SOMERSET SUN.

NOURISHES OUR SOIL.
GROWS OUR GRASS.
FEEDS OUR COWS.
WARM OUR AIR.
FUELS OUR SOLAR PANELS.
POWERS OUR FARM.
CREASES OUR CHEDDAR.

Richard Clothier MD, Wyke Farms Ltd – A practical take on CO2 Reduction
“We wish to operate our business in a way that has minimal impact on the Somerset environment and to create a truly symbiotic relationship with the countryside that provides our food, our income and our home.”
Facts About Wyke

Wyke is an 150 year old family farmhouse cheese making business

**Family farm 1500 acres and have 1000 milking cows in Somerset**

Sourcing milk from 110 local farm assured farms within a 35 miles radius of the dairy

**Wyke process up to 300 million litres milk per annum**

Wyke is 5% of the UK cheddar market with a 25% penetration of UK households

**Trading in UK retailers and 160 countries inc Sams Club U.S.**

Leading the field in Green and sustainable branding

**Food Manufacturing Awards ‘Dairy Company of the Year 2013’**

Guardian Sustainable business of the year 2014

**Grocer sustainable supplier of the year 2014**
OUR HISTORY

Sue making cheese

Dad

Grandfather Tom Milking

Uncle Jim mowing
OUR CHEESE PRODUCTION TODAY

- 300 million litres per year process capacity
- 15,000 tonnes cheese manufacturing capacity
OUR PACKING & DISTRIBUTION

20,000t capacity scalable to 40,000t
Why Green?
How did we get here?

Business undertaking a costcutting process
Reducing waste
More efficient working
Ruthless pursuit of savings
At same time, looking to diversify

MADE FROM NATURE BY NATURE.
W O U L D  a  f o c u s  o n  G r e e n  u n l o c k  m o r e  s a v i n g s ?

Use your natural assets for ‘Green’.

South facings roofs suitable for PV
  Ice banks suitable for ‘storing power’ – underneath them!

Livestock producing waste/manure/slurry

‘Too much’ dairy waste! Lactose permeate.

Abundance of Organic waste
  eg. Silage tops ends, bad silage not fit for cows, pomace, sludge

1500 acres of land and 150 farmers suppliers with most of the above also!

Strong electrical and gas grid connections that we had previously paid to put in

Water flow to drive H.E.P

Prevailing wind for turbines

MADE FROM NATURE BY NATURE.
OUR GREEN STRATEGY

‘Our goal is to create a sustainable working farm, one in which we source all of our electricity and gas from both solar and biogas, generated from our farm and dairy waste which is currently of no value.’
We will measure ourselves against these commitments at the end of every year in order to monitor our progress.

OUR ‘GREEN PROMISES’ TO OUR SHOPPERS

- Produce all our own energy from renewable sources, Inc. offsetting
- **Save energy through investment and changes in work practices.**
- Maximising use of organic nitrogen on our farm and supplier farms replacing artificial fertiliser.
- **Minimising package waste.**
- **Recover heat in our factory.**
- Filter and re-use waste water.
- **Knowledge share and encourage our suppliers to work in more sustainable ways**
- Encourage wildlife within the Brue Valley.

We will measure ourselves against these commitments at the end of every year in order to monitor our progress.
Why Anaerobic Digestion?

There is a limit to the capacity of solar on suitable rooftops and connections

Not many other business has the baseline ‘fuel’ that we have
  Cow muck
  Pig muck
  Dairy Waste

Many other businesses can’t use the electrical energy themselves (increases return by 50%)

We had a large gas main for our phase 2 Gas to grid plant

We have the expertise
  Science, knowledge of fuel source, waste contacts and land

We have a site beside an intensive pig unit with connecting pipe and wire to factory

Timing. The government is incentivising Green energy.

Wyke was ideally positioned to do this.
Our AD Plant
Gas To Grid Plant
Work with PR and community:

Yes, I often buy Wyke in my local....

Countryfile Visit

PM visit

School visits
What is Next?

• More gas production
• More solar
• Building infrastructure
• Transport – milk tankers?
• Can only be as ‘Green’ as current technology allows
• .......and now some food for thought..
Technology Scenario 1 - The electric farm of the future

Source: R.A.S.E. ‘Re-fuelling the countryside’
Technology Scenario 2 - The biogas farm of the future

Source: R.A.S.E. ‘Re-fuelling the countryside’
Technology Scenario 3 - The hydrogen farm of the future

Source: R.A.S.E. ‘Re-fuelling the countryside’
Why Would I Encourage You?

- Green energy is profitable with an index linked return
- Sustainability makes good business sense
- It will diversify your business and insulate it from Agricultural commodity swings
- Business with their own energy solutions will be at an advantage
- Most farmers already have the natural assets (that external investors such as pension funds don’t have)
- Utilise existing resource, labour/Management etc
- The general public care about Green – 60% shopper panel
- It’s the right thing to do for future generations