



# “Being an Entrepreneur”





## Why be an entrepreneur?

- great business idea bursting to be exploited
- desire for control over your own destiny
- because you think you would be good at it
- to create wealth

## Why not to do it

- to fund your own research



## Work out your own role

- The business will need a full-time entrepreneur/manager- is that you?
  - this role cannot be part-time
- or are you the scientific innovator?
  - the Research Director can be part-time
- Find a business partner you can trust
  - long term colleague?
  - research student & supervisor model?



## What Investors Look For

- a large market
- business with a clear competitive advantage
- high quality, value added product or service unique enough to command a premium price
- superior management with a demonstrated desire to act in shareholder's interest
- high growth rate potential
- strong IP
- high profitability potential



## PowderJect Seed & First Round Funding

- Seed investment ~£80k
- Income from corporate partners ~ £1.0m
- Research Grants ~ £70k
- Lloyd's Bank overdraft ~£150k
- 1st round venture capital November 1995
  - CWB Capital Partners
  - £2.0m for 15%
  - valued company at £13m



## Business Common-sense

- take reasonable risks
- maintain flexibility to bolt-off costs
  - short term facilities
  - rent rather than buy
- avoid “all or nothing” strategies
- start small, make mistakes you can survive
- aim to build a company strong enough to withstand the inevitable set-backs



## Building a Great Team

- entrepreneurial drive
- relevant management experience
  - in the sector
  - in a similar size company
- individual track records & team balance
  - finance / technical / commercial / operations
- timing / cost
- good advisors



## Equity

- You can only sell your equity once
- But, in your desire to conserve equity-don't sell out the future by licensing too broadly
- Which would you rather have?
  - 51% of a company worth £10 million
  - 5.1% of a company worth £100 million
  - 0.5% of a company worth £1bn.....





## Good Management

- Manage it AS A BUSINESS
- Not as a research project
  - good technology is not enough
  - identify key success factors early on

Remember: a business primarily exists to create a return for its shareholders.

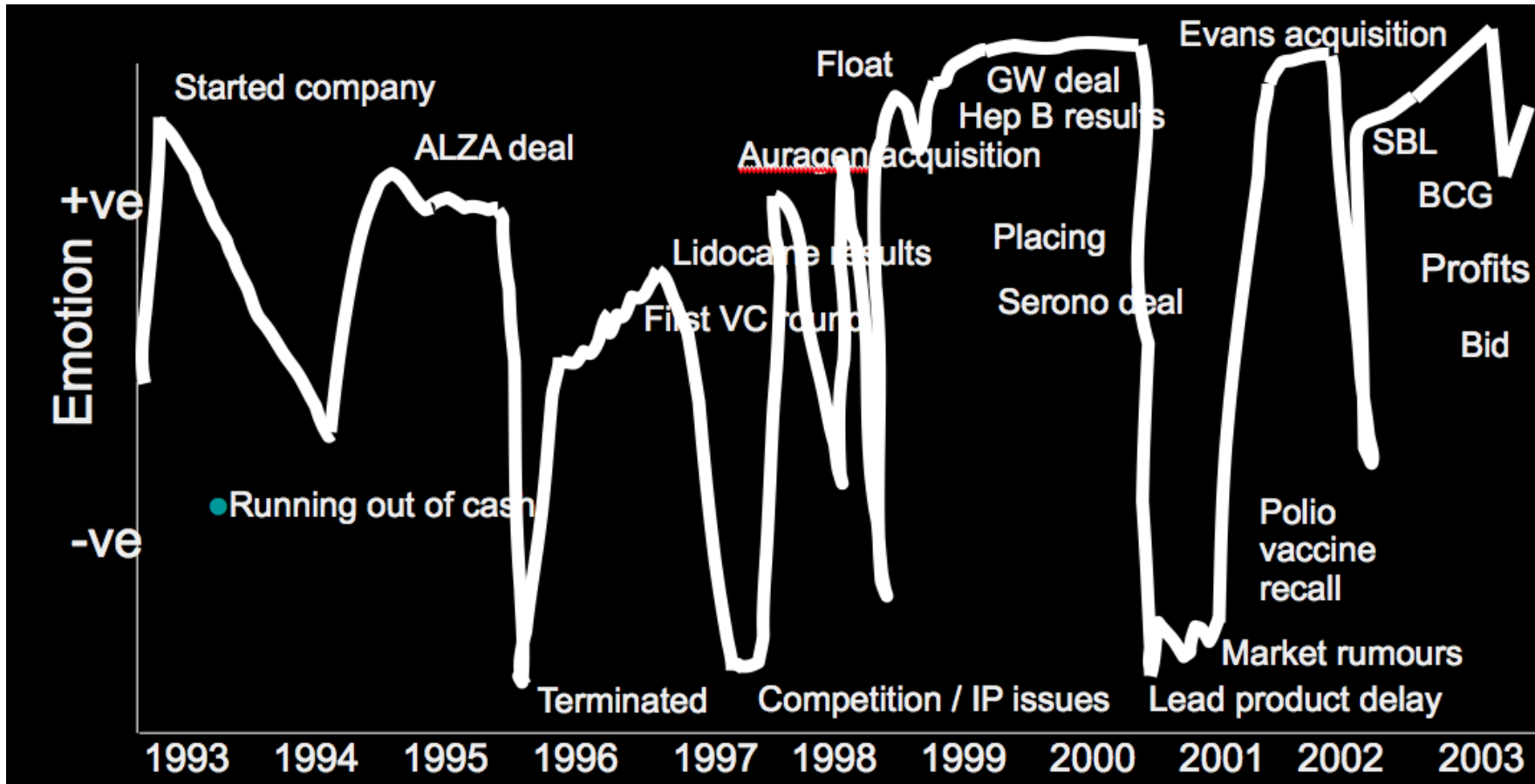


## PowderJect Ten Year Results

	YR1	YR5	YR10
SALES	£10,000	£1,500,000	£158,500,000
PROFIT / LOSS	£20,000	£3,610,000	£23,500,000
EMPLOYEES	5	100	1,100
MARKET CAP	£1,000	£110,000,000	£542,000,000



# The Highs & Lows!





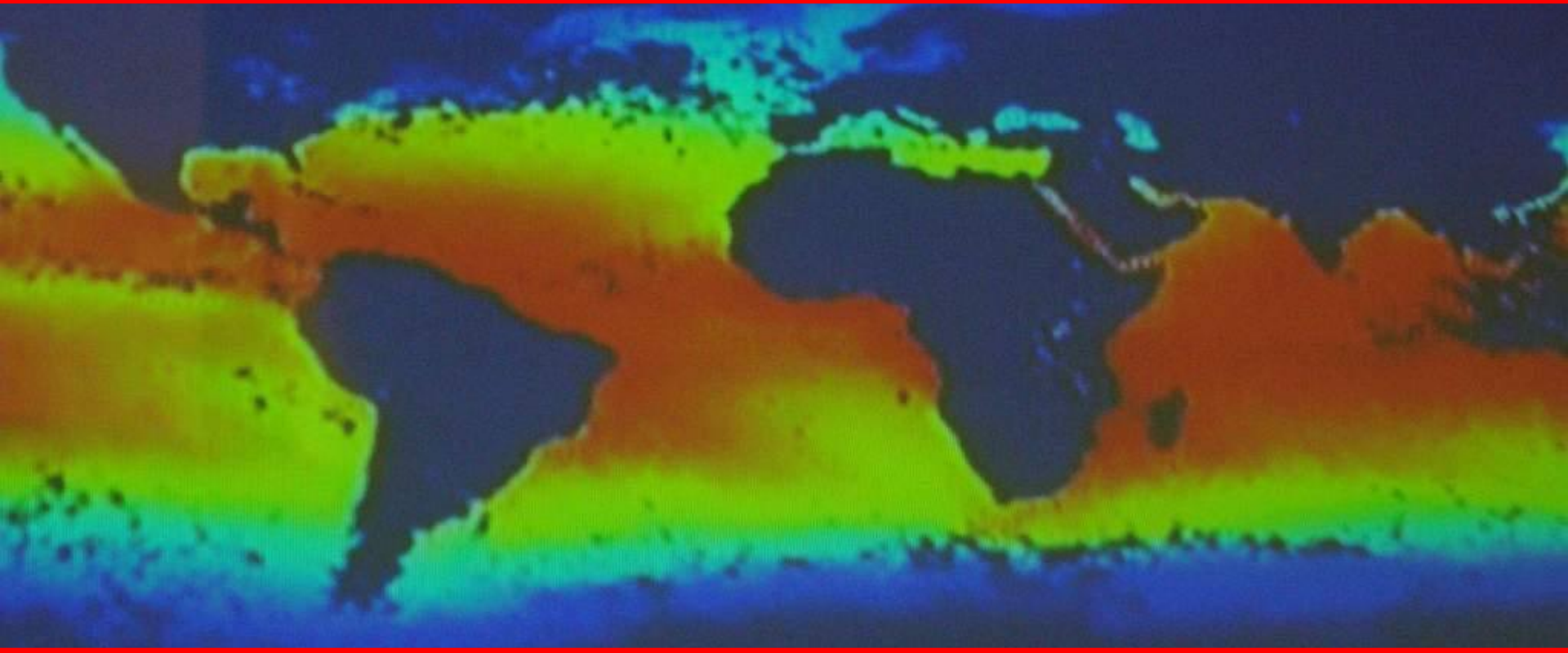
## Handling stormy weather

- Easy to get surprised by a downturn or setback
  - have a “Plan B”
- Causes are often beyond your control
- React quickly & take decisive action early
- Communicate well & manage expectations through the crisis
  - keep the bank / investors informed
- Be positive & show confidence



It is worth it.



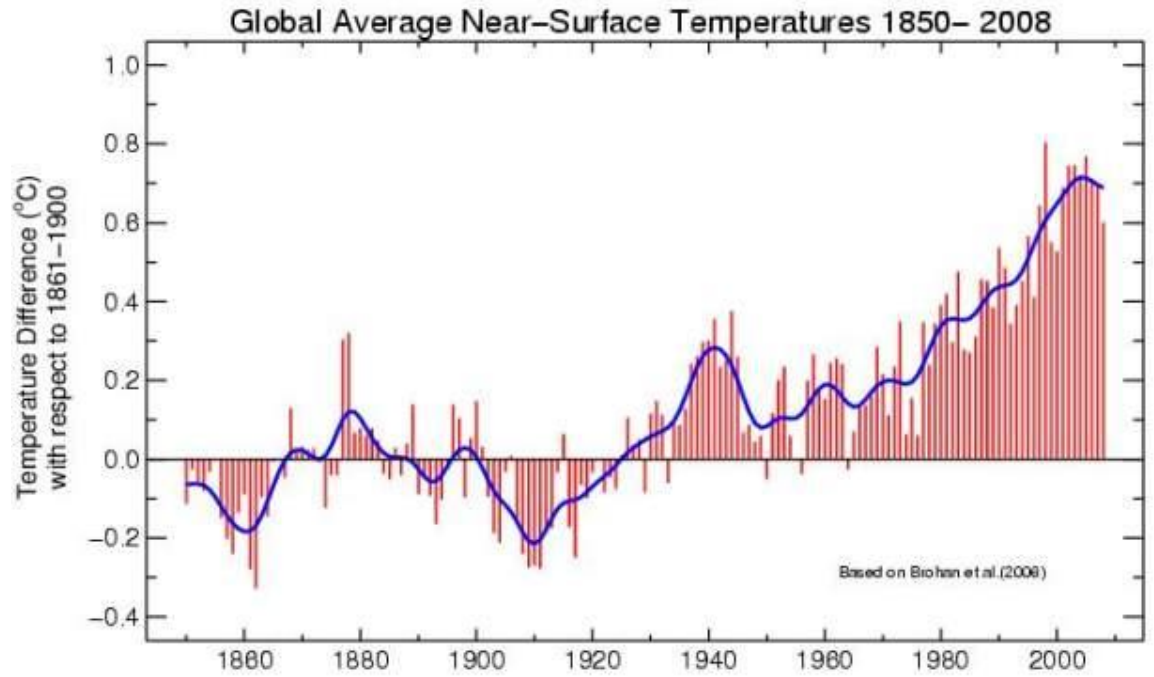


Climate change: the greatest challenge facing our generation



# Global temperature rise

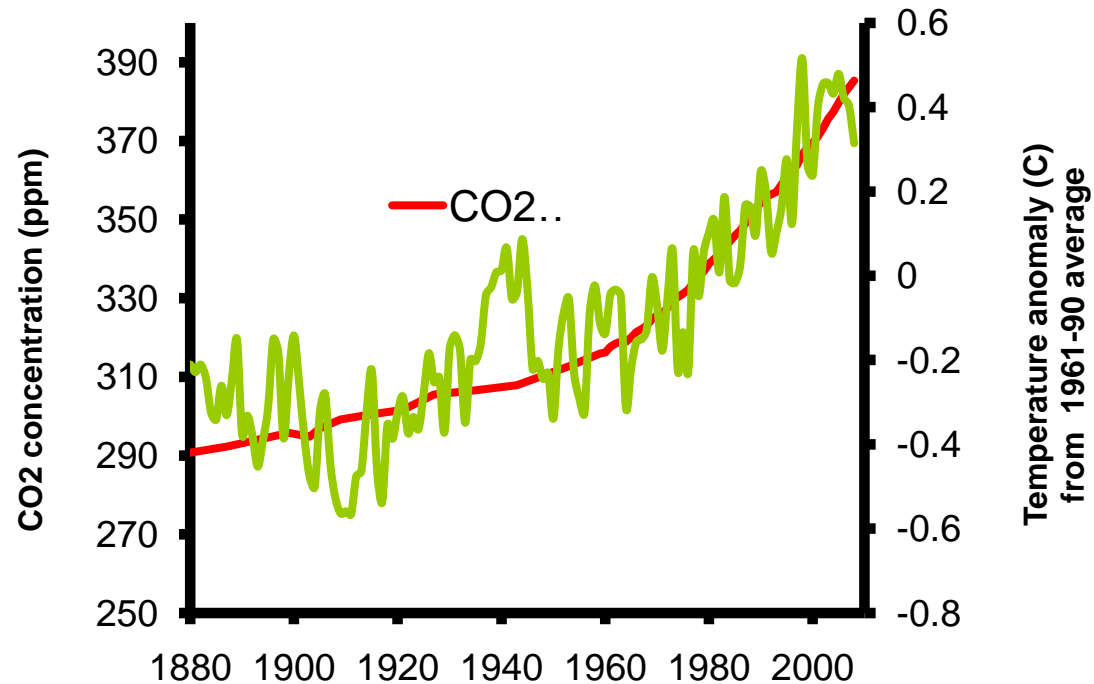
- Global average temperatures have already risen by  $0.75^{\circ}\text{C}$  since about 1900.
- Global temperatures are linked to the growth of  $\text{CO}_2$  emissions





## Correlation between CO<sub>2</sub> concentration and temperature increase

- Levels of CO<sub>2</sub> have risen by 40% since the industrial revolution.
- Now at their highest levels for at least 800,000 years

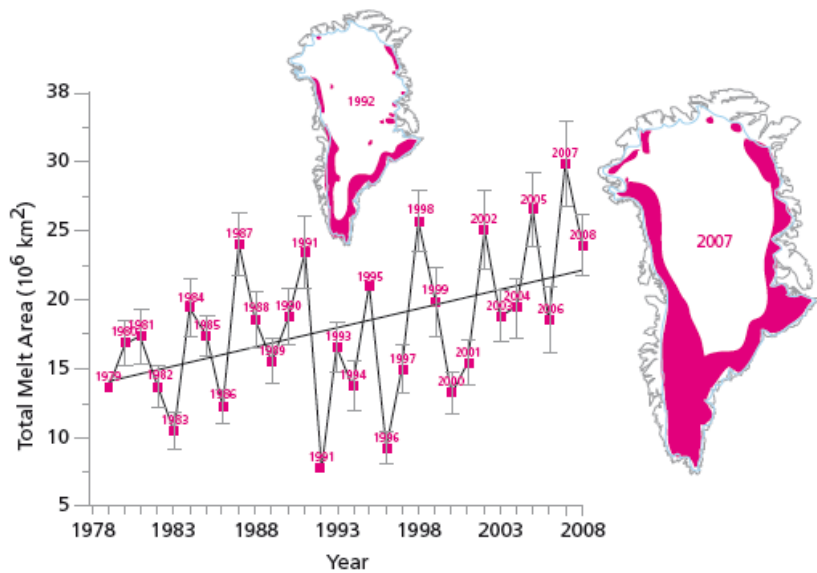




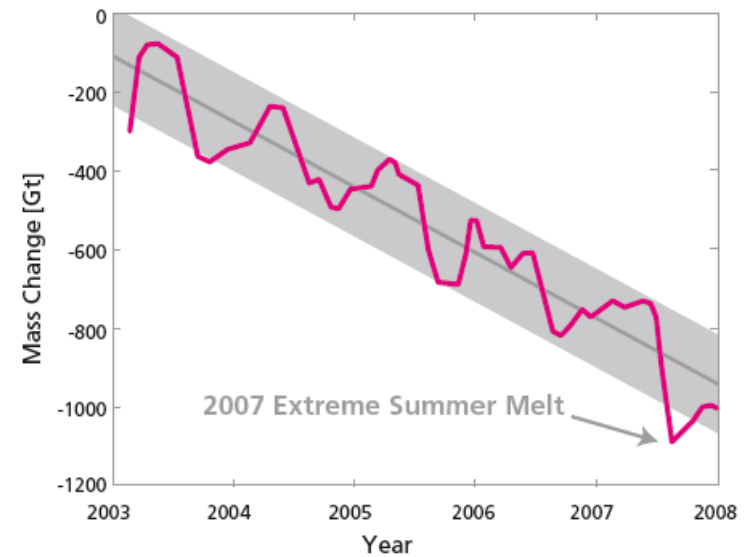


# Melting of the Greenland ice sheet

- the ice sheet has been losing mass at a rate of 179 Gtonnes / yr since 2003<sup>1</sup>.



Area of surface melting across the Greenland Ice Sheet, as inferred from satellite observations of the surface temperature<sup>6</sup>.



Change in the mass of the Greenland ice sheet from 2003 to 2008, as estimated from satellite measurements of changes in the gravitational field. The grey shaded area shows the 90% confidence level of the fitted straight line. The vertical axis is set to an arbitrary value of zero at the beginning of the observational period<sup>8</sup>.

<sup>1</sup> Wouters, B., D. Chambers, and E. J. O. Schrama 2008: GRACE observes small-scale mass loss in Greenland. Geophys. Res. Lett., 35, L20501, doi:10.1029/2008GL034816



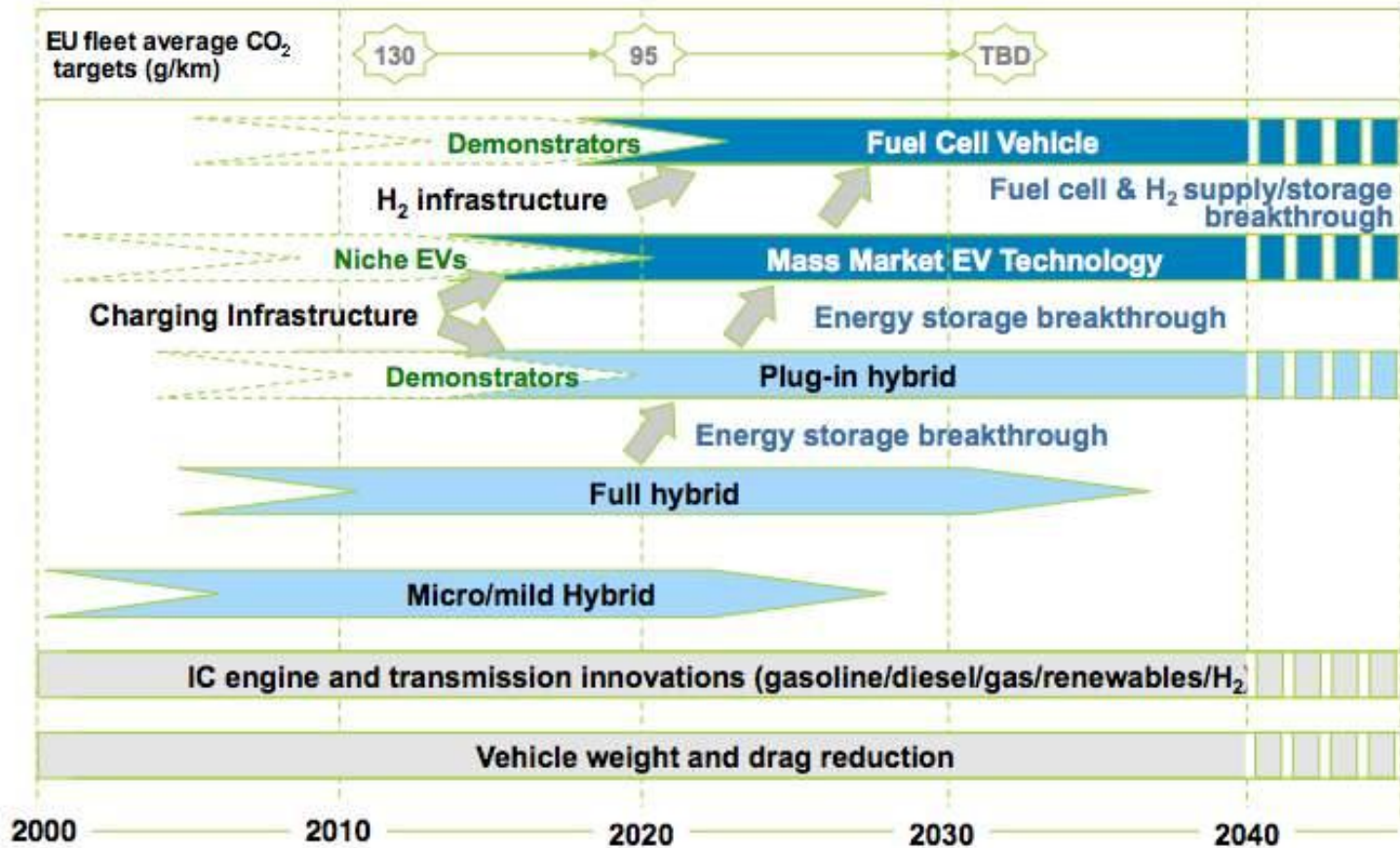
## The Scale of Change Needed

For the UK to meet its international commitments..

UK surface transport will have to produce  
zero carbon by 2050



# UK Automotive Technology Roadmap





## Massive Commercial Opportunity<sup>1</sup>

- The global low-carbon and environmental goods and services sector was worth £3.2 trillion in 2008/09- growing at 5% annually
- The global market for electric vehicle batteries is predicted to grow to \$46 billion by 2020.
- The number of VC investments in clean tech hit a record high in the first quarter of 2010
- Of 13 clean-tech IPOs in Q1 2010, 8 in China.

<sup>1</sup> Report by Cleantech Group & Deloitte.

See [www.wealth-bulletin.com/portfolio/products-and-strategies/content/4058622913/](http://www.wealth-bulletin.com/portfolio/products-and-strategies/content/4058622913/)



# Drayson Motor Racing LLP

*racing to develop and promote advanced “green” motorsport technologies*





## Business Strategy

- Professional racing team business with a unique selling point as a leading developer and promoter of green technologies in motorsport
- Acquire and develop in-house proprietary new green technology in sustainable fuels & electric vehicle systems
- Partner with leading OEMs in the motor-sport & automotive fields to co-fund development
- Fast-track technology development and build brand equity through racing competition success
- License and sell branded technology solutions into the motor-sport & automotive markets



- 2006 premiered in GT racing
- 2007 raced a bio-ethanol fuelled Aston Martin DBRS9 for the first time



## Four year green racing track record

- 2007
  - First bio-ethanol pole & race win
  - 2<sup>nd</sup> in British GT Championship
- 2008
  - 2<sup>nd</sup> place inaugural Michelin Green X Challenge Petit Le Mans
- 2009
  - Pole, Winner Michelin Green X Challenge Okayama Japan
- 2010
  - 2<sup>nd</sup> Place Salt Lake City
  - 1<sup>st</sup> Place Road America – 1<sup>st</sup> international bio-ethanol pole & race win





## Being an Entrepreneur

- Be positive. Always.
- Love what you do - do what you love
- Banish the fear: turn negatives into positives
- Learn from the best – work with the best
- Trust your instincts.

..... and get on with it!



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