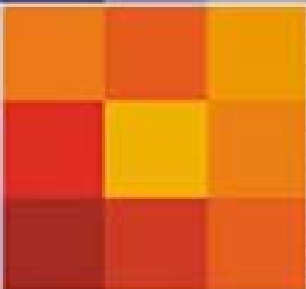




FOSTER'S
GROUP

Impact of Climate Change Challenges for the wine industry



Paul Petrie
National Viticulturist
Fosters Group
May 2009

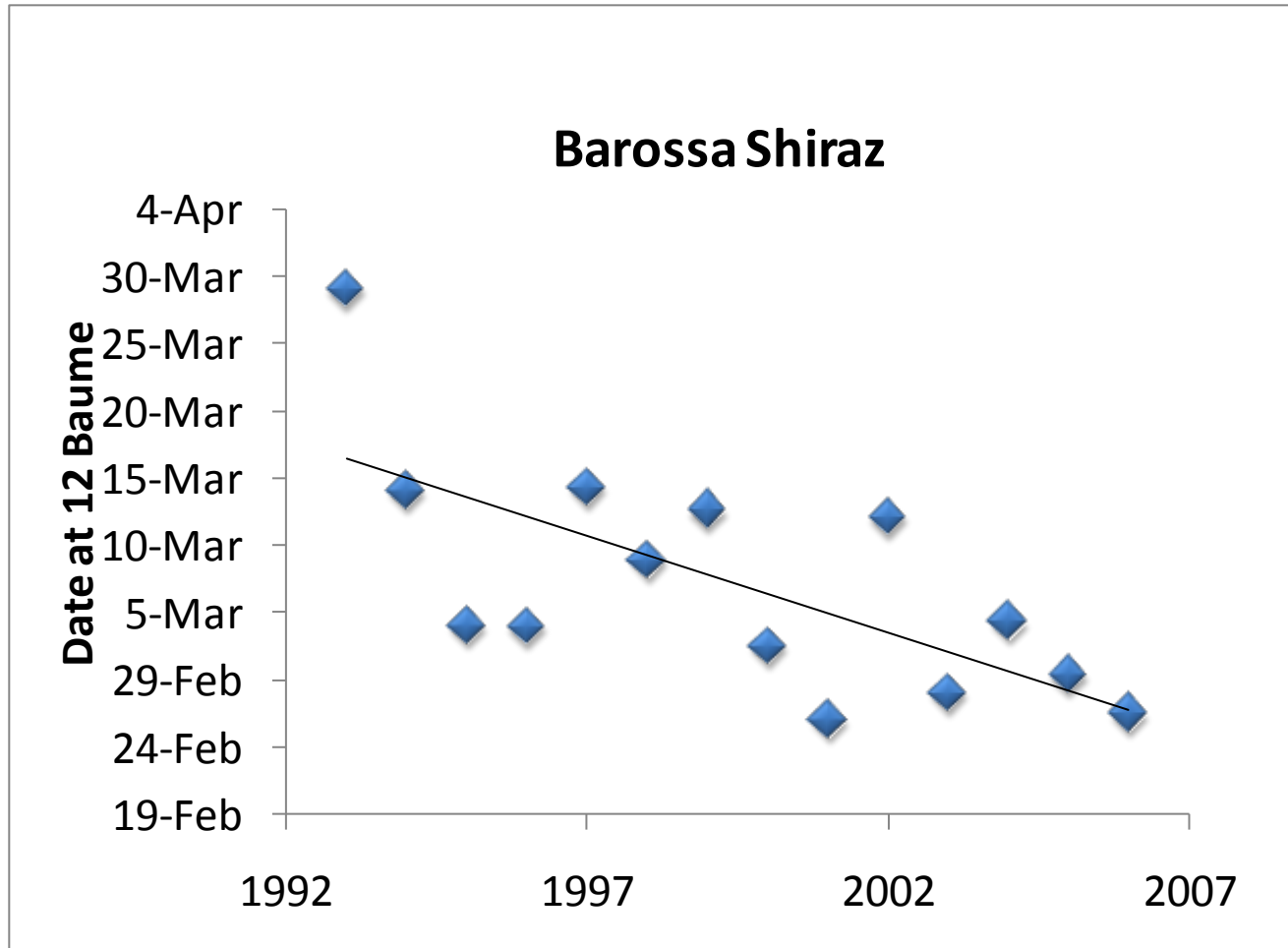
Foster's



Overview

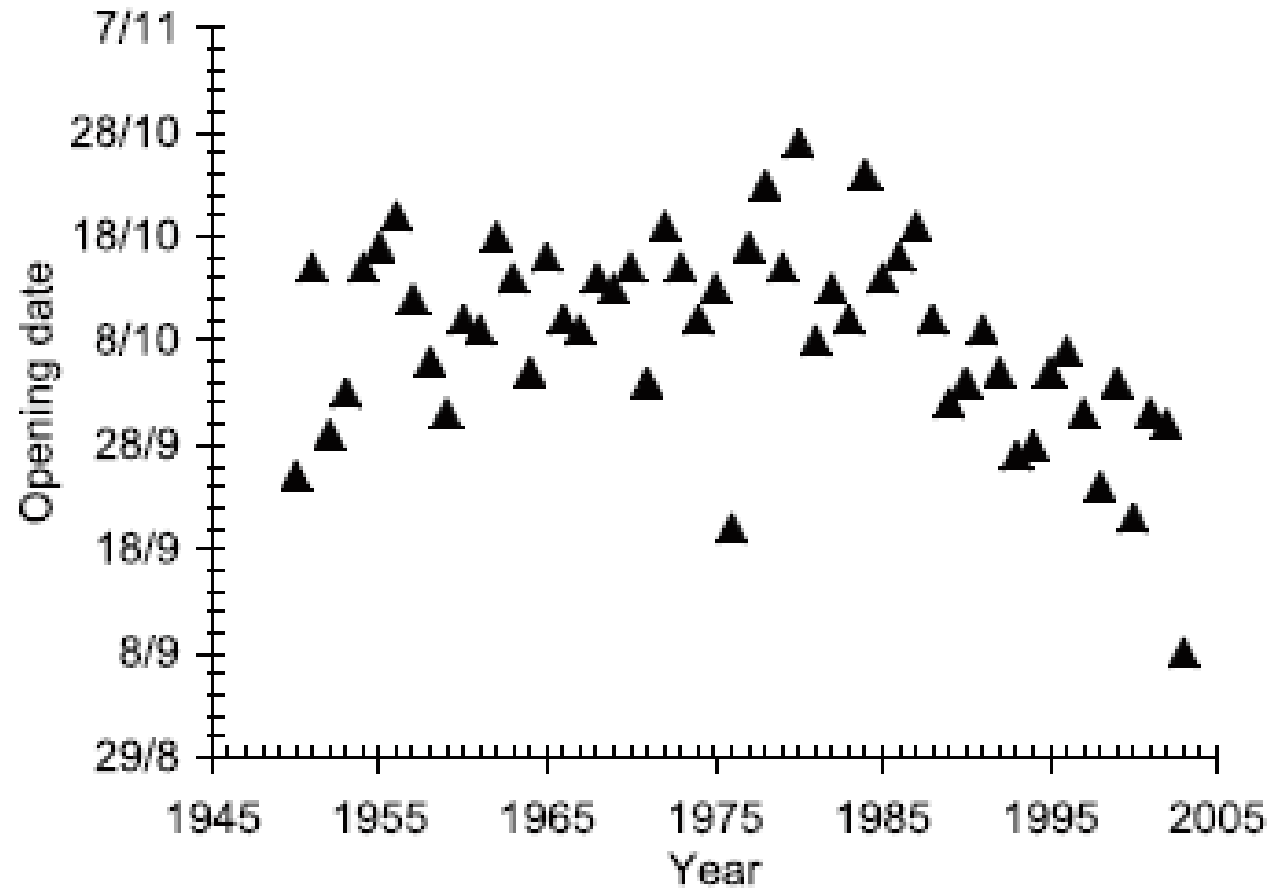
- Climate Change
- Why is Foster's Concerned ?
- How Are We Responding ?
- Wine focus

What are the vines telling us?



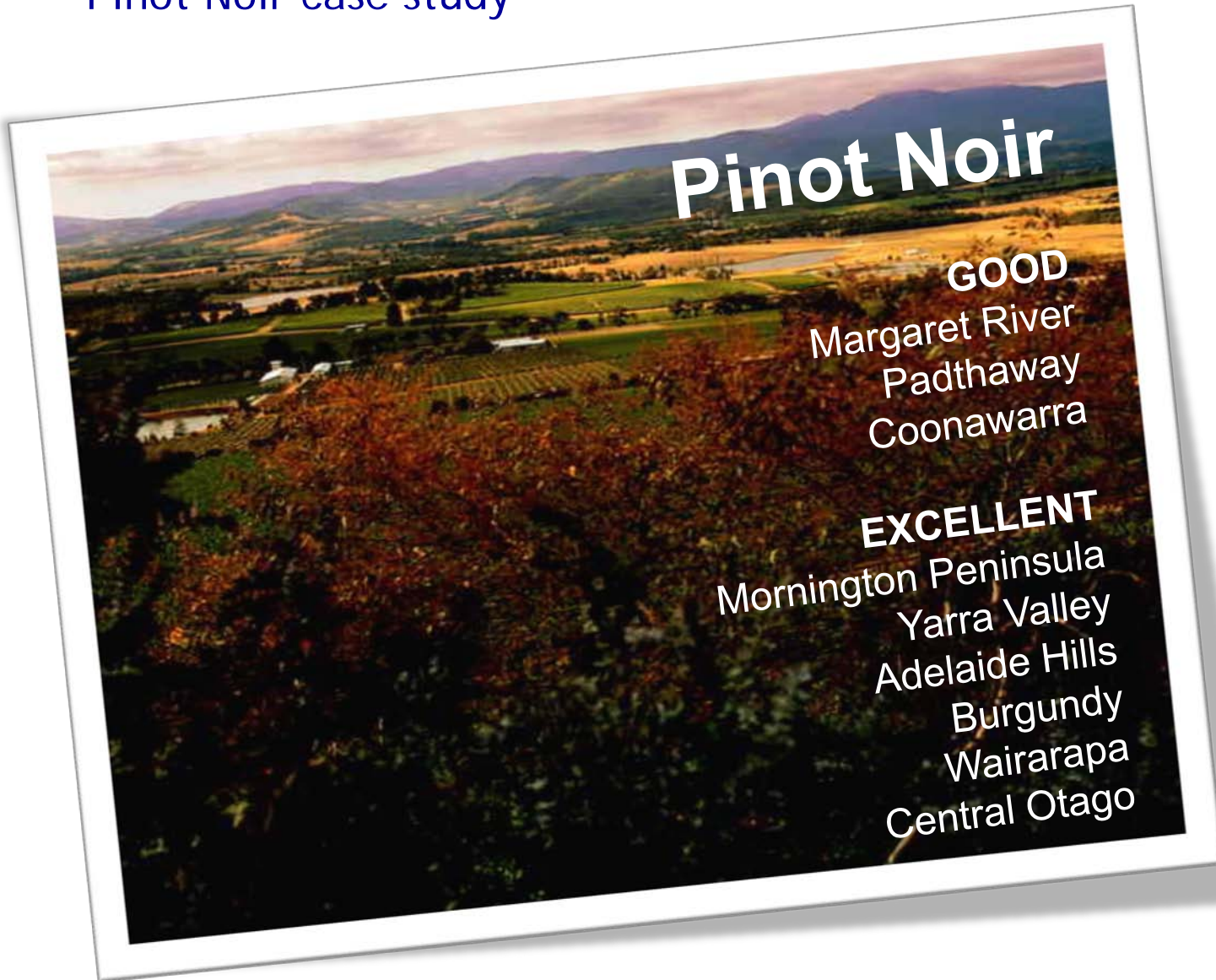
And elsewhere in the world...

Vintage opening dates for Alsace (Riesling)

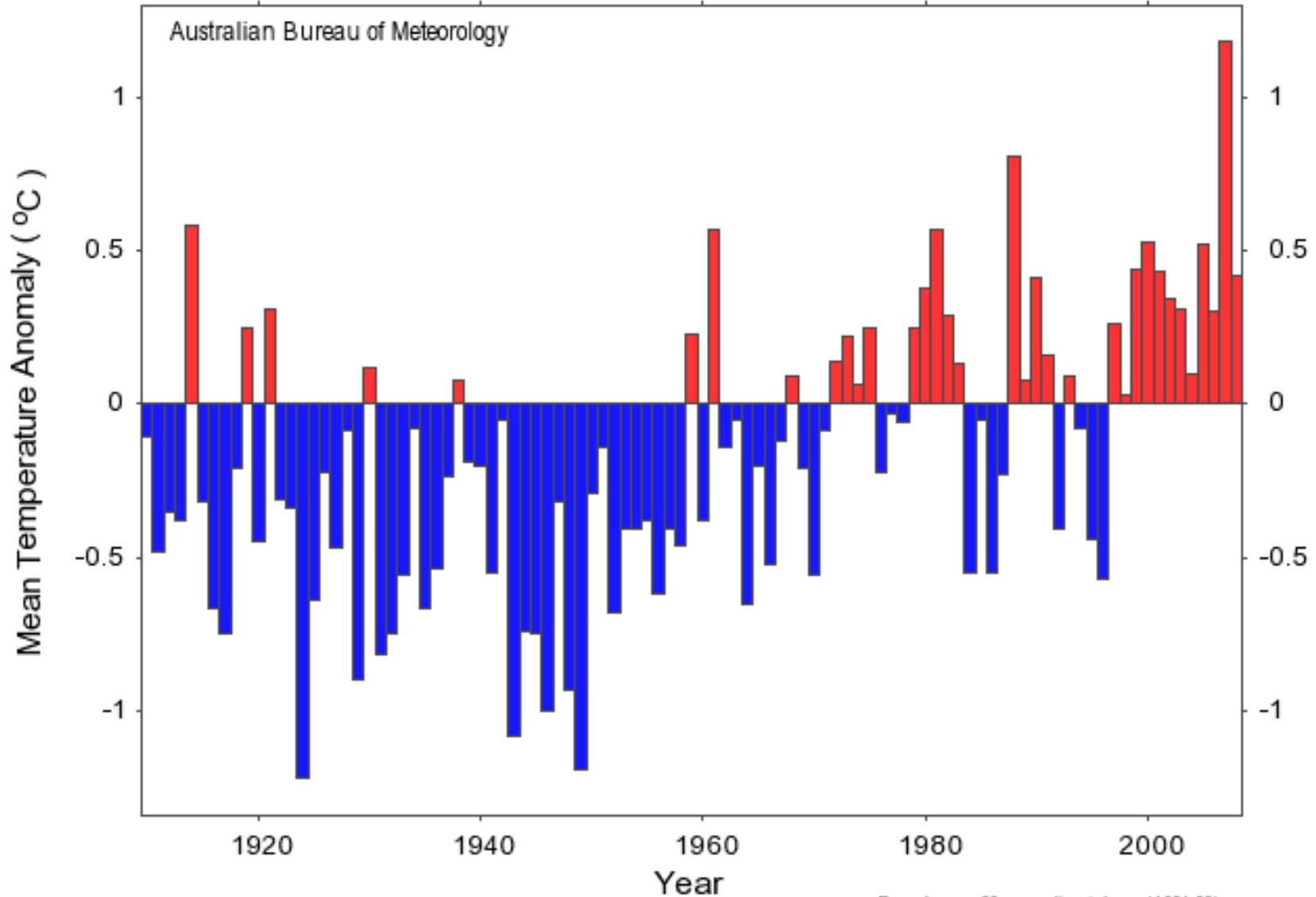


How will climate change impact on quality?

Pinot Noir case study

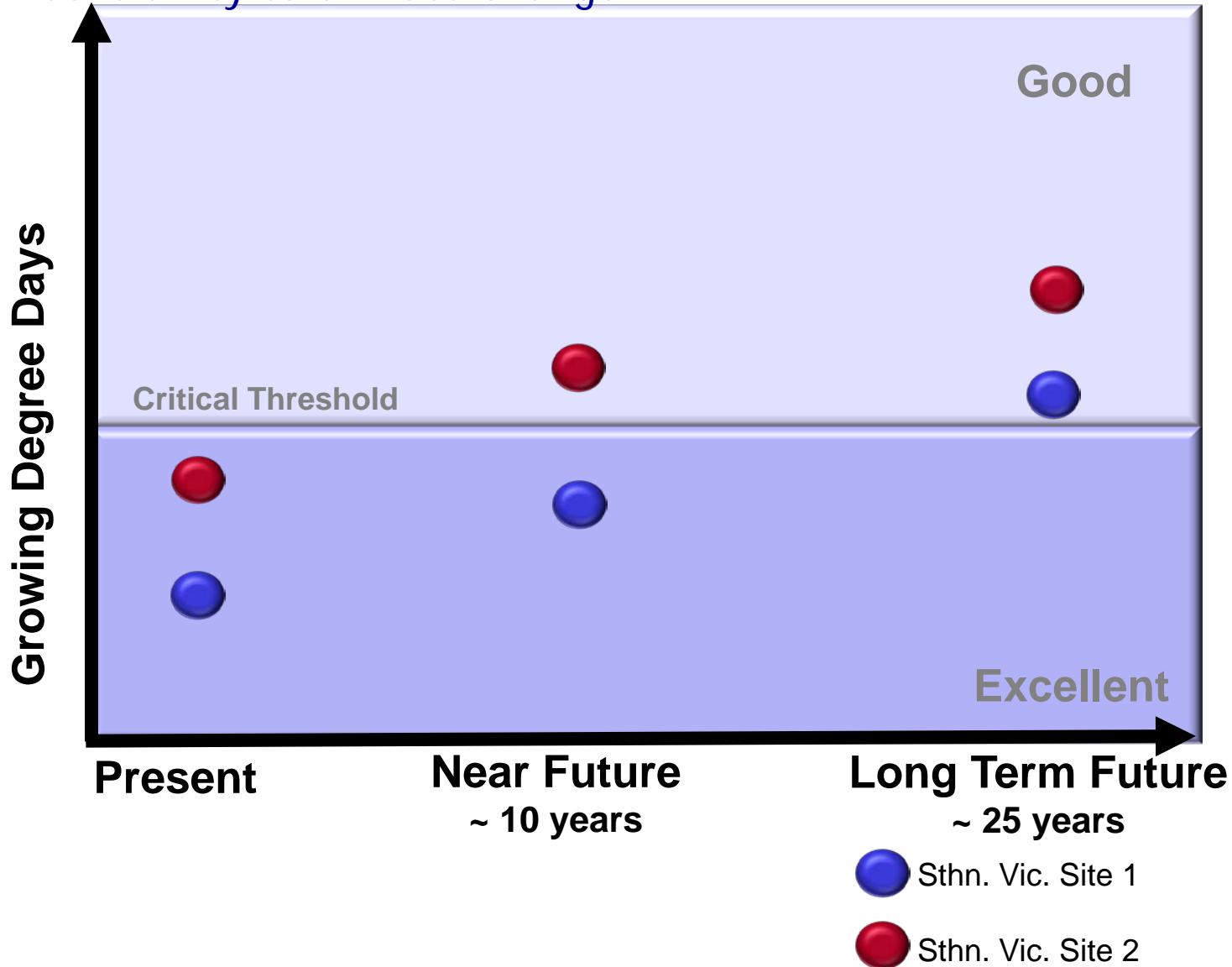


Temperatures trends for Victoria



Pinot Noir

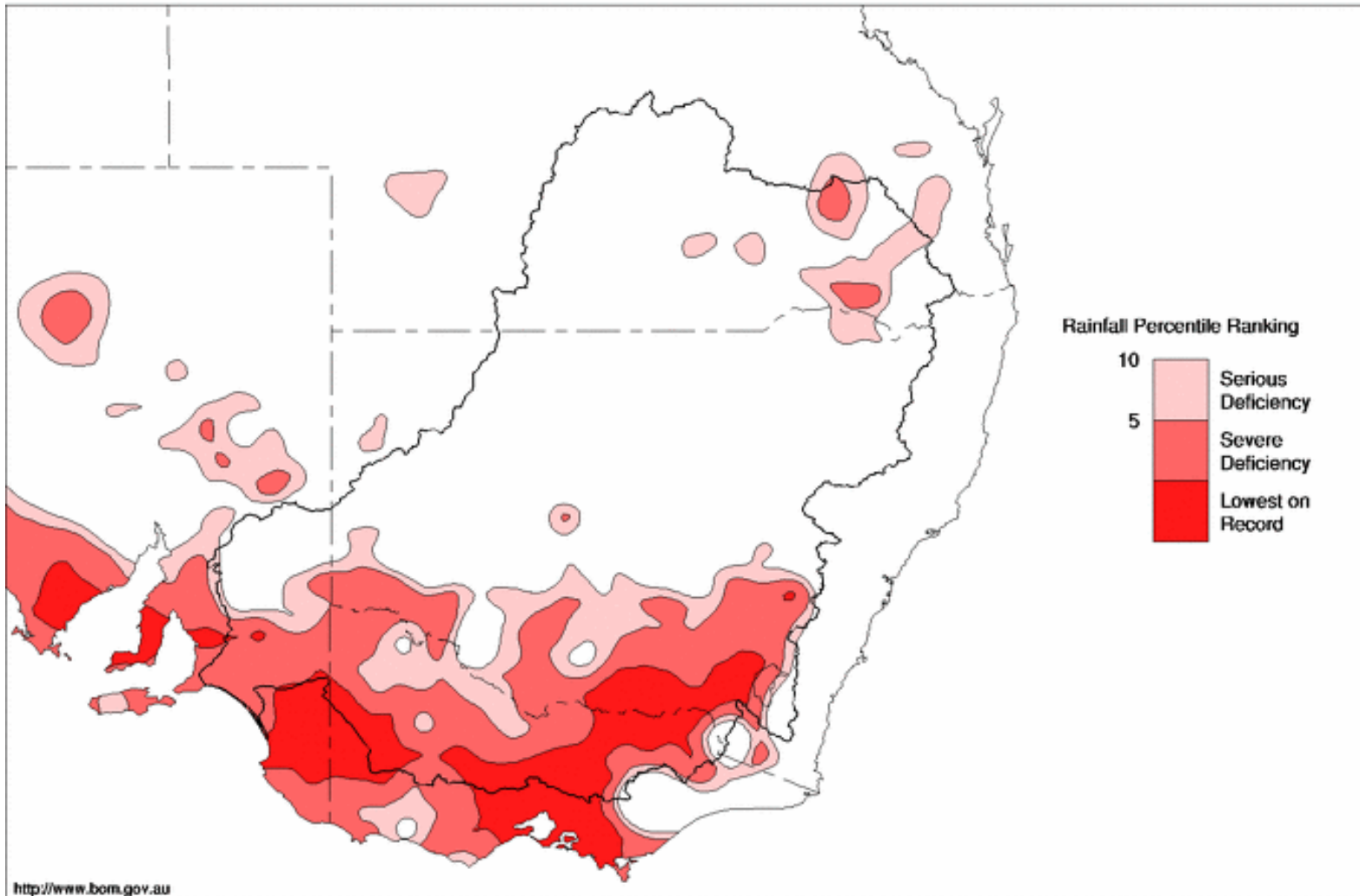
Sensitivity to climate change



Reduced water availability

Murray Darling Rainfall Deficiencies 1 April 2006 to 31 March 2009

Distribution Based on Gridded Data
Product of the National Climate Centre



Conversion to more efficient irrigation

- Converted 700 ha in South Eastern South-Australia from flood and overhead to drip
- Water usage reduced from 5 ML/ha to 2.2 ML/ha



Water conservation - lining and lidding dams



Frost protection

Change to low volume sprinklers saved 350 ML water



Langhorne Creek Pipeline



Using reclaimed water



Cleaner Production in Wineries

Waste water as a resource



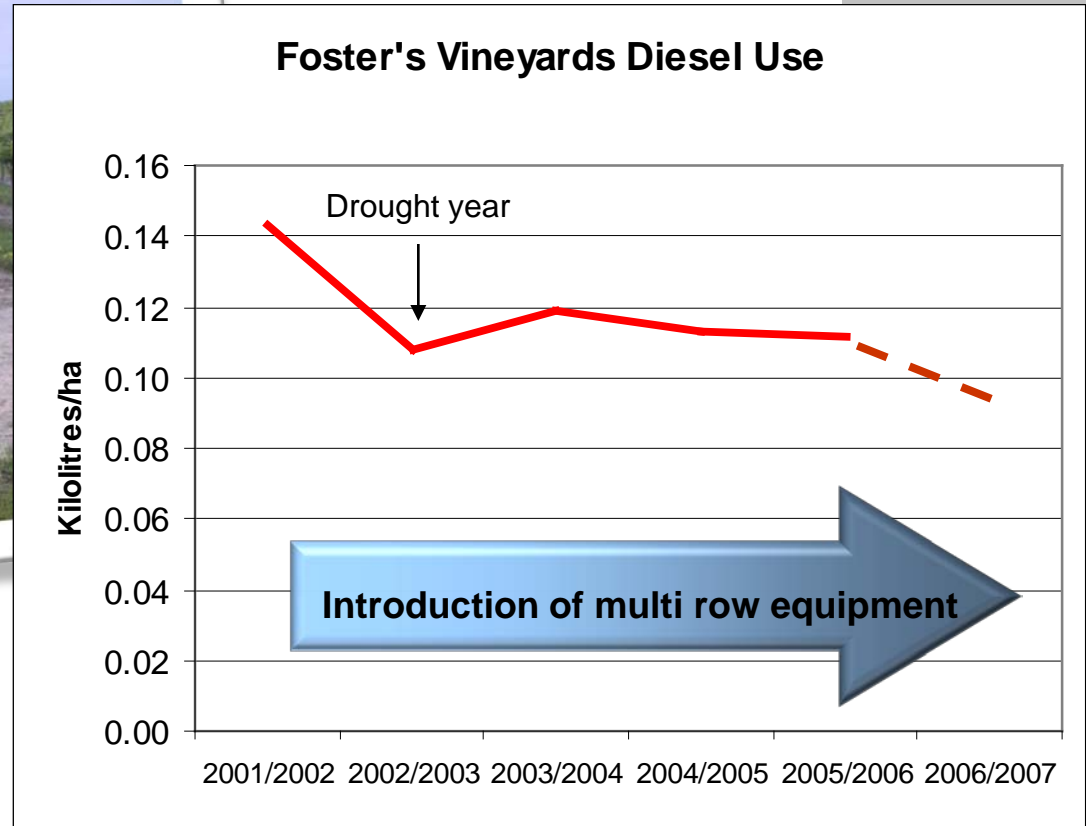
Increased
Small Volume
Lees Recovery

Increased
Fruit Capture



Water
Conservation

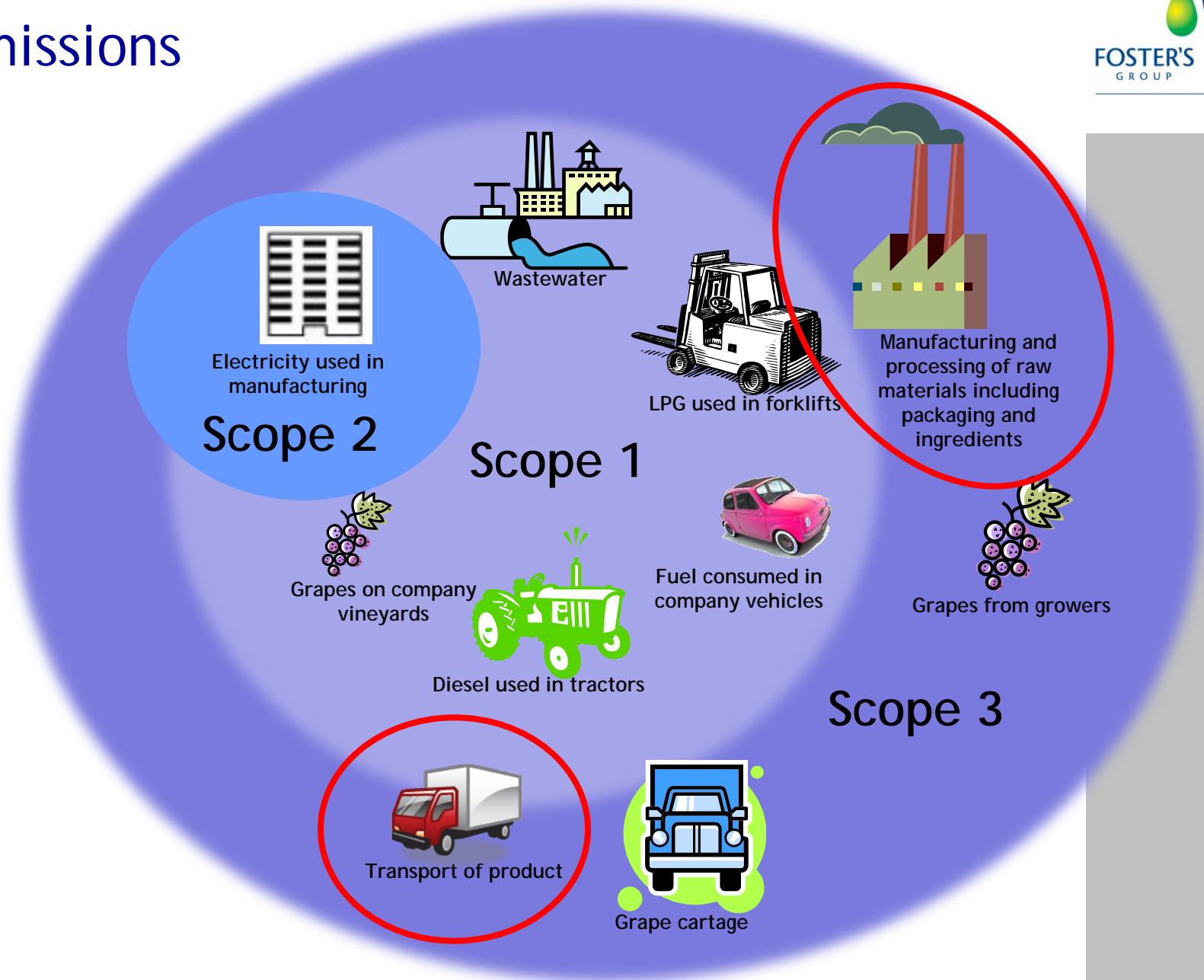
Reduce emissions



What is a carbon footprint?

- Measure of impact of human activities on the environment
- Life Cycle Assessment (LCA)
- Expressed as CO₂ equivalents (kg or T)

Emissions



Green Label

- Plastic bottle
- 36% Lighter in Weight
- 29% Less Greenhouse Gas Emissions



Conclusion

- An agricultural business
 - Vulnerable to Climate Change
- Learning more
 - Vine responses
 - Carbon footprint
- Adapt and manage risks
 - Reduced water use
- Mitigate – reduce emissions
 - Plastic bottles

Thankyou

- Grape and Wine Sustainability
 - Gioia Small
 - Suzanne Mcloughlin
 - Rohan Wighton
 - Julie Rogers
 - Allen Hart