

# What is New in Sugar? Current & Future Challenges



**FDF**

**BCCC Sector  
Group**

**Annual Conference**

**19 March 2010**

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# Where do the Challenges come from?

- Customers/Consumers
- Political/legislative
- Technical
- Environmental
- Company
  - Increased shareholder value!!



# Customers & Consumers

- Food safety & quality paramount
- HACCP
- 'Free from'
- Allergens
- Health concerns - obesity
- Reformulation
- Clean label - Natural
- Removing complexity – 'part processed'

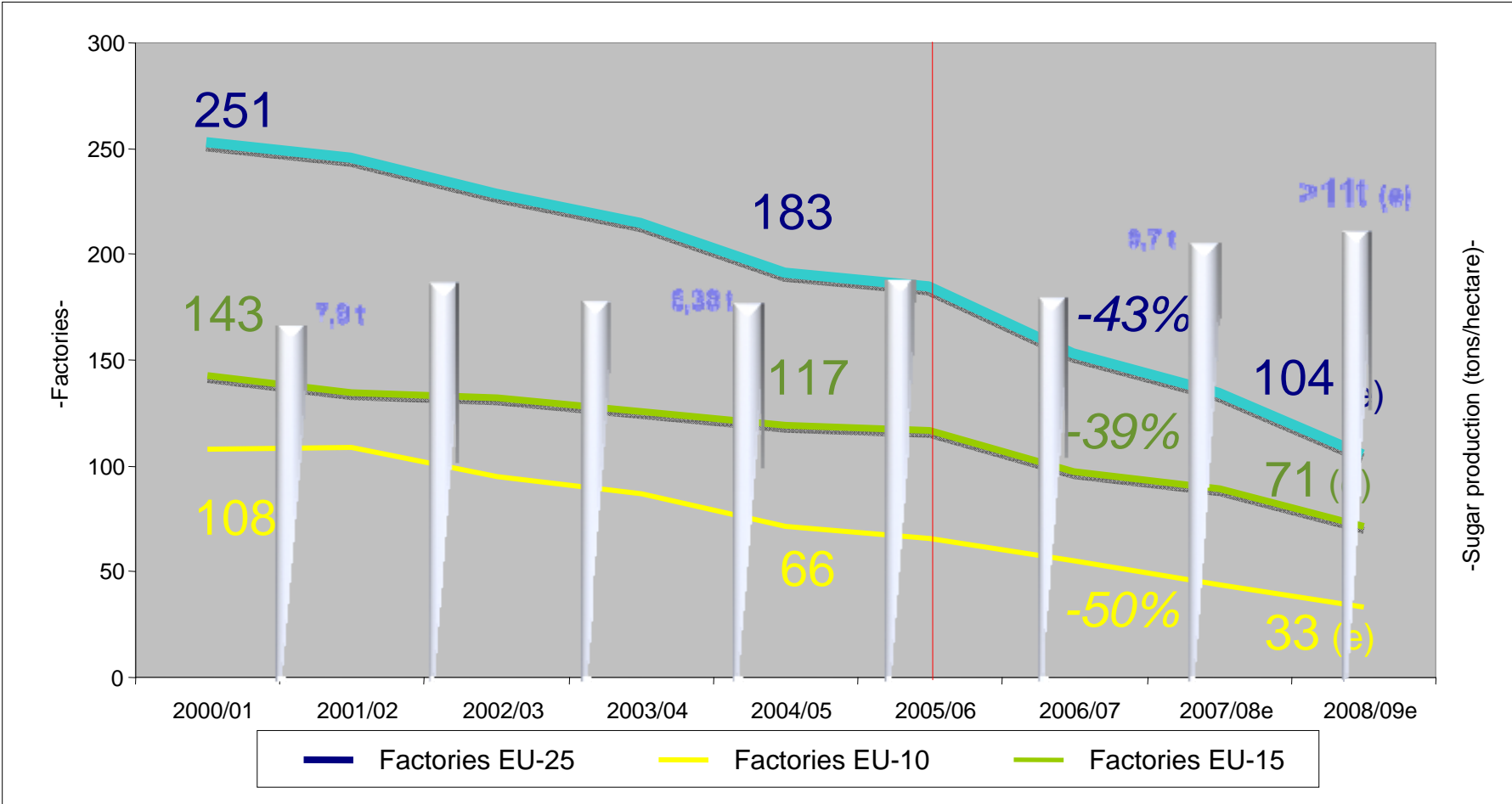
# Political/Legislative

- Food information proposal
- Nutrition & Health claims
- Natural
- Reformulation
- Regime Change
- Supply & cost
- World vs EU

# Sugar Regime Change

- Changes to EU sugar supply started 06/07
- Commission aim – reduce EU quotas by 5 Mt
- Reference price change
  - 06/07 €632/t; 09/10 €404/t – 36% reduction
- Similar reduction in beet price
- Major reduction in sugar factories & countries growing/processing beet
- Change from a net exporter to net importer
- More volatile – World price vs EU price for sugar

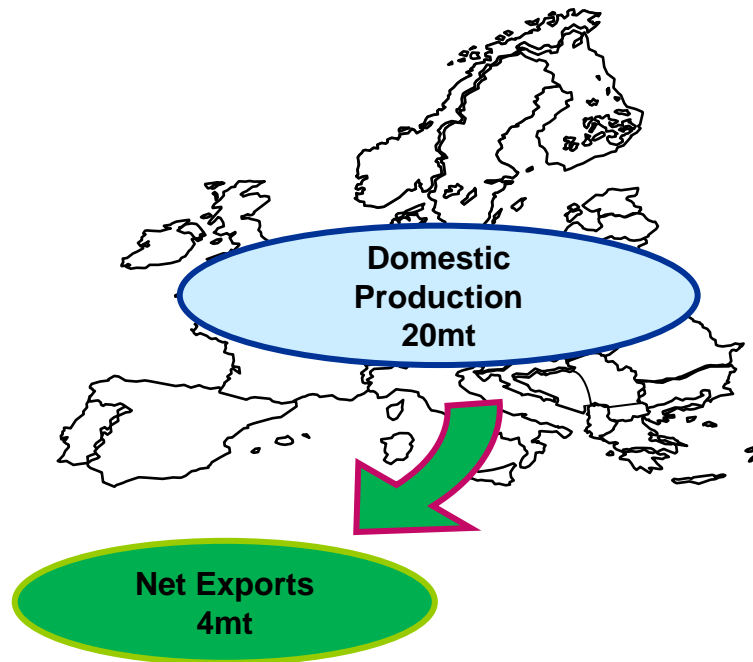
# Factory reductions – yield increases



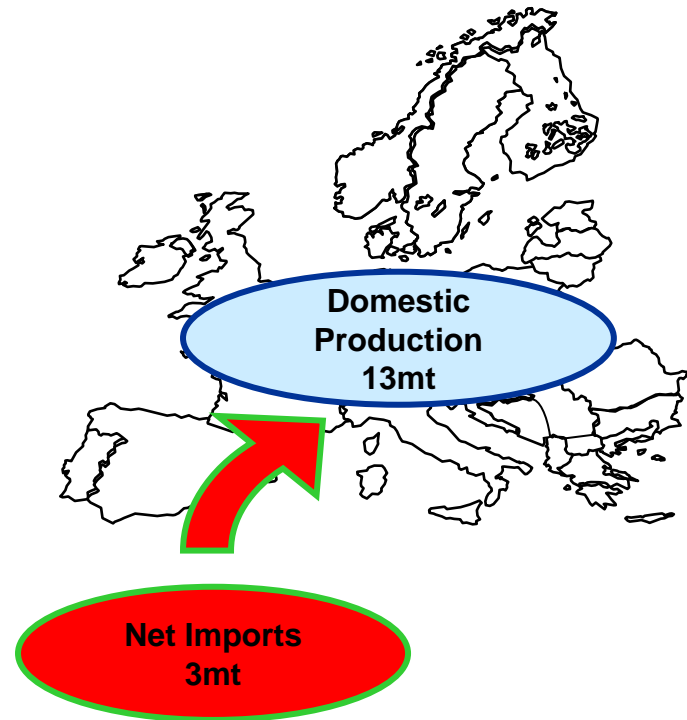
Source: CEFS statistics. 2008/09 values are shown as estimates “(e)”.

# Exporter to Importer

Pre- Reform (2005)



Post-Reform (2010)



# World Sugar price

White Sugar price (\$/t )



# Technical

- Particle size control
- Additional functionality
  - Freeze thaw stability
  - Close wrap
- Clean label
- Reformulation
- Removing process steps

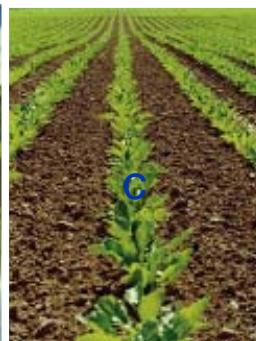
# Environmental

- Crop husbandry
- Supply Chain
- Carbon Footprint
- Energy
- Sustainable

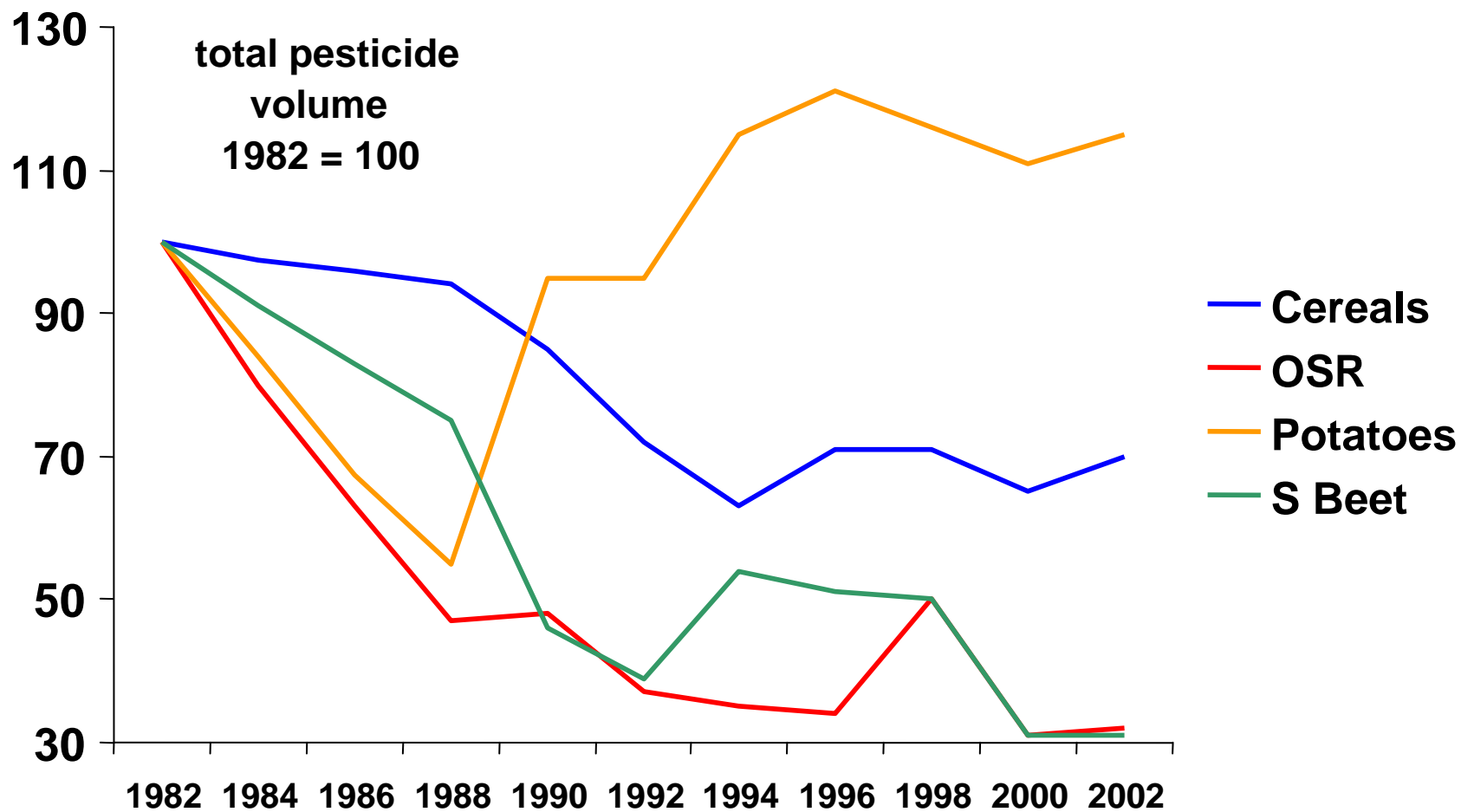
# Growing with British Sugar



- Partnership approach
  - Target 70 Yield initiative
  - Adding value – online beet campaign management
  - Grower collect scheme for topsoil or soil conditioners
- Beet-sampling programme
  - 30% reduction in usage of nitrogen fertiliser since 1980
  - Seed treatment technology reduces pesticide applications
- Programme of cover crops reducing crop erosion to <math><1\%</math>



# Pesticide Usage - All Pesticides



Source: MAFF Pesticide Usage Survey

# Bringing transparency to our supply chain

- Quality is key in all of our products
  - Promoting and celebrating best practice
  - Red Tractor Farm Assurance
  - £12m investment in new Wissington Distribution Centre
- Ethical Concerns
  - Membership of Sedex



# Carbon footprint of our granulated sugar

The detailed supply chain GHG assessment took British Sugar over 6 months to complete, with the assistance of the Carbon Trust and underlines an ongoing commitment by British Sugar to carbon reduction.

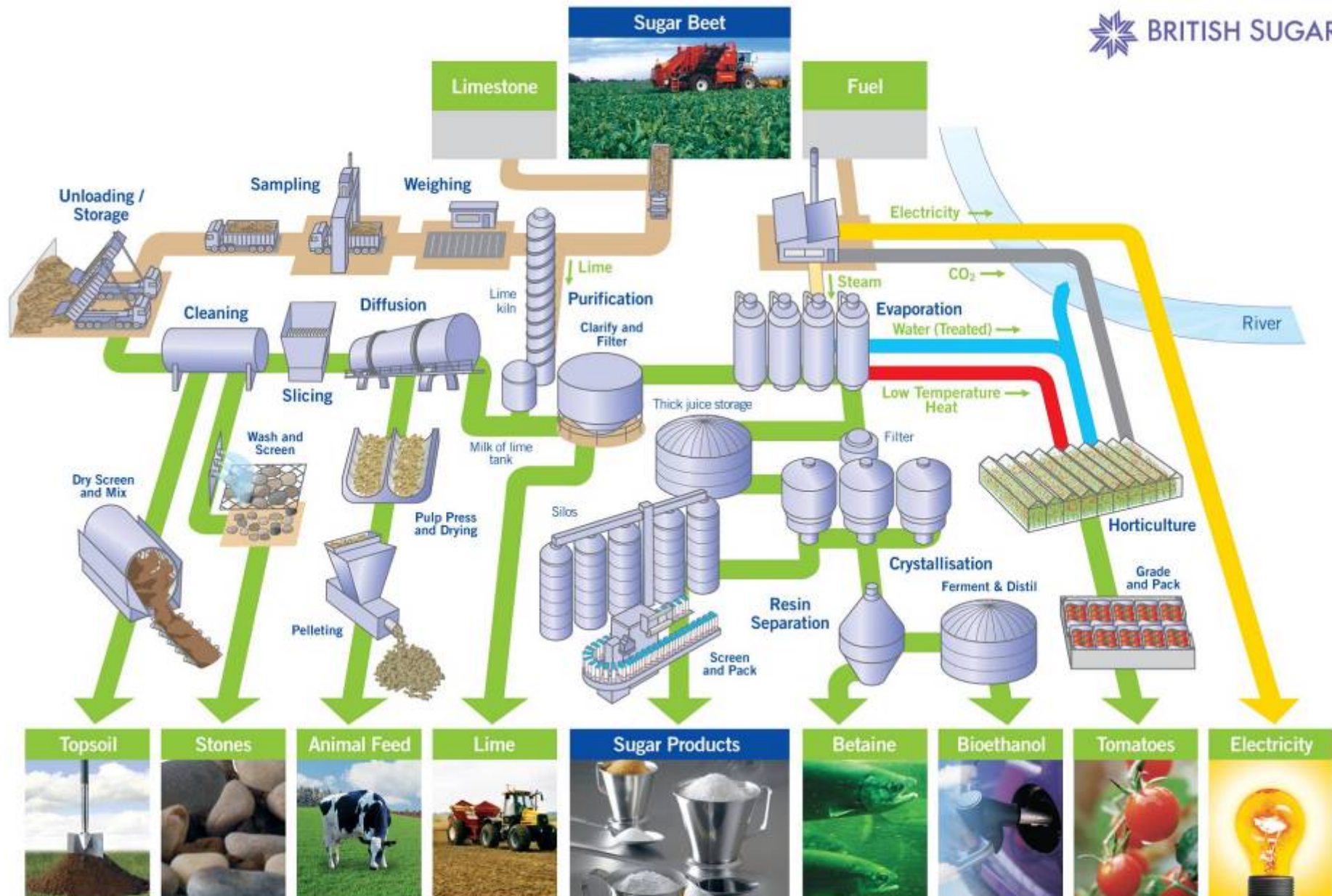
- Using the new method, British Sugar's homegrown granulated white sugar was assessed to produce 0.6 grams of CO<sub>2</sub> equivalent per gram of product.
- In order to calculate the carbon footprint of our granulated sugar, we have completed a detailed assessment of each stage of our 'total supply chain', using the new PAS 2050 methodology.
- British Sugar's low carbon footprint for granulated sugar reflects a focus over many years of improving our energy efficiency.



# Process efficiency through innovation

- Most efficient sugar manufacturer in Europe
  - Invested ~£1 billion in new & emerging technologies
- Embraced combined heat & power (CHP)
  - Sell over 100 MW electricity to grid which powers local homes
  - Reduced energy requirements pt/sugar by 40%
  - Emissions therefore drastically reduced.
- Water usage
  - transport, heat recovery, recycling
- Emissions recovery and recycling
  - Biogas (Methane) fuels boilers
  - CO2 utilised





**We transform all of our raw materials into sustainable products.**

# The Future – Challenges or Opportunities?

- Reformulation – more reductions
- Labelling – more Information
- Supply & cost – more volatile!
- Sustainable – more far reaching
- Energy – further reductions
- Waste – further reductions
- IT WILL CHANGE!!

# Acknowledgements

- Comite Europeen des Fabricants de Sucre (CEFS)
  - European sugar statistics
- Colleagues at British Sugar
  - Sustainability
  - Environmental
  - Agricultural

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**Thank you for your attention**

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