



FrieslandCampina n.v.  
nourishing by nature

**Roelof Joosten**  
**COO Ingredients**  
**Royal FrieslandCampina N.V.**



# Last Monday in the Netherlands...



# On our way to climate neutral growth

## More renewable energy for FrieslandCampina Borculo

Borculo, the Netherlands - For the new development at its Borculo production site, FrieslandCampina has opted for **biomass-based energy**, taking a new step towards climate-neutral growth. By using brand-new technology, which involves heating without oxygen **(pyrolysis)**, an oil is produced from renewable biomass with very low carbon emissions. FrieslandCampina will be sourcing this energy exclusively for all of the production site in Borculo.

As a result of using this fuel, the immediate carbon emissions for the entire Borculo site – one of the group’s larger dairy factories – will be reduced by 15 percent. **This will generate a substantial saving on fossil fuels (10 million m<sup>3</sup> natural gas and 16,000 tonnes of carbon reduction**, which corresponds with the carbon emissions of nearly 2,000 households annually in The Netherlands).

But, there is more....

100% green electricity  
for all 35 factories in  
the Netherlands –

50% coming from our  
own dairy farms  
(biomass/manure, solar,  
wind)



## But, there is more...

- Hybrid barges to transport dairy (oil & electricity)
- LNG for milk collection trucks (will become biogas)  
Solar powered engines for pumping milk
- Manure fermentation potentially a source of 'circular' dairy farming and processing sector.  
It converts waste into green gas to power plants and fuel trucks, into recycled minerals (phosphates) and into a fertilizer replacer



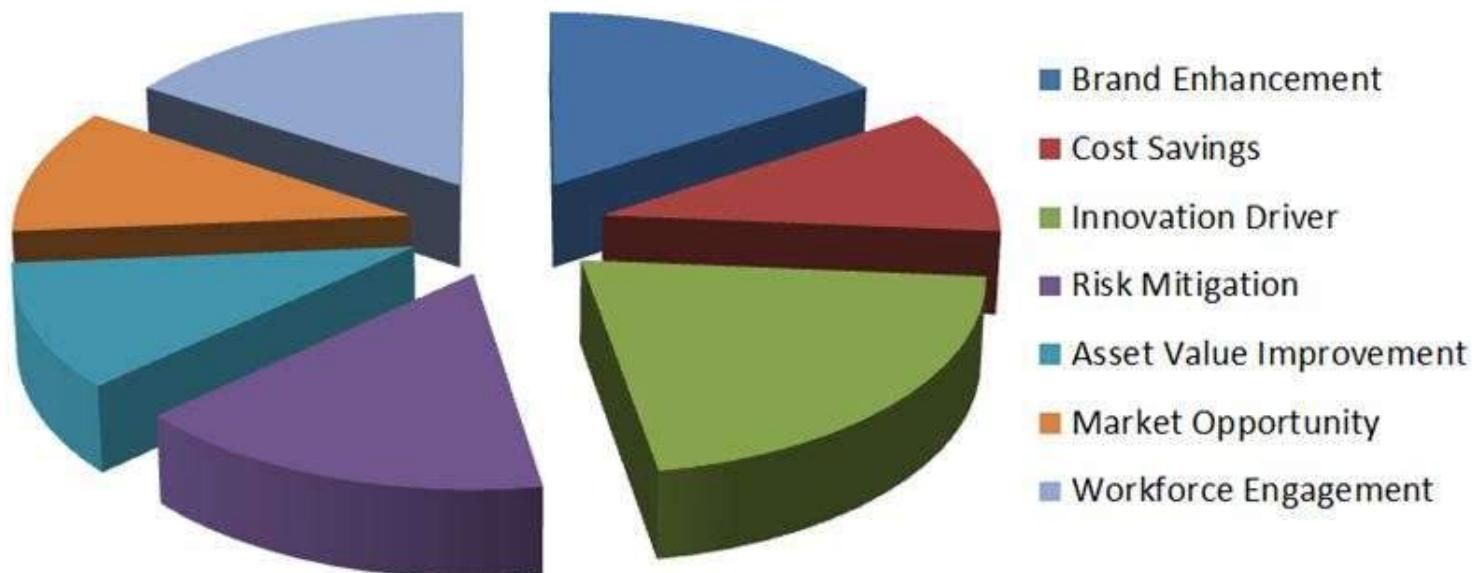
April 30, 2015

## FrieslandCampina and Elopak are setting the standard with new bio-based milk carton

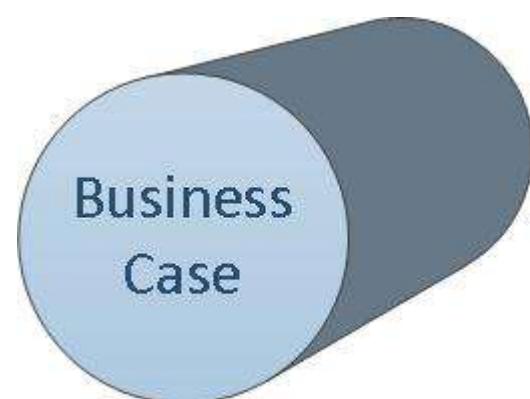
FrieslandCampina plans to introduce a new bio-based beverage carton over the next 1.5 years, starting with fresh milk and buttermilk from Campina in June 2015. For the production of the cap and the coating certified organic waste material is purchased. The paper in the carton was already renewable and this innovation makes it the most sustainable beverage carton ever. **The CO<sub>2</sub> footprint of this bio-based milk carton is 20% lower than the current carton.** This is a novelty on the Dutch market. The introduction of this bio-based carton fits perfectly within the movement to a circular economy, where the raw material of the carton is completely renewable (certified organic residue).



# 'The business case of sustainability' IS driving innovation & customer value



**The Business Case Seven.** The fundamental elements don't change, but their relative importance does depending on industry and stage of organizational development.



# Our purpose 'Nourishing by Nature': wrapping it all up...



Food & nutrient security for consumers - today & tomorrow

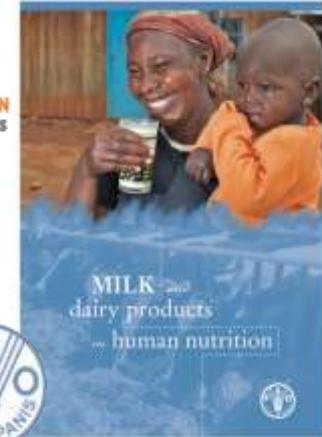
Farmers livelihood

Climate smart production, zero waste

Closing loops, circular economy

Trusted, tasty, safe, affordable and high-quality dairy nutrition

Milk, by nature, contains essential nutrients proteins, vitamins & minerals to stay healthy



Limiting the growing pressure on natural resources, raw materials & biodiversity. We go for climate neutral growth



Securing long-term customer value in our supply chain from 'grass to glass'

