



# Environment Review

Update 2010/11

packaging than ever before. I need less water, energy, carbon





# PERFORMANCE OVERVIEW

## OUR COMMITMENTS IN EUROPE

## OUR ACHIEVEMENTS IN EUROPE 2010

### Water Stewardship

**By 2010:** Recycle all wastewater to environment.

97% of our plants achieved this target in 2010, the remaining investments and constructions in three plants are being finalised in 2011.

**By 2012:** Reduce water use by 20% compared to 2004 and achieve Water Use Ratio of 1.9 litres.

Already achieved 20% water efficiency and water use ratio of 1.9 litres.

**By 2020:** Replenish the equivalent of the water we use in our beverages back in the environment.

We have set a strategy to achieve 100% replenish in 2020 and are working with our bottlers and partners to identify relevant projects.

### Energy Management and Climate Change

**By 2010:** Improve energy efficiency of new cold drink equipment by 40% compared to 2000 models by fitting Energy Management Devices (EMD).

We changed our approach and have now introduced a far-reaching policy called Modelled Energy Consumption (MEC), which continuously pushes energy improvements of all certified cooler models. This has slightly altered our timings, but we will achieve 40% improvement in 2011.

**By 2012:** Ensure that 50% of all new coolers, vendors and fountains are HFC-free. By 2015 coverage to be 100%.

51% of our new coolers, vendors and fountains were already HFC-free.

**By 2015:** Reduce manufacturing emissions by 5% in absolute terms compared to 2004.

Already achieved -8% absolute carbon emissions reduction.

### Sustainable Packaging

**By 2012:** Increase packaging efficiency (weight per litre) by 25% compared to 2004.

Already achieved 33% packaging efficiency.

**By 2012:** 25% of our PET will come from recycled material.

12% of our total PET used in Europe was from recycled material.

**By 2013:** All bottles and cans will be fully recyclable in 2013.

98% of bottles and cans were recyclable in 2010.

**By 2020:** All our PET bottles will be made from 100% renewable and recycled material.

PlantBottle™ has been introduced in Denmark, Norway, Sweden in 2010 containing plant-based and recycled material and reducing the carbon footprint of a bottle by about 30%. In 2011, Plantbottle is being launched additionally in Belgium, the Netherlands, Luxemburg, Great Britain, France and Germany.

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## ABOUT US

The Coca-Cola Company and its bottling partners worldwide manufacture, distribute and sell non-alcoholic drinks to refresh and hydrate people, with moments of simple pleasure – more than 1.7 billion times per day.

Nature provides water, raw materials and all the other ingredients required for our 3,500 local product varieties, which includes 13 billion-dollar brands, in 206 countries worldwide. In Europe, we nurture 140 brands, from sparkling and still soft drinks, to juices, energy drinks and waters.

Despite our global reach, we are essentially a local business with over 900 local manufacturing plants across the world, 112 of which are located in the 38 countries of our Europe Group. This vast network is held together by our franchise system between the Coca-Cola Company and separately owned and operated bottling companies. In Europe alone, we have 20 bottling partners, including two of the biggest bottlers in the world, Coca-Cola Enterprises Inc. (CCE) and Coca-Cola Hellenic Bottling Company S.A. (CCH).

And we have been around for a while:

In 2011, we celebrated the Coca-Cola's 125th anniversary, the moment when John Pemberton, a pharmacist in Atlanta, invented the first Coca-Cola drink. In Europe, we are not far behind: our products have been on sale in Great Britain for 111 years (since 1900) and we have had manufacturing operations in Italy since 1927.

So, long-term and sustainable thinking together with the desire to spread happiness and refreshment is indeed at the heart of our business. We have expressed this as LIVE POSITIVELY, a strategic framework that encompasses our key sustainability areas of environment, health and wellbeing and communities. It helps us to make the right choices today so that future generations don't have to make fewer choices tomorrow.

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# FOREWORD



Dear Reader,

I am very pleased to share the 2011 update of the Europe Group Environment Review with you. It is based on the Coca-Cola Europe Environment Review published last year and focuses primarily on the key performance figures for the group for 2010/2011.

So, how did we do on environment in Europe? I am delighted to say: we used less water, less energy, less carbon and less packaging in 2010. This is fantastic news and I am very proud of our business and our bottling partners to have achieved such an effective proof of sustainability.

My highlights are that we achieved our 'best in class' water efficiency target of 1,9 litres per litre of product two years before the deadline. We even hit the carbon reduction target of -5% in our manufacturing operations five years ahead of deadline. That means that we reduced the carbon emissions of our production by 38,000 tonnes since 2004, despite a growing business.

However we can't be complacent and the challenge with sustainability is that there are always new areas we need to take into account. Our stakeholders, customers and partners are very keen for us to further drive sustainability through our supply chain. We have already made good progress in this area, for example through our work on Water Footprint Sustainability Assessments for natural ingredients and joint global environmental initiatives with our suppliers. And we are keen to do more.

One key challenge will be effective consumer communication. Over and over again, I hear that a brand like Coca-Cola has an enormous potential to galvanise people to make better choices for the environment.

We have been piloting a number of successful initiatives to inform and motivate our consumers on specific issues, for example through our recycling campaigns in the UK, or through a range of carbon footprint awareness activations in Belgium. We will continue to try out new ways of communicating with our consumers on environmental topics in the typical Coke-way: engaging, effective and relevant.

More than ever, we at The Coca-Cola Company and our Bottling partners believe in the critical importance of environmental sustainability. I am convinced that by this time next year, we will have continued our success story.

A handwritten signature in black ink, appearing to read 'D Reiniche', written in a cursive style.

**Dominique Reiniche**  
Group President Europe



# WATER STEWARDSHIP

Water is essential to our business. It is a key resource for our products, our production processes and for growing the fruit, flavours and natural sweeteners for our agricultural supply chain.

Without water we would not have a viable business. That is why water stewardship is our principal sustainability concern.

## OUR GLOBAL WATER COMMITMENTS?

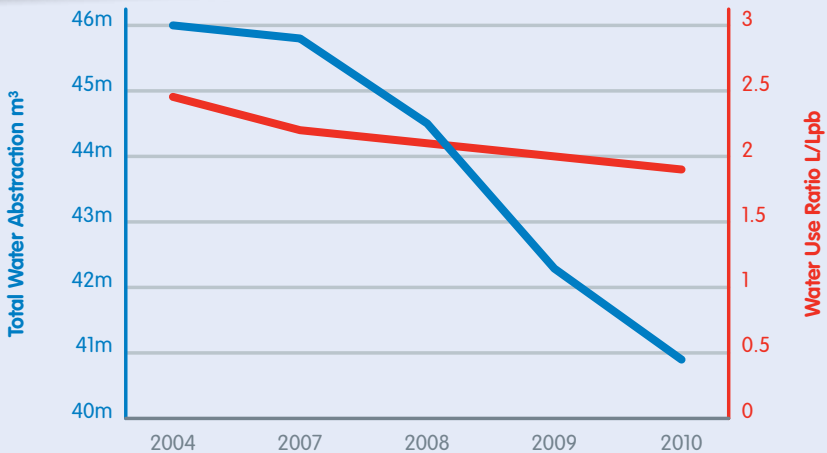
- **Reduce.** To increase the efficiency of our water use by 20% between 2004 and 2012.
- **Recycle.** To treat all the wastewater from our processes and return it to the environment at a standard that is clean enough to support aquatic life.
- **Replenish.** To return to the environment the equivalent of water we use in our products by 2020.



All the wastewater from our processes is returned to the environment at a standard that is clean enough to support aquatic life



## Benefits of water efficiency



## HOW ARE WE DOING IN EUROPE?

### Reducing our use water

In Europe, we have reduced our total water use every year, while growing our business. In 2010, we abstracted a total of around 40.9 million m<sup>3</sup> of water, which is 1.4 million m<sup>3</sup> less than in 2009.

About half of this water goes into our drinks. The other half is used for essential tasks such as cleaning and rinsing. That's why we measure as Water Use Ratio (water used per unit of product). In 2010, we reduced our Water Use Ratio to 1.90 litres. Nearly all of our bottling plants in Europe have achieved this target on time; however, in a few cases, there were delays in the planning and construction process and three plants are finalising their investments this year.

### Recycling water to the environment

It is important that our manufacturing processes return clean water to the environment. To achieve our standard that directly discharged water must support aquatic life, we need to remove detergents and organic substances, for example from juices and sugar. This has required investment into primary and secondary treatment at many of our plants. Of a total of 109 bottling plants in Europe, 106 have achieved the target in 2010. The remaining three are finalising their investments this year.

**We are  
decoupling  
water use from  
business growth**

## SUPPORTING WATER STEWARDSHIP IN EUROPE

Coca-Cola is working with many partners across Europe on water stewardship and to protect ecosystems. Some of the highlights of 2010/2011 were:

- Following on from the successful work with WWF in the Danube river basin, we are working together on protection 'Europe's Amazon', a highly valuable area between the rivers Mura, Drava and Danube along the border of Croatia, Hungary and Serbia. See [www.panda.org](http://www.panda.org)
- Together with WWF and the International Commission for the Protection of the Danube River (ICPDR), we set up a new interactive internet platform called Danube+ to allow everybody interested in the river basin to explore its value, its challenges and the actions that are already taken to protect it. Visitors are invited to upload their own stories and special places. [www.danube.panda.org](http://www.danube.panda.org)
- With the help of the Coca-Cola Foundation, we supported a major expansion of rainwater harvesting on the Cycladic islands in Greece and reforestation on the Guadiana River in Spain.
- As part of the Green Danube Partnership with ICPDR and 'Coca-Cola Hellenic', we ran another successful Danube Day engaging thousands of people in the protection of the river in several countries on the Danube in June 2010 and 2011. [www.danubeday.org](http://www.danubeday.org)
- We also worked with the European Water Partnership EWP to develop and pilot the first water stewardship standard for industry in Europe. The standard is expected to be launched in 2011. [www.ewp.eu](http://www.ewp.eu)

## Protecting and replenishing watersheds

Because sustainable water supplies are so essential to our production, we are assessing water risks across all our European operations and investigating the vulnerability of local water sources. Based on these assessments we are then developing Source Water Protection plans together with local stakeholders. In 2010, 45 of our over 100 bottling plants in Europe had a full vulnerability assessment and protection plan in place. For 2011, we aim to have covered 84 plants.

Based on our in-depth understanding of the local water situation, we have also developed a European Replenish strategy, which will allow us to demonstrate how we achieve our goal to replenish the equivalent of the water we use in our products in 2020. Obviously, we will focus on the areas, where it makes most sense and where our involvement can add value to the local environment and communities. We have started to quantify the benefits of our different water projects and will further develop our project portfolio.

## Identifying water use in the supply chain



We also aim to actively develop our understanding of water stewardship further, gaining a full picture of the risks facing water resources and the impacts on our business along the value chain.

Since 2007, we have engaged with stakeholders on water footprinting. We first assessed the full water footprint of our most popular product: a half-litre regular Coke in a PET bottle.

We saw that the biggest impact comes from the supply chain (99% of total) and in particular from the natural ingredients (i.e. the sugar, 80% of total).

We therefore went on to have a close look at the water footprint of our sugar use in Europe, which comes to 80% from locally grown beet and is largely rain fed. In September 2010, we published our first summary report, Product Water Footprint Assessments. [www.thecoca-colacompany.com/dynamic/press\\_center/2010/09/water-footprint-report.html](http://www.thecoca-colacompany.com/dynamic/press_center/2010/09/water-footprint-report.html)

# We aim to replenish water resources by giving back to nature and communities

## WATER FOOTPRINT SUSTAINABILITY

Water footprinting is an important tool for companies concerned about supply chain security and sustainability. It can help to understand water use along the supply chain and identify priority areas for engagement.

However, it does not yet give an indication of the local impacts and does not provide a practical guidance for action. That's why we invited our beet sugar suppliers to help us develop a new methodology to assess the sustainability of their water footprint. This showed that water footprints of most of the beet growing areas we analysed have very little impact on the local environment; however, it also identified 'hotspot' areas where we need to do more.

[www.thecoca-colacompany.com/citizenship/pdf/2011\\_europe-water-report.pdf](http://www.thecoca-colacompany.com/citizenship/pdf/2011_europe-water-report.pdf)



# ENERGY MANAGEMENT AND CLIMATE PROTECTION

Climate Change and greenhouse gas emissions remain important topics for business, politics and society. At just over eight million tonnes of carbon emissions for our European business, mainly coming from packaging and cooling, we feel that we are a small but visible contributor to the overall European emissions of 4.614 million tonnes of CO<sub>2</sub>e. But we want to set a good example.

We are achieving sustained absolute carbon reductions in our own operations in Europe, even though we are growing the business and we are working hard with our suppliers and customers to reduce our indirect emissions from packaging and cooling.

## OUR GLOBAL ENERGY AND CLIMATE COMMITMENTS

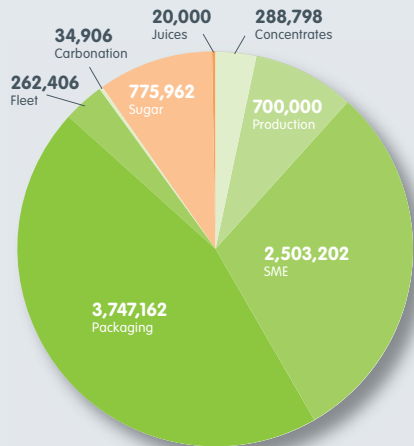
### Manufacturing

- To grow our business without growing our carbon. That means, in Europe, we will reduce the absolute carbon emissions in our manufacturing processes by 5% between 2004 and 2015.
- To improve energy efficiency in our plants by 20% by 2015, compared to 2004.

### Cooling

- To reduce the energy use of our new coolers by 40% by 2010, compared to 2000.
- To purchase all new cooling equipment free of Hydro-fluorocarbons (HFC) by 2015.

## The Greenhouse Gas Inventory 2010



We are a small but **visible** carbon contributor

## HOW ARE WE DOING IN EUROPE?

### Energy use

Greater efficiency in energy use is key to reducing carbon emissions. We are measuring it as Energy Use Ratio (energy used per unit of product). In 2010, we reduced our pan-European Energy Use Ratio to 0.4 megajoules per litre of product produced, a reduction of 12% since 2004. Our top three energy-efficient countries are France, the Netherlands and Italy.

### Growing the business, not the carbon

But energy efficiency is not enough to get carbon emissions down in absolute terms and to save about 300,000 tonnes of carbon between 2004 and 2015. That's why we are looking to low-carbon energy sources,

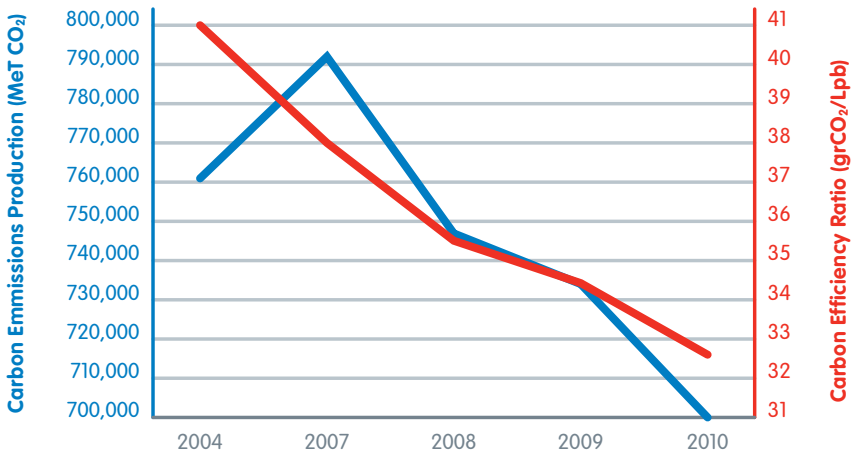
for example Combined Heat and Power (CHP), which utilises both the heat and electricity from burning natural gas.

In 2010, Coca-Cola Hellenic installed another two CHP plants in Europe bringing the total to four and saving over 20,000 tonnes of carbon annually. In total, we reduced our absolute carbon emissions by 8% between 2004 and 2010.

We could do more but as a business in a competitive environment, we need the right policy frameworks in place to further reduce carbon emissions. That's why The Coca-Cola Company, Coca-Cola Hellenic and Coca-Cola Enterprises have signed the 'EU Business Call for -30% Carbon Reduction' target in summer 2011 of the Climate Group, the Cambridge Programme for Sustainability Leadership and WWF Climate Savers. [www.theclimategroup.org/](http://www.theclimategroup.org/)  
EU-30-per-cent-initiative

In total, we reduced our **absolute** carbon emissions by 8% between 2004 and 2010

### Carbon in manufacturing





### Efficient and natural cooling

People love our products chilled and refreshing, so we offer them in more than two million coolers across Europe. Those machines have environmental impacts from energy use and HFC refrigerant gases. HFCs are used in very small volumes and they rarely leak, but if they do, they have a global warming impact 1,430 times greater than carbon dioxide.

Alternative refrigerants are available for household fridges, but not yet for commercial uses, and so we have been working with Greenpeace and our suppliers to find and test natural refrigerants for our coolers. In 2009, we committed to only purchasing HFC-free coolers after 2015. In Europe, over half of our new coolers purchased were HFC-free in 2010.

Energy efficiency of coolers is another important topic for us and our customers. We are fitting them with more efficient compressors, insulation, lights and Energy Management Devices (EMDs). The EMDs contain an intelligent software that recognises when the cooler is in use and switches it on for the minimum length of time needed. In 2010, we combined all these activities and launched an Energy Rating System for our coolers (MEC), which requires every new cooler model we buy to be 40% more energy efficient compared to a similar model in 2000.

### ECO-INFORMATION

Reducing our own production-related emissions is a well-established business strategy. How to provide environmental product information to consumers to encourage more sustainable consumption behaviour is a trickier question.

On one side, we want to be transparent about the environmental footprints of our products and we understand consumers want to know more. On the other side, we realise the challenges around changing consumption behaviour and the immense complexities to account for environmental footprints on a product-level in a comparable way.

We know that all this needs to be simplified to not overwhelm consumers. We haven't got the answer yet, but we have started to push more consumer-friendly and consumer-relevant information, for example in Belgium with the 'Plant a Flower' campaign in 2010 ([www.cocacolabelgium.be/cocacolaquiz](http://www.cocacolabelgium.be/cocacolaquiz)) or with the 'Coke acts' in Belgium and the Netherlands (e.g. [www.traceyourcoke.nl](http://www.traceyourcoke.nl)), as well as in the UK and France in 2011 (e.g. [www.coca-cola.co.uk/environment](http://www.coca-cola.co.uk/environment)). We also continue our consumer activations on recycling with consumers, for example in the UK ([www.recycle-zone.co.uk](http://www.recycle-zone.co.uk)).





# SUSTAINABLE PACKAGING

Packaging is essential to our business and our products. Without it we could not supply people with drinks. It contributes to convenience, safety, practicality and hygiene. And, of course, it should look good too, with our contour bottle having iconic status. But we know that making packaging requires raw materials, energy and water. It is the biggest contributor to our carbon footprint.

The disposal of used packaging can also have impacts if it is land filled or ends as litter in the environment. All these environmental impacts can be substantially reduced through our own actions, with the help of consumers and by working collaboratively and imaginatively with others. Ultimately, we would like to achieve 'zero waste'.

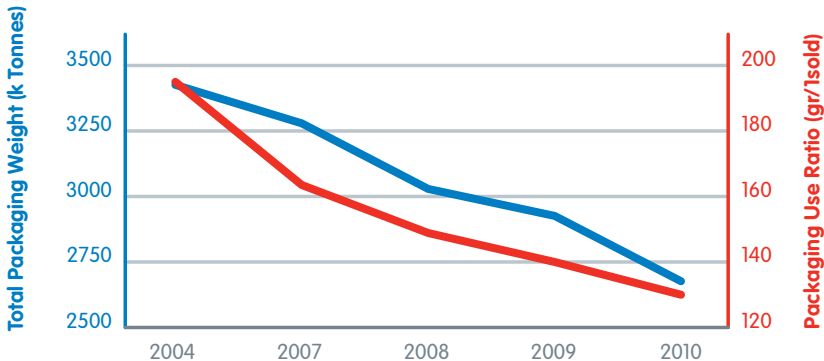
## WHAT ARE OUR SUSTAINABLE PACKAGING COMMITMENTS\* IN EUROPE?

- **Reduce.** To develop stronger and lighter packaging. We will make a 25% reduction in the weight of packaging required for each litre of beverage between 2004 and 2012.
- **Recover.** Further increase the recovery of our packaging. The recovery rate for our packaging (cans, glass, bottles) has been around 66% in 2010.
- **Recycle.** To use more recycled content in our main packaging materials. By 2012, we aim to increase our use of recycled PET (rPET) to 25% across Europe.
- **Renew.** Using renewable and recycled resources for packaging is the future. By 2020, our aim is that all plastic bottles will be made from a combination of plant-based materials and recycled PET plastic.

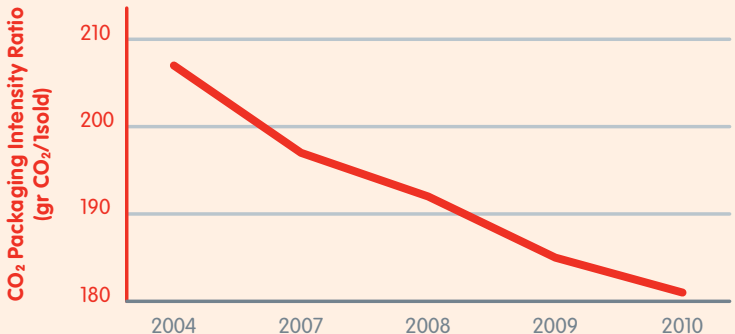


\*These are our European commitments, which better reflect the development of packaging recovery and recycling in the EU.

### Packaging weight



### Packaging carbon



Ultimately, we would like to achieve 'zero waste'

## HOW ARE WE DOING IN EUROPE?

### Lighter packaging

Making packaging lighter means to use less resources and energy to produce it. There is still room to do more and technology is always evolving to help us take more material out of our existing packs as long as it still does the job and is recyclable.

Our aim is to increase overall packaging efficiency by 25% by 2012, which we measure in Packaging Use ratio (PUR). Between 2004 and 2010, we already improved our PUR by 33% and reduced our total packaging weight by 7,340 tonnes.

The other benefit of using less packaging is that it reduces carbon emissions. Between 2004 and 2010, we reduced the carbon emissions from packaging per litre of product by 13%.

**We have  
reduced  
our total  
packaging weight**

### Increasing the recovery of our packaging

Recovering our bottles and cans from consumers, for recycling, re-use, refilling or energy recovery delivers significant environmental benefits.

In 2010, 66% of the bottles and cans we put on the European market were recycled or refilled.

We are making strenuous efforts to reduce landfill and litter. For the remaining packaging not captured by the current recovery systems, our priority is to work together with other industries and with local and national governments to put cost-efficient infrastructure in place and to engage consumers to sort their waste and dispose of packaging correctly.



### Increase recycling

Our packaging in Europe includes around 42% of recycled glass and 51% of recycled aluminium. This saves resources and energy, and helps to create new and stronger incentives for recycling. The increasing use of plastic (PET) bottles means that bottle-to-bottle recycling, to produce recycled PET, is a key focus for our efforts.

Achieving 25% recycled PET content across our European business would avoid the use of 100,000 tonnes of new plastic. This would save resources and oil and would also have a substantial climate change benefit because the carbon footprint of recycled PET is 84% less than conventional PET.

However, there are substantial challenges in reaching this goal next year. We face a shortage of sufficient quantity of post-consumer PET material, which is fit for food-grade recycling. Due to the massive demand for plastic from emerging markets for simpler applications such as sheet, the costs of these materials have also risen beyond economically sustainable levels. Increasing mixed collection of household waste also reduces the quality of the material and further reduces the amount available for bottle-to-bottle recycling.

We are working with recyclers, suppliers, other industry and regulators to find solutions for more post-consumer PET recycling in the EU and make more material available for high-quality applications such as our bottles.

### Using renewable resources

One of the biggest challenges to achieve sustainable packaging is to develop renewable alternatives to fossil resources, for example petroleum. Since 2009, we have been rolling out our innovative PlantBottle™ packaging, a fully recyclable plastic bottle that is partially made from plants and recycled material.

In Europe, we are proud that Denmark was the first to launch this new bottle worldwide and has since been followed by Sweden, Norway, Belgium, the Netherlands, Luxembourg, Great Britain, France and Germany in 2010 and 2011. Globally, we will put more than five billion bottles in the market by the end 2011, including half a billion PlantBottles™ in Europe.

We currently use bioethanol from sugarcane but we are researching alternative plant materials, such as barks, stems and peels.



Another key project is to make all the elements of PET from plants for a 100% renewable bottle. Our vision is to create a carbon neutral, fully recyclable bottle that is made from renewable and recycled material.



**Ultimately, our goal is to develop recyclable plastic bottles made from plant-based waste – there by turning waste into a resource**



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