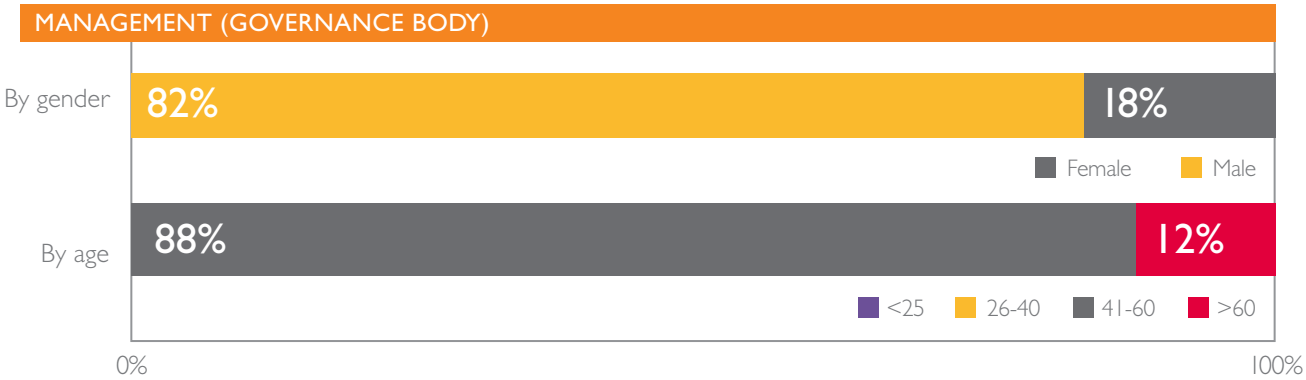
Diversity and equal opportunities

We believe we are a stronger company for the diversity of our global workforce and are committed to non-discriminatory treatment in all our employment practices. Our employment policies, including hiring, training, working conditions, compensation, benefits, promotions, disciplinary actions, termination and retirement, are based on individual qualifications, performance, skills and experience.

Much of our site management is locally hired. However, we also do gain an advantage in terms of business development and knowlegde sharing by having employees of diverse nationalities working at most of our sites.

We treat our employees equally, independent of gender, race, age, religion, political opinion, social or ethnic origin, sexual orientation, disability or other status unrelated to the ability to perform the job.





CASE

EMPLOYEES DEMONSTRATE COMMUNITY SPIRIT

Danisco employees join together to support their local communities in many ways, year after year. The time, effort and money they give benefit a long list of charitable causes, most often with a focus on helping the most vulnerable among us – children. So it is, perhaps, not surprising that their community spirit shines brightest during the holiday season.

New Century

Employees at our New Century site each year host a Children's Christmas Party to support the local Head Start education programme, which promotes healthy development in low-income children ages three to five. Volunteers join the children in playing games, making crafts, enjoying snacks, watching a balloon artist create fanciful animals, and visiting with special guests, Santa and Mrs. Claus.

Cedar Rapids

In 2009, Cedar Rapids employees decided to give back to the community by "adopting" a group of 12 girls who live at Tanager Place, a local non-profit organisation providing services for children and families challenged by social and psychological needs. Employees used their donations to purchase items on each girl's holiday wish list.

Rochester

Employees in Rochester, New York, this year sponsored the local Ronald McDonald House, which provides a "home-away-from-home" for families travelling for their child's medical care. The facility provides a kitchen, laundry facilities and areas where parents and their children can relax and play. Employee donations included snacks and breakfast foods, board games, slippers, socks and laundry supplies. Some employees also found time during the holidays to participate in a five kilometre run to raise money for the Arthritis Foundation.

Waukesha

The community spirit shared by our employees in Waukesha, Wisconsin, has been demonstrated in a variety of ways. They, too, have helped to support their local Ronald McDonald House and have lined up for local blood drives. In an effort to send good cheer to troops far from home during the holidays, they baked homemade cookies for gift packages they shipped to men and women in the Armed Services.

Beloit

In 2007, only two bicycles were donated to the Beloit Salvation Army's annual Toys for Tots drive. Employees of Danisco's Genencor division decided to turn that around in 2008, donating 36 new bikes and vowing to double that figure the next year. True to their word, the team donated 72 bikes in 2009, and convinced neighboring companies to contribute 54 additional bikes, ultimately delivering 126 new bicycles. They even enlisted family members to help tackle the considerable task of assembling the bikes.

Health and safety

Protection of the health and safety of our employees is a way of life at Danisco. It is supported by top management and is a strong focus area for our CEO. This means that we continually drive a systematic risk assessment approach throughout our organisation to ensure that not only the risks of day-to-day tasks are minimised, but that we examine non-routine tasks performed by our employees, even if they occur only once a year.

When we set the target of 2.0 lost-time injuries (LTI) per one million working hours in 2006, we experienced scepticism regarding the attainability of such an ambitious goal. In 2007, Danisco's LTI frequency was 5.0; today we are proud to have improved to an LTI frequency of 3.5.

We can attribute much of this improvement to increased accountability for safety performance on the senior management agenda and to the change in emphasis from observing behaviours to proactively assessing risk.

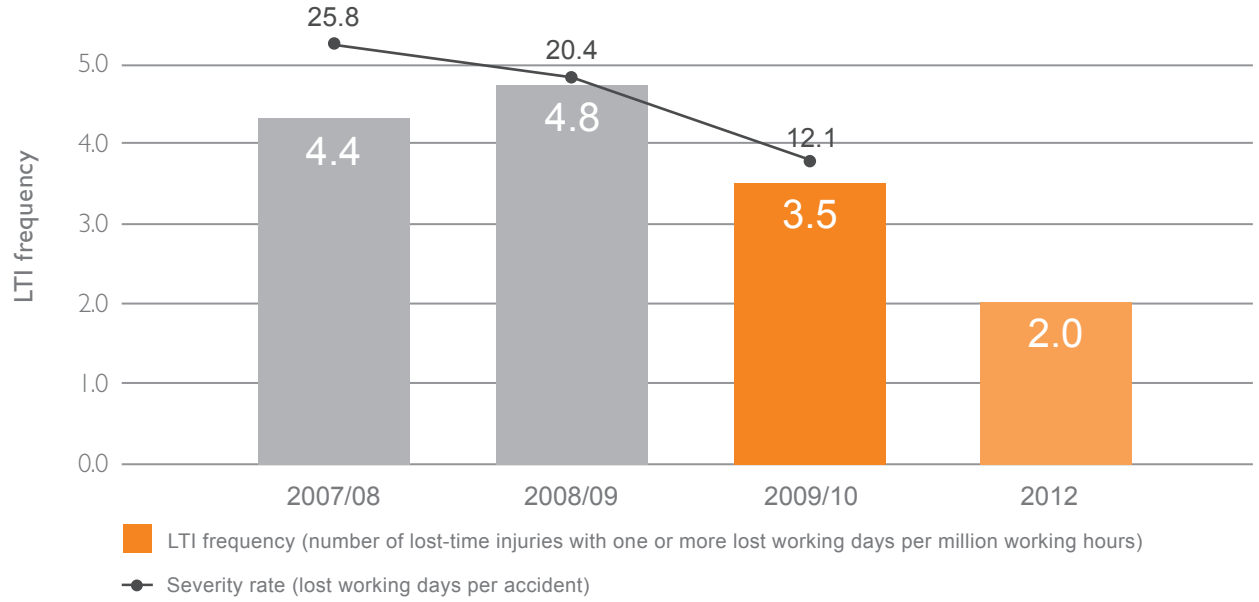
Our manufacturing sites are developing management systems based on the OHSAS 18001 standard. To date, 34% of our production sites operate according to a certified OHSAS 18000 management system. As part of a robust safety management system, formal joint management-worker health and safety committees have been developed to help track performance and monitor risks and issues related to occupational health and safety.

Lost-time injuries (LTI)

From FY 2007/08 to 2009/10, LTI rates have been reduced by over 22%. The severity rate – an index of the number of lost scheduled work days caused by each injury – has dropped by 53% when compared to 2007/08, using a conservative approach by counting the first lost day after the injury occurs. We have reported no fatalities in the last seven years. Occupational diseases are included in our LTI rates. Rules for reporting follow country laws, otherwise the international labour organisation's (ILO's) code of practice on recording and notification of occupational accidents and diseases are used.

With an increasing number of our sites experiencing long periods of time without a lost-time injury, we strongly believe that we are on track to achieve our LTI goal of 2.0 or below by 2012.

LOST-TIME INJURY FREQUENCY (LTI FREQUENCY) AND SEVERITY RATE



Exemplary health and safety performance

Another important factor in safety management is the increased knowledge sharing between internal divisions and sites. A cross-organisational health and safety focus group was established to share experiences and best practices, and to identify strategies and tactics around occupational risk reduction. As a result, in 2009/10, there were no serious accidents in the Danisco permanent employee population.

We did, however, experience the serious injury of a contractor during construction activities at one of our sites in the United States. The contractor was working on a scissor lift and was trapped between the lift and the ceiling of the plant, causing unconsciousness and hospitalisation. The worker regained consciousness after several hours and fully recovered. Although the injury did not occur under the prevailing influence of our site's health and safety programmes, the incident has been fully investigated and corrective actions have been put in place to prevent similar injuries in the future.

Our focus for the coming year will include:
A unified methodology for benchmarking and sharing knowledge on a management level.
Inclusion of all administration, sales and R&D facilities into our health and safety performance metrics.
An online environmental health and safety dashboard to provide all sites with up-to-date performance information.

LTI FREQUENCY AND SEVERITY RATE BY REGION

Region	LTI frequency	Severity rate
Europe	7.1	12.1
North America	0.8	3.5
Latin America	1.6	7.0
Asia-Pacific	0.5	50.0
Rest of the world	0.0	3.0

We have decreased our lost time injury frequency by 28% with a current value of 3.5 injuries per million working hours

Attention to safety is a focus in our operations

Engineering controls are a priority in our risk reduction efforts

A staff of around 6,800 people ensure the smooth running of our activities in more than 40 countries in every time zone

Human rights and Code of Conduct

Respecting human rights

At Danisco, respect for human rights is more than a lofty ideal – it is a business imperative and the basis for how we treat our employees, interact with our communities and work with our suppliers.

As a signatory of the UN Global Compact, our social responsibility policy is based on the principles of the Universal Declaration of Human Rights (UDHR) and International Labour Organisation's (ILO) Declaration of Fundamental Principles and Rights at Work. We also follow the principles of the OECD Guidelines for Multinational Enterprises.

Our social policy requires that:

- Employees receive fair and equal treatment, regardless of gender, race, age, religion, political opinion, social or ethnic origin, sexual orientation and disability or other status unrelated to the ability to perform the job
- Employees have the right to freely form and join trade unions and to negotiate collectively
- We will not employ forced or compulsory labour
- We will not use child labour
- Employees receive fair and lawful compensation
- We support employees' training and development
- We safeguard employees' health and safety in the workplace
- We provide a secure work environment

Our social policy is designed to be administered consistently for the protection of all our employees. However, with operations in more than 35 countries, Danisco must adhere to applicable local laws, which sometimes differ from our policy in some respects. In such cases, local laws prevail. When internal policies provide greater protection for employees, they are used to determine the minimum standard of behaviour.

We respect the right of our employees to freely form and join trade unions and to negotiate collectively in accordance with applicable laws. However, not all employees choose to make use of that possibility.

In 2008, 97% of our sites were found to be fully compliant with Danisco's policy. We continually monitor activities at our facilities to ensure adherence to the policy, which is frequently communicated through our Human Resources staff. In 2009/10, we had no reported incidents of discrimination, child labour, forced or compulsory labour, or violating the right to exercise freedom of association or collective bargaining.

In 2010/11, we will revisit our human rights approach and our social responsibility policy and we will implement changes as needed.

Rethinking our Code of Conduct

Taking a risk-based approach

In 2008, we launched an anti-corruption policy, The Danisco Code of Conduct. The policy focuses on bribery, facilitation payments, gift giving, political donations and charitable contributions.

When we launched the code in 2008, we had a target to reach 90% of our employees by 2010. After many training sessions, online learning courses and only achieving a training rate of 35% of our global employees, we re-examined the code and its implementation and determined that we could have taken a better approach.

We learned in this process that a risk-based approach would be more suitable for our workforce based on the context of their work and their ability to influence or be influenced by external parties.

We re-examined the job functions of all our employees worldwide to identify risks related to corruption through the nature of their work. We found that roughly 15% of our employees could affect or be affected by corruption or bribery. Although we have no documented cases of bribery and corruption over the past seven years, we have identified potential risks in our procurement, indirect production, sales and marketing functions because of their proximity to contractual agreements and ability to influence business.

To date, 43% of these employees have completed the on-line anti-corruption course. We will work in 2010/11 to increase this value to 100%.

EMPLOYEE CORRUPTION RISKS

Employee categories	Percentage of employees		
	Low risk	Medium risk	High risk
Administration	11%		
Direct production	44%		
Indirect production		17%	
Distribution / procurement			7%
Innovation	13%		
Sales / marketing			8%

Community and society

Danisco is committed to supporting the communities in which we operate. As we are a diverse company with operations in over 80 different communities, we find that a common approach to community involvement and development may cause us to miss important opportunities.

At Danisco, community involvement and development manifests itself in different ways. In our Genencor division we engage our communities through community relations teams who develop annual strategies to engage and support the local communities. Other divisions make it a challenge to site employees to drive the programmes and initiatives based on how the employee population perceives the needs.

Donations of money and time to community organisations like local food banks, women's shelters, universities or environmental groups is a traditional way and definitely is part of our approach. In 2009/10 we donated DKK 1,564,982 to different areas such as educational institutions, vulnerable groups, sport clubs, NGOs and non-profit organisations. There is not a corporate driven policy for contributions, but instead a strategic decision made at the site level.

However, we have aspired to developing our communities even further. These approaches range from building capacity of local farmers in areas where we produce pectin or carrageenan to employ advanced farming techniques and to increase their yields and build their businesses – to educating dairy farmers in South Africa in storage and sanitation methods to reduce milk spoilage.

It can be seen in our capacity building efforts with small volunteer fire departments in Arroyito, Argentina, to understand the techniques for responding to highway accidents involving hazardous materials. It can be seen in our efforts to train and enable fishermen and mussel farmers in Paragua, Chile, to cultivate seaweed in their off-seasons.

The list is long and the commitment is deep. We invite the engagement of our local communities as well and would like to hear from you on how we are doing at **sustainability@danisco.com**

Community due diligence

We have taken a systematic approach to how we locate our facilities. While we did not enter any new communities in the reporting period we will maintain our established due-diligence process in the future.

We assess the impacts of our operations on the local community prior to entering the community by using a filter of sustainability core issues like environmental impacts, job creation and access to talent, potential displacement of residents and impacts on transport, noise and infrastructure.

The most recent example of this was in 2005 when we sited our facility in Wuxi, China. In addition to thorough economic due diligence, environmental and social aspects were considered. The plot of land in the Wuxi New District was selected because it was one of the only locations in the area that would prevent the displacement of local farmers and their families.

CASE

INFRASTRUCTURE INVESTMENT IN BRAZIL

An infrastructure project was created by Danisco Brazil in order to prevent reduce truck traffic downtown Pirapozinho, Brazil, in consideration of the local community. The streets are not prepared for heavy trucks often carrying dangerous goods where any leak could present a serious risk. Also there are schools along the way where children play on the street where trucks were traveling.

Danisco entered into a partnership with local authorities. providing resources to finance part of the construction. The municipality managed the project by which people living along the new road were provided new houses in another part of town. This project took almost two years and involved road construction with side walks, fencing, signs and lights.

Genencor and its employees, socially responsible at the local level

At the International Children's Day 2009, a total of 358 books (280 books from Dansico's Genencor Division and 78 from Genencor employees) were donated to children who survived the Sichuan earthquake. Though RMB 100,114 from Genencor and Genencor employees had been donated for the Sichuan Earthquake in May 2008, we did not think of it as an isolated action. We belived that our response to the disaster be sustained.

Beyond the book donation, we launched the Genencor Scholarship at Shanghai Jiaotong University by which RMB 35,000 was donated. In addition, the Genencor Scholarship at Jiangnan University provided RMB 35,600 in educational support for the fifth consecutive year.

Compliance

Environmental violations and spills

We employ environmental management systems (EMS) at our global manufacturing sites and use a risk-based process to identify our major potential impacts and opportunities. While we use leading metrics to drive performance in our management systems, such as the time it takes for us to correct an internal non-conformance or the number of risk assessments completed in year, we still must examine lagging indicators to ensure maximum controls.

Most violations experienced by Danisco sites relate to exceeding wastewater permit conditions – primarily related to pH, nutrient load concentration or Chemical Oxygen Demand (COD). Many of our sites have wastewater intensive processes resulting from the use of biological materials present in wastewater after the product separation equipment. We also clean our processes with high-pH detergents which must be neutralised before discharge. In both cases, violations are almost always related to process control variances, which are included in maintenance and operational control programmes. In the reporting period we experienced 19 violations, none of which resulted in fines.

We also monitor trends of odour and noise concerns filed at Danisco facilities. Odour is caused mainly by the nature of our processes. For instance our fermentation plants produce a characteristic odour that smells like bread, grain or beer.

Noise complaints are mosth often related to vehicles that transport raw materials or products to and from our sites, or our processes themselves. As complaints are registered, the sites evaluate control methodologies and frequently involve community members in the solution. In the reporting period we registered 37 complaints.

For all community concerns we encourage you to contact our sites directly or write us at **sustainability@danisco.com**

Other fines and sanctions

There have been no significant fines or non-monetary sanctions levied against Danisco for non-compliance with laws and regulations.

ENVIRONMENTAL INCIDENTS

Violation and spills	Unit	2009/10	2008	2007
Wastewater	Number	13	13	15
Other violations, e.g. spills	Number	6	2	1

Complaints	Unit	2009/10	2008	2007
Noise	Number	15	10	13
Odour and dust	Number	22	9	15

External organisations

Actively participating in external stakeholder bodies and networks is essential for our business to succeed when addressing global challenges. Engaging in networks provides us a venue and opportunity to participate in the discussion around relevant issues, such as human rights, sustainable palm oil, biofuel, and reporting with a variety of stakeholders.

Commitment to external initiatives

Danisco has adopted several voluntary economic, environmental and social charters and principles. These initiatives apply to all Danisco sites and involve employees, suppliers, customers, investors and NGOs.

EXTERNAL INITIATIVES

Charters and principles	Date of adoption
UN Global Compact	March 2003
UN Caring for Climate	2007
OECD Guidelines for Multinational Enterprises	2003
Copenhagen Communique	July 2009
Global Reporting Initiative	December 2001

Danisco is also a member of the following associations:

- The Danish Council for Sustainable Business Development
- Business for Social Responsibility (BSR)
- World Business Council for Sustainable Development (WBCSD)
- The Sustainability Consortium
- Confederation of Danish Industry
- The European Association for Bioindustries (EuropaBio)
- International Food Additive Council (IFAC),
- European Food and Drink Association (CIAA)
- Federation of European Specialty Food Ingredients Industries (ELC)

UN Global Compact

The Global Compact aims to promote responsible corporate citizenship. In 2003, Danisco became a signatory to the UN Global Compact and committed to following the Compact's principles and to communicate progress annually. We have incorporated the Compact's 10 principles in our sustainability strategies, targets and policies. Since 2007, our communication has been praised by the UN Global Compact as "notable." This means that, in the opinion of the Global Compact executive, the Danisco communication represents best practices in communicating progress.

In addition, we are signatories of the UN Global Compact's "Caring for Climate" initiative, a voluntary and complementary action platform for those Global Compact participants who seek to demonstrate leadership with regard to climate change. It provides a framework for business leaders to promote practical solutions and help shape public policy and attitudes.

Public policy

Danisco is taking formal positions on, or lobbies for, a wide range of sustainability issues either directly as Danisco or as expert representatives of trade/industry associations.

- European Roundtable on Sustainable Biofuels
- Roundtable on Sustainable Palm Oil (RSPO)
- Roundtable on Responsible Soy (RTRS)
- European Sustainable Food Consumption and Production Roundable
- Guidance on Social Responsibility (ISO26000)
- The WRI/WBCSD Scope 3 and Product Life Cycle Climate Standards
- International Life Sciences Institute

Contributions

According to Danisco's anti-corruption policy, we do not engage in political activities, nor provide contributions or other support to political parties, local candidates or committees.

Governance and leadership

A different kind of "ingredient for sustainability" is outstanding corporate governance, which is highly valued at Danisco. Danisco's top-level management structure consists of the Board of Directors, the Executive Board and the Executive Committee.

The management of Danisco is, as required by Danish company law, based on a two-tier system, separating the Executive Board and the Board of Directors.

Once a year, the Executive Committee discusses and establishes its most important tasks related to the overall strategic management as well as the economic, environmental, social and managerial supervision of the company.

The Executive Committee is responsible for the ownership of Danisco's sustainability strategies. The Committee approves resources and manages economic, environmental and social activities. CEO Tom Knutzen and CFO Søren Bjerre-Nielsen preside over the Executive Committee and report on strategic performance to our Board of Directors and investors quarterly and annually.

Sustainability performance is facilitated by the Corporate Sustainability department led by Vice President Jeffrey Hogue. The group works closely with divisional sustainability directors and managers, divisional CEOs and Vice Presidents of Operations to guide the implementation of strategies and to roll up performance data for our quarterly and annual accounts. All performance, including the embedding of sustainability into our business process, is validated annually by an independent third party.

As an overarching governance approach we strive to use the precautionary principle in our decision-making. This allows us to take early action to prevent possible harmful effects on the environment or human health and to consider impacts when scientific evidence is lacking.

Governance

The Board of Directors is elected by the general meeting and is responsible for the overall management of Danisco. The Board of Directors appoints and terminates the members of the Executive Board. The six shareholder-elected members, for whom an important criterion for nomination to the Board of Directors is independence in all matters concerning the Company, are not employed by or dependent on Danisco. Proposals or issues raised by shareholders may be submitted in writing to the Board of Directors.

The Chairman evaluates annually the work of the Board of Directors and the performance of the individual Board members.

Board members receive a fixed annual remuneration and are not included in any share option programmes or bonus schemes. The remuneration is fixed on the basis of market terms and reflects the workload, competence requirements and number of Board meetings attended. The Board of Directors reviews the remuneration of the Executive Board to ensure a balance that encourages value creation in the long term and maintains control of current performance.

Members of the Danisco Business Forum (DBF), who compromise the top 70 senior managers of Danisco, have a formal link between their compensation and their performance against annual company and departmental goals. The company's goals and each department's goals include financial objectives.

Danisco Executive Committee
From left: Iain Witherington, Tjerk de Ruiter, Ole Søgaard Andersen, Søren Bjerre-Nielsen, Fabienne Saadane-Oaks, Tom Knutzen

CASE

GLOBAL GENENCOR TEAM (VIRTUALLY) TOURS THE WORLD

With a divisional presence in 26 cities around the world, employees of Danisco's Genencor division joined together in 2010 to promote their own health, build a stronger global team and benefit the local community of which they had recently become a part. Genencor's Amazing 'Round the World Challenge invited employees in all divisional locations collectively to walk, run or bike the number of kilometres it would take to (virtually) visit Genencor's locations around the globe.

The virtual world tour began on 1 April 2010 at the newest Genencor production facility in Cape Town, South Africa, with the goal of completing the 58,036 km journey by the end of May 2010. The promise to employees: Upon successful completion of the challenge within a 61-day timeframe, Genencor would make a donation of USD 20,000 to Habit for Humanity in Cape Town for the construction of two houses and provision of some appliances for the new homeowners.

The initiative was designed to help enhance the sustainability of the business in several ways. First, it helped give Genencor employees – scattered across 26 locations worldwide – a stronger sense of belonging to a team that can accomplish shared objectives. It also aimed to help strengthen the local community surrounding Genencor's newest site, thereby contributing to the viability of that site. Finally, the endeavor gave employees an added incentive for taking part in healthy physical activity.

In only 34 days, the goal had been accomplished, so the team challenged themselves to complete a second "lap" in even less time – a mere 27 days – with a second donation of USD 5,000 to go to a local orphanage in Cape Town.

GENENCOR'S
AMAZING
'Round the World Challenge
58036 kilometers

Performance

We measure our performance and use the results to guide our business.

Change of data reporting period

This year, 2010, we have changed our reporting period from calendar year (CY) to financial year (FY). We have done this to align our sustainability activities as an organisation and to increase the relevance of our sustainability efforts in our financial reporting – both quarterly and annually. Furthermore, we have decided to begin including more on sustainability in our annual report to meet new Danish financial reporting requirements.

Changing the reporting period has required some methodological challenges. Previously, the reporting period covered January to December whereas now it is May to April, and this poses challenges in realigning our internal reporting periods. It also creates a gap in reported data in CY 2009 January-April. To be transparent, we have reported where significant variances and/or incidents have taken place in January to April 2009 and where relevant will report on these separately.

New data processes

To facilitate the transition, we have developed a calculation guide in order to take the change in reporting period into account. Because the change in CY to FY has resulted in a change of the frequency of data collection we have been forced to make estimations for the data of April 2009 as well as for April 2010. These estimations are based on a validated estimation formula and compared with CY data to identify significant variances. Using this estimation we can compare the FY reporting periods of the last three years consistently.

It has not been necessary to make estimates of employee data as this data is less complex and we prefer to report on the entire 16 months of performance.

Data errors in the 2009 edition of the Sustainability Report

In our new data collection process, we identified several significant systematic errors in data reported between 2006 and 2008 related to CO2 emissions, energy consumption, water consumption and materials parameters.

Energy consumption and CO2 emissions

Energy consumption and CO2 emissions for 2006-2008 included in some cases a doubling of the energy consumption value due to an error in data input. Similarly, we found inconsistencies in the emission factors used for Scope 2 CO2 emissions between years. Upon correction of the energy and CO2 consumption data, the total values decreased by 10% and 20%, respectively.

Besides cooling agents, which have been converted into CO2 equivalents, the data provided in this report only represent CO2. The reason for only accounting for CO2 is that emissions for other greenhouse gases (besides cooling agents) are insignificant for our plants.

The CO2 equivalents associated with refrigerant emissions have not been included in our total CO2 emissions because they make up only 1.3% of our total CO2 emissions.

Measuring our performance enables us to set goals and assess our progress

Refrigerant emissions
Emissions of refrigerants causing global warming reported from 2006 to 2008 were too low due to an error in data extraction.

Water consumption
Water reported in 2006-2008 included in some cases water that was used for non-contact cooling, which was erroneously aggregated into the total water consumption value. The non-contact cooling water was not consumed as it was taken from surface water and returned to the same surface water without a net decrease in volume and without chemical alteration. The impact of this water use is the increase in temperature of the water localised at the discharge point. When removing the non-contact cooling water from the total water consumption value our total consumption systematically decreased by 20%.

Materials
Materials input reported 2007 and 2008 have been corrected. Recycled materials are now categorised according to GRI guidelines.

Social and economic performance
All social and economic data is collected from our SAP HR system and the annual report which is audited according to all standard international accounting practices. Please refer to the annual report for more information.

Environmental, health and safety performance
Environmental Performance Management (EPM) is our database for collecting environmental and health and safety data. In 2006, EPM was implemented at all production sites to unify the data collection and validation process. Selected editors at each site are responsible for filling in numbers in datasheets and sending them for approval to an appointed members of management. Depending on the use of the data, the reporting cycle is either monthly or yearly and significant fluctuations in values between two periods must be explained. All data is available to our employees via our business warehouse reporting module.

For data supplied to the quarterly or annual report, each division reviews data prior to audit by our third-party auditors. Relevant documentation must be available to ensure a complete audit track.

In order to monitor effectiveness in our production, we measure the use of some raw materials in relation to our total product output, e.g. water consumption per produced product (m^3/tonnes). Due to the complexity in the product portfolio, comparison between two periods might not be precise. The product mix ranges widely from enzymes measured in activity and carrageenan measured in gel strength rather than kilos. Nevertheless, consolidated numbers for the parameters show a trend. Our efforts to develop more precise parameters that cover all Danisco's production activities are ongoing.

We measure our performance and use it to guide our business

Our performance data is validated by a third party

Reporting

In determining the scope of this report, we have taken into consideration issues across our value chain and all indicators in the Global Reporting Initiative (GRI) G3 Guideline. We have used the principles of materiality, stakeholder engagement, sustainability context and completeness. We have sought to report on all core and additional indicators, unless specifically noted as not material in the context of our business. It should be noted that the food processing-specific supplement in the GRI Framework does not apply for the reporting period, as it was in draft during the reporting period.

This report covers the entities in Danisco's value chain over which we have either direct control and/or significant influence with regard to financial and operating policies and practices, as well as entities that generate significant sustainability impacts (actual or potential). We have striven for a reasonable and balanced picture of Danisco's sustainability performance.

This report was designed and written to meet the standards set forth by the Global Reporting Initiative (GRI) (www.globalreporting.org) according to the G3 protocol. The GRI framework is the most widely used, credible and trusted framework in the world for reporting performance on human rights, labour, environment, anti-corruption and other corporate citizenship issues. Its credibility comes largely from the quality and applicability of the standards, which have been created by experts through a global, multi-stakeholder consensus approach.

Scope and boundary

This includes all of our subsidiaries in which we have at least a 50% share. Performance data for Dupont Danisco Cellulosic Ethanol (DDCE) and toll manufacturing sites are not included in this report. Specific data reporting varies based on the degree to which we exercise direct control versus influence. The definition of each indicator is provided where the indicator is disclosed.

This year we are changing from reporting on the calendar year to our financial year (1 May to 30 April). Our last sustainability report was published in June 2009 covering the calendar year of 2008. The report has been published yearly in the past and will continue to be in the future.

GRI application

In assessing this report's content against the criteria in the GRI Application Levels, we have internally assessed that it has reached the A level. In assessing our GRI compliance, we applied the following principles:

1. Where the aspect does not meet our materiality threshold as defined on pages 25-25. The rationale is stated in the GRI content index on pages 98-106.
2. When the aspect is material, but the indicator is less suitable in a Danisco organisational context, we have disclosed the contextual response to the aspect in the section referred to in the GRI content index.
3. If the aspect and the indicator are material and specific reasons prevent us from reporting the requested indicator, we disclose our rationale in the section referred to in the GRI content index.

Our materiality threshold is described in the sections entitled: "Key impacts, risk and opportunities" and "Stakeholders and strategies".

Our external assurance provider, Deloitte, has also completed an Application Level check of the report against the criteria for the GRI Application Levels and has confirmed that the report meets Application Level A+.

Our report has achieved an A+ GRI Application Level

Recognitions and awards

Sustainability indexes track the performance of companies according to corporate sustainability criteria in the social, environmental and financial dimensions and are used by private and institutional investors to screen possible investment opportunities. In recent years, Danisco has been listed in a number of major indexes, which we use to benchmark our work with sustainability in relation to customers and competitors.

We have also been recognised in several investor-driven initiatives as a leader.

The Dow Jones Sustainability World Index
The only business-to-business company included in the food and beverage sector since 2002.
http://www.sustainability-index.com/

The FTSE4Good Index Series
Included in the index since 2002.
http://www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp

NASDAQ OMX GES Ethical Index
Recently included in 2010.
http://omxnordicexchange.com/produkter/index/OMX_index/Responsible_Investment/

Oekom Research
Rated as a sustainable investment.
http://www.oekom-research.de/index_en.php

Carbon Disclosure Project
Ranked no. 3 in Demark and no. 14 in the Nordic countries.
Began participation in 2008.
https://www.cdproject.net/en-US/Pages/HomePage.aspx

Forest Footprint Disclosure Project
Ranked as the leader in the food and soft drink sector in 2009.
http://www.forestdisclosure.com/

Global Reporting Initiative (GRI)

GRI content index

Key

● Included ● Additional and not included

GRI CONTENT INDEX			
GRI disclosure	**Description**	**Page**	**Key**
Strategy and analysis			
1.1	CEO statement about the relevance of sustainability to the organisation and its strategy	11	●
1.2	Description of key impacts, risks and opportunities	9, 13, 40	●
Organisational profile			
2.1	Name of the organisation	109	●
2.2	Primary brands, products and/or services.	5, 41, 108	●
2.3	Operational structure of the organisation	108	●
2.4	Location of organisation's headquarters	108	●
2.5	Countries where the organisation operates	108	●
2.6	Nature of ownership and legal form	110	●
2.7	Markets served	5	●
2.8	Scale of the reporting organisation	5, 111	●
2.9	Significant changes during the reporting period regarding size, structure or ownership	No significant changes	
2.10	Awards received in the reporting period	97	●
Report profile			
3.1	Reporting period (e.g. financial/calendar year) for information provided	96	●
3.2	Date of most recent report (if any)	96	●
3.3	Reporting cycle (annual, biennial etc.)	96	●
3.4	Contact point for questions regarding the report or its contents	sustainability@danisco.com	

GRI CONTENT INDEX

GRI disclosure	Description	Page	Key
Report scope and boundary			
3.5	Process for defining the report content	24, 96	●
3.6	Boundary of the report	96	●
3.7	Any specific limitations on the scope or boundary of the report	96	●
3.8	Basis for reporting on joint ventures, subsidiaries, etc.	96	●
3.9	Data measurement techniques and the bases of calculations	94	●
3.10	Explanation of the effect of any re-statements of information provided in earlier reports	94	●
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods	94, 96	●
GRI content index			
3.12	Table identifying the location of the standard disclosures in the report	98	●
Assurance			
3.13	Policy and current practice with regard to seeking external assurance for the report	96, 107	●
Governance	See more in our Annual report on www.danisco.com		
4.1	Governance structure of the organisation	92	●
4.2	Indication of whether the chair of the highest governance body is also an executive officer	92	●
4.3	The number of members of the board that are independent and/or non-executive members	92	●
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the board	92	●
4.5	Linkage between compensation of board and management and the organisation's performance - economic, social and environmental	92	●
4.6	Processes in place for the board to ensure conflicts of interest are avoided	92	●
4.7	Process for determining the qualifications and expertise of the board for guiding the organization's strategy on economic, environmental, and social topics	92	●
4.8	Internally developed statements of mission or values, codes of conduct and principles	87, 92, 109	●
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental and social performance	92	●
4.10	Processes for evaluating the board's own performance	92	●
Commitment to external initiatives			
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation	92	●
4.12	Externally developed economic, environmental and social charters, principles, or other initiatives	91	●
4.13	Memberships in associations	91	●

GRI content index

Key

● Included ● Additional and not included

GRI CONTENT INDEX				
GRI disclosure	Description	Core or additional	Page	Key
Stakeholder engagement				
4.14	List of stakeholder groups engaged by the organisation		18, 19	●
4.15	Basis for identification and selection of stakeholders with whom to engage		19	●
4.16	Approaches to stakeholder engagements		20	●
4.17	Key topics and concerns that have been raised through stakeholder engagement		20	●
Economic performance indicators Management approach			92	●
Economic performance				
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings and payments to capital providers and governments	Core	111	●
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	Core	13	●
EC3	Coverage of the organisation's defined benefit plan obligations	Core	80	●
EC4	Significant financial assistance received from government	Core	110	●
Market presence				
EC5	Range of ratios of standard entry level wage compared to local minimum wage	Add		●
EC6	Policy, practices and proportion of spending on locally-based suppliers	Core	34	●
EC7	Procedures for local hiring and proportion of senior management hired from the local community	Core	82	●
Indirect economic impacts				
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit	Core	88	●
EC9	Understanding and describing significant indirect financial impacts	Add		●

GRI CONTENT INDEX

GRI disclosure	Description	Core or additional	Page	Key
Environmental performance indicators Management approach			56	●
Materials				
EN1	Materials used by weight or volume	Core	61	●
EN2	Percentage of materials used that are recycled input materials	Core	61	●
Energy				
EN3	Direct energy consumption by primary energy source	Core	64	●
EN4	Indirect energy consumption by primary energy source	Core	64	●
EN5	Energy saved due to conservation and effienciency improvements	Add	66	●
EN6	Initiatives to provide energy-efficient or renewable energy-based products and services and reductions in energy requirements as a result of these initiatives	Add	31, 44, 52	●
EN7	Initiatives to reduce indirect energy consumption and reduction achieved	Add	66, 73	●
Water				
EN8	Total water withdrawal by source	Core	68	●
EN9	Water sources significantly affected by withdrawal of water	Add		●
EN10	Percentage and total volume of water recycled and reused	Add		●
Biodiversity				
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value	Core	Not material No operations on or near protected area	
EN12	Description of significant impacts of activities, products and services on biodiversity	Core	13	●
EN13	Habitats protected or restored	Add	14, 35	●
EN14	Strategies, current actions and future plans for managing impacts on biodiversity	Add	14, 35	●
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations	Add		●

GRI content index

Key

● Included ● Additional and not included

GRI CONTENT INDEX				
GRI disclosure	Description	Core or additional	Page	Key
Emissions, effluent, and waste				
EN16	Total direct and indirect greenhouse gas emissions by weight	Core	72	●
EN17	Other relevant indirect greenhouse gas emissions by weight	Core	72	●
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	Add	74	●
EN19	Emissions of ozone-depleting substances by weight	Core	72	●
EN20	NOx, SOx and other significant air emissions by type and weight	Core	Not material Insignificant emissions	
EN21	Total water discharge by quality and destination	Core	70	●
EN22	Total weight of waste by type and disposal method	Core	76	●
EN23	Total number and volume of significant spills	Core	90	●
EN24	Weight of transported, imported, exported or treated waste deemed hazardous	Add		●
EN25	Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff	Add		●
Products and services				
EN26	Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation	Core	61, 66, 71, 74, 76	●
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Core	63	●
Compliance				
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Core	90	●
Transport				
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations and transporting members of the workforce	Add		●

GRI CONTENT INDEX

GRI disclosure	Description	Core or additional	Page	Key
Overall				
EN30	Total environmental protection expenditures and investments by type.	Add	59	●
Responsibility performance indicators Management approach			42	●
Customer health and safety				
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement and percentage of significant product and service categories subject to such procedures	Core	43, 45, 55	●
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle by type of outcomes	Add		●
Product and service labelling				
PR3	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements	Core	55	●
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling by type of outcomes	Add		●
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Add		●
Marketing communication				
PR6	Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship	Core	45, 55	●
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	Add		●
Customer privacy				
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Add		●
Compliance				
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Core	55	●

GRI content index

Key

● Included ● Additional and not included

GRI CONTENT INDEX				
GRI disclosure	Description	Core or additional	Page	Key
Labour practices and decent work performance indicators Management approach			78	●
Employment				
LA1	Total workforce by employment type, employment contract and region	Core	78, 79	●
LA2	Total number and rate of employee turnover by age group, gender and region	Core	80	●
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	Add	80	●
Labour / management relations				
LA4	Percentage of employees covered by collective bargaining agreements	Core	86	●
LA5	Minimum notice period(s) for significant operational changes, including whether it is specified in collective agreements	Core	86	●
Occupational health and safety				
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes	Add	84	●
LA7	Rates of injury, occupational diseases, lost days and absenteeism and number of work-related fatalities by region	Core	84	●
LA8	Education, training, counselling, prevention and risk-control programmes in place to assist workforce members, their families or community members regarding serious diseases	Core	84, 88	●
LA9	Health and safety topics covered in formal agreements with trade unions	Add		●
Training and education				
LA10	Average hours of training per year per employee by employee category	Core	81, 87	●
LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Add	81, 87	●
LA12	Percentage of employees receiving regular performance and career development reviews	Add	27, 81	●

GRI CONTENT INDEX

GRI disclosure	Description	Core or additional	Page	Key
Diversity and equal opportunity				
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity	Core	82, 92	●
LA14	Ratio of basic salary of men to women by employee category	Core	80, 82	●
Human rights performance indicators Management approach			30, 78	●
Investment and procurement practices				
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	Core	88	●
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	Core	38	●
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Add	81, 87	●
Non-discrimination				
HR4	Total number of incidents of discrimination and actions taken	Core	86	●
Freedom of association and collective bargaining				
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	Core	86	●
Child labour				
HR6	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour	Core	86	●
Forced and compulsory labour				
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour	Core	86	●
Security practices				
HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations	Add		●
Indigenous rights				
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	Add	86	●
Society performance indicators Management approach			87, 88, 91	●
Community				
SO1	Nature, scope and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting	Core	88, 90	●

GRI content index

Key

● Included ● Additional and not included

GRI CONTENT INDEX				
GRI disclosure	Description	Core or additional	Page	Key
Corruption				
SO2	Percentage and total number of business units analysed for risks related to corruption	Core	87	●
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures	Core	87	●
SO4	Actions taken in response to incidents of corruption	Core	87	●
Public policy				
SO5	Public policy positions and participation in public policy development and lobbying	Core	91	●
SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions by country	Add	88, 91	●
Anti-competitive behaviour				
SO7	Total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes	Add		●
Compliance				
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Core	90	●

Statements

Independent auditor's report on Danisco's Sustainability Report 2009/10

To the Management of Danisco A/S

We have reviewed the Danisco Sustainability Report 2009/10 ("the Report"). The Report is the responsibility of and has been approved by the Management of the Company. Our responsibility is to draw a conclusion based on our review.

We have based our approach on emerging best practice and standards for independent assurance on sustainability reporting, including ISAE 3000, "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board. The objective and scope of the engagement were agreed with the Management of the Company and included those subject matters on which we have concluded below. Data for the reporting years 2008 and 2007 were not included in our review.

Based on an assessment of materiality and risks, our work included analytical procedures and interviews as well as a review on a sample basis of evidence supporting the subject matter. We have interviewed members of the Management responsible for environment, health & safety and social responsibility at corporate and divisional levels as well as at the reporting units: Grindsted, Denmark; Cedar Rapids, Iowa, USA; Kunshan, People's Republic of China and Zhangjiagang, People's Republic of China.

We believe that our work provides an appropriate basis for us to conclude with a limited level of assurance on the subject matters. In such an engagement, less assurance is obtained than would be the case had an audit-level engagement been performed.

Conclusions

In conclusion, in all material respects, nothing has come to our attention that causes us not to believe that:

1. Danisco has established systems at corporate level to identify and manage material sustainability aspects as described in the Report.
2. Danisco has applied detailed procedures to identify, collect, compile and validate the data and information about environment, health & safety, social and economic performance to be included in the Report as described on pages 94-96. The data for 2009/10 as presented in the Report are consistent with the data accumulated as a result of these procedures and are appropriately reflected in the reporting.
3. Danisco has implemented and locally adopted as necessary the management systems referred to in item 1 above at the reporting units tested by us. The data for 2009/10 from these units have been reported in accordance with the procedures referred to in item 2 and are consistent with the source documentation presented to us.
4. Danisco applies reporting practices in accordance with its objectives and principles for reporting, and these practices are aligned with the Global Reporting Initiative (GRI) reporting principles as described on pages 94-96. The GRI Index presented in the Report on pages 98-106 appropriately reflects the extent to which the Report aligns with the indicators in the GRI Sustainability Reporting Guidelines.

Copenhagen, 22 June 2010
Deloitte Statsautoriseret Revisionsaktieselskab

Anders Dons
State Authorised Public Accountant

Preben J. Sørensen
Public Accountant (Corporate Responsibility)

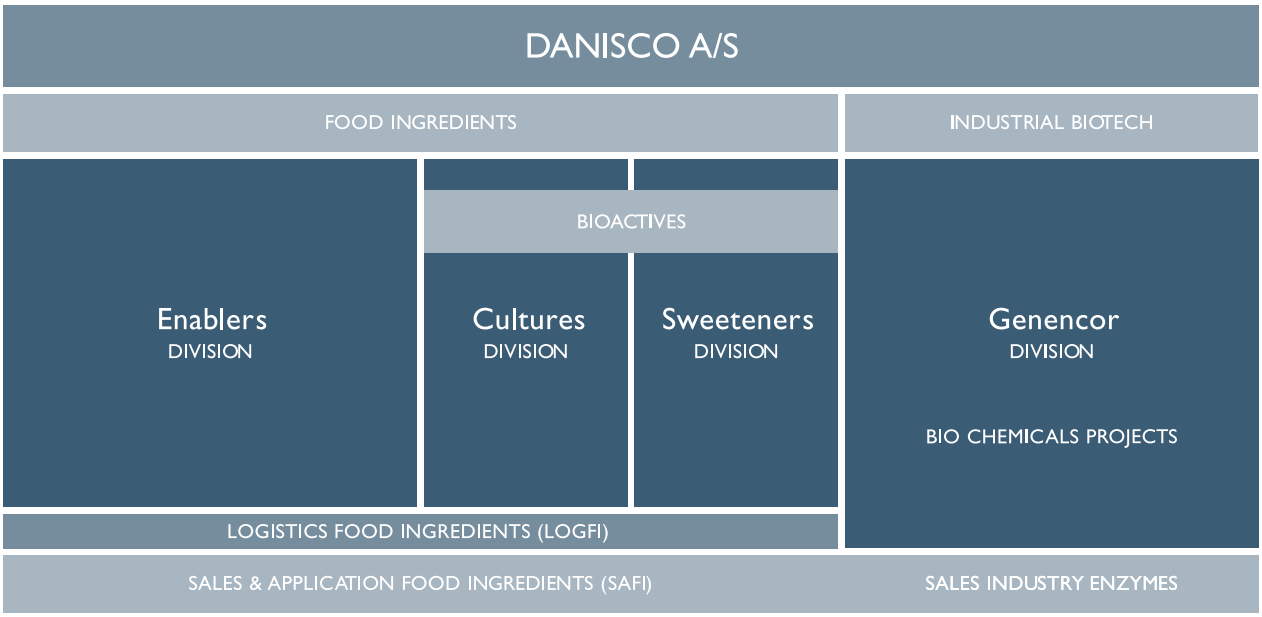
Our company

Danisco A/S was formed in 1989 through a merger of the two old C.F. Tietgen companies, Danish Sugar and Danish Distillers, with Dansk Handels- og Industri Company (Danisco A/S). Headquartered in Copenhagen, Denmark, Danisco is today among the world's leading producers of food ingredients and industrial ingredients to industry. Biotech solutions are a new key focus area for the company, e.g. enzymes for bioethanol and BioIsoprene™, a bio-based material for rubber manufacturing.

We have some 80 locations in more than 35 countries. This gives us proximity to our customers, strong local market knowledge and minimal transport from raw material to finished product. We have production facilities in countries such as China, India, France, Denmark, USA and Brazil and have innovation centers in Australia, Singapore, California, Finland, China and Denmark. Our biggest market places are Europe and USA, but we also see solid growth in Asia and Latin America.

Organisation

The Danisco Group comprises two business segments: Food Ingredients and Industrial Biotech. Danisco is organised into four divisions - Enablers, Sweeteners, Cultures and Genencor - and BioActives. BioActives is comprised of the Cultures and Sweeteners divisions as well as our Health & Nutrition platform.



VISION

To be the First choice provider of bio-based ingredients to industry globally

MISSION

To help our customers increase their competitiveness through innovative, sustainable and bio-based ingredient solutions that meet market demand for healthier and safer products

STRATEGY

To create value through:

- organic and acquisitive growth by leveraging and strengthening our market access, applications and technology platforms
- talented and engaged people

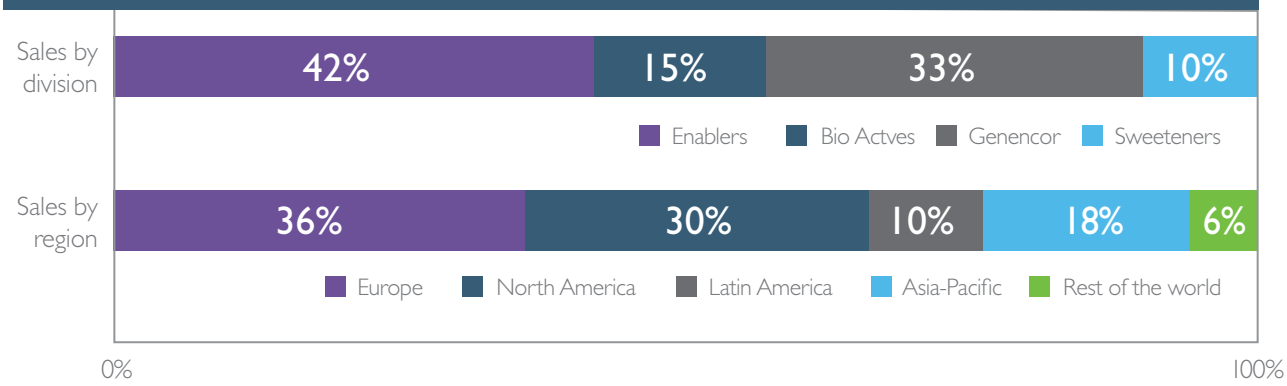
Policies and guidelines

Danisco has issued a number of policies, position papers and guidelines within the sustainability area to ensure that we address important sustainability issues in a uniformed and responsible way.

We have developed the following polices, position papers and guidelines:

- Safety, health and environmental policy
- Corporate social responsibility policy
- Policy on sustainable water use
- Position paper on animal trials
- Position paper on modern biotechnology
- Position paper on GMMs in enzyme production
- Position paper on strain

REVENUE BY DIVISION AND REGION



Ownership

Danisco is a public limited company listed on the NASDAQ OMX Nordic Exchange. The ownership structure at the end of the financial year 2009/10 is shown below. The table shows that the most significant change in the ownership structure was an increase in the number of international investors, growing from 38% to 49% at the expense of domestic investors.

Governmental grants

During the financial year Danisco received government grants for research and development of DKK 2 million (2008/09 DKK 3 million), DKK 1 million (2008/09 DKK 9 million) for investments and DKK 6 million (2008/09 DKK 14 million) for other purposes. Further, Danisco was granted quotas of 49,551 tonnes of CO2 allowances (2008/09 610,277 tonnes). The value at grant date was DKK 5 million (2008/09 DKK 88 million), and the quotas match the expected emission tax.

DANISCO´S OWNERSHIP STRUCTURE

%	30 April 2010	30 April 2009	30 April 2008
Professional investors	75	72	75
Private Investors	25	28	25
Total	100	**100**	**100**
Interantional investors	49	38	28
Domestic investors	51	62	72
Total	100	**100**	**100**

Source: VP Securities

Economic key figures

In 2009/10 we continued to take important steps towards meeting our strategic ambitions, and our business performance showed sustained improvement over the year. Focus has been on execution.

Financial ambitions

Our ambition for organic growth is at the level of 5-7% over a business cycle and a long-term EBIT margin (including corporate and central R&D costs but excluding share-based payments) of at least 13.5% and to have a capital structure, which over time will correspond to debt defined as a net interest-bearing debt/EBITDA (including Bio Chemicals Projects) ratio at the level of 1.5-2.5. A reduction of the capital base will be in the form of dividends and/or share buybacks.

Group financials

In FY 2009/10, Danisco recorded total revenue of DKK 13.7 billion against DKK 13.0 billion in the same period of last year, made up of DKK 9.2 billion from Food Ingredients and DKK 4.5 billion from Genencor.

DANISCO KEY FIGURES

	2009/10	2008/09	2007/08
Number of employees	6,876	6,999	9,219
Revenue (DKKm)	13,706	12,991	12,219
Equity (DKKm)	12,505	12,140	12,542
Net interest-bearing debt (DKKm)	3,007	4,739	9,545
Total assets (DKKm)	20,508	21,278	27,943
Operating costs (DKKm)	9,694	9,141	7,378
Employee expenses (DKKm)	(3,117)	(3,355)	(3,437)
Change in equity (DKKm)	365	(402)	(407)
Payments to government[1] (DKKm)	(390)	(359)	(463)
Community investments[2] (DKKm)	(650)	(773)	(626)

1 Including taxes and related penalties
2 Including donations and infrastructure investments

About Danisco

With a rich and innovative portfolio, Danisco is a world leader in food ingredients, enzymes and bio-based solutions. Using nature's own materials, science and the knowledge of our 6,800 people, we design and deliver bio-based ingredients that meet market demand for healthier and safer products. Danisco's ingredients are used globally in a wide range of industries - from bakery, dairy and beverages to animal feed, laundry detergents and bioethanol - to enable functional, economic and sustainable solutions. Danisco operates from sales, production and innovation sites in more than 40 countries. Find out more at www.danisco.com

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DANISCO
First you add knowledge...