



Sustainable Exmouth

A TTE presentation to

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13th October 2014



Exmouth a sustainable town: agenda

- > A definition of sustainability and what it means to TTE
- Creating a vision for Sustainable Exmouth: The Win-Win-Win scenario
- > The context
- Are people interested?
- > Exmouth today
- Priority 1: Queens Drive Leisure Centre, The 'Splash Zone'
- > An example on our doorstep?
- Addressing the 'Eco' question
- Examples from around the world
- Is sustainability possible in Exmouth?
- Next Steps

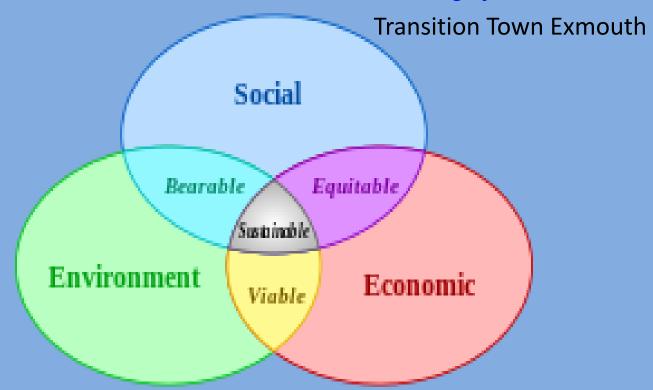
A definition of sustainability

'Sustainability recognises that the economy, environment and society are interconnected and that present needs should not be met at the expense of the future. A decision that commits future generations to excessive costs, or leads to irrevocable environmental damage is unsustainable'

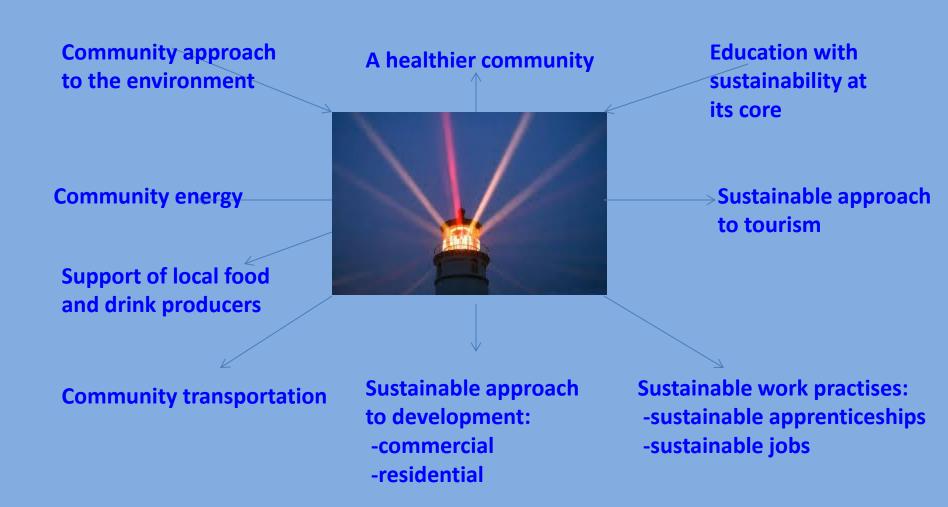
United Nations

What does Sustainability mean to TTE

'A healthier, vibrant, environmentally secure community characterised, informed and driven by an understanding and passion for the positive impacts that 'green thinking' and new eco-friendly technologies that planners, developers, businesses and residents can bring to the physical infrastructure, economic, social, and cultural wellbeing of the town



A vision for Exmouth: to become a beacon of excellence in sustainable practises



No vision for Exmouth is complete without imagining a future for the young





'Education should prepare young people for jobs that do not yet exist, using technologies that have not yet been invented, to solve problems of which we are not yet aware'

Richard Riley

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Richard Riley

We believe that the future is already here....we can imagine a world powered without fossil fuels....and a learning and growing environment which inspires them......

NI schools bring electric cars to Goodwood IET Formula 24 race





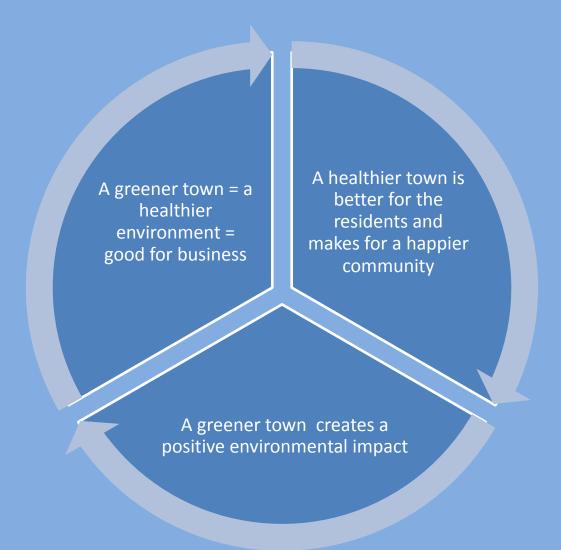
The car built by pupils at St Colm's High School in Draperstown: The idea, to design a highly efficient electric vehicle, that can do up to 30mph for up to four hours.

"It's not just about the race - it's also about the engineering behind it, so there are portfolio and design awards as well."

'Previously it was the boys who were most interested in engineering at our school the girls outnumber the boys 2 to 1 in our Engineering classes.'

Source: BBC

Creating a vision for sustainable Exmouth: The 'Win-Win-Win' Scenario



Creating a vision for sustainable Exmouth The Win-Win-Win Scenario

The TTE Vision is for a 'cleaner carbon neutral' Exmouth.....
a Sustainable 'Eco Town' of national and possibly international
Repute

Better for the community, better for business and better for the environment, the 'Win-Win-Win' solution

Creating a vision for sustainable Exmouth The Win-Win-Win Scenario

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Better for the community, better for business and better for the environment, the 'Win-Win-Win' solution

How?

- An architectural and planning blueprint....for new builds, creating smart buildings and smart businesses that positively contribute towards a healthier environment and sustainable community
- For existing buildings tapping the governments Green Deal incentive schemes
- Collective/community purchasing and switching of energy supplies, introducing new renewables such as wind, wave energy and estuary heat pumps for which Exmouth is ideally located

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When?

The time is now. Our Queens Drive development is the most exciting opportunity this town will see for several decades....and we want to do the 'right thing'

Why is it important?

It touches all our lives, it touches all aspects of our lives....

- Our children and their education
- Our health
- Our economy
- Our jobs, our careers
- Our 'down time' and leisure activities
- Our environment

Sustainability is a binding force that links everything we do and want to be

The context

Context 1: Sustainable Britain, the built environment

- The UK has a legal commitment to reduce its carbon emissions by 80% by 2050.
- The challenge: if the UK is to meet its legal target then the homes we live in, buildings we work in, and leisure facilities we play in will need to be transformed to make them greener and more energy efficient over the coming years.
- Excellent opportunity: to rethink how we design, construct and maintain our buildings to help ensure they have a long term future.

Context 2: 4 key drivers

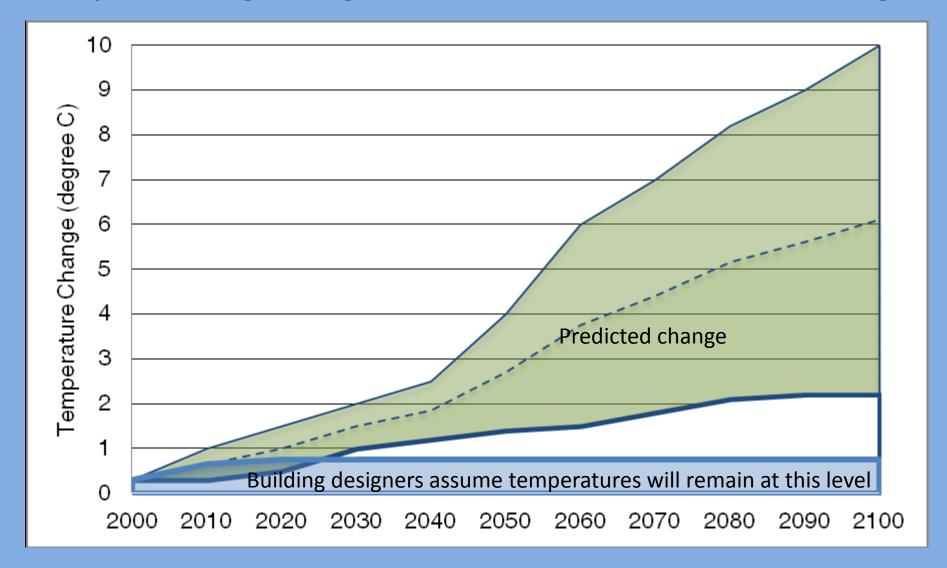
The Federation of Master Builders (the largest trade association in the UK building industry) believes there are four key drivers to bring about a low carbon built environment:

- The need to minimise waste across the industry
- ➤ The need to reduce carbon emissions from housing and other buildings through innovation in materials and process
- > The need to create sustainable communities and a sustainable work force
- > The need to give specific and practical advice to real design and site activity.
- The FMB is determined that the building industry should be a lead player in the move towards a low carbon built environment. They aim to achieve this by outlining policy recommendations to government and opinion formers to enable builders to play a full and constructive role in building the new greener, more energy efficient Britain.

Context 3: Climate change itself

- Buildings need to be constructed for the possibility of more extreme weather patterns, greater range of heat and cold, greater wind strengths and higher rainfall
- Global examples of extreme weather events
- '000's of people were flooded during this last winter
- > 14,802 people died in the extreme heat in France in 2003 for which the 'architecture' offered no protection.

Why building design and construction must change



Source: Gale and Snowden

Context 4: Green tourism



On World Tourism Day 2013, UN secretary-general Ban Ki moon said the industry was "especially well-placed to promote environmental sustainability, green growth and our struggle against climate change through its relationship with energy".

After revealing that over a billion people now travel across international borders annually – a huge 4,000% increase on the 25 million who travelled to foreign lands in the 1950s – he added, "Imagine what one act multiplied by one billion can do."

Context 4: Green tourism



The Rio+20 United Nations Conference on Sustainable Development emphasised that well-designed and well-managed tourism can make a significant contribution to the economic, social and environmental dimensions of sustainable development.

Initiatives such as the Hotel Energy Solutions toolkit developed by the UN World Tourism Organisation and the UN Environment Programme demonstrate how by deploying clean energy solutions can cut energy consumption and carbon emissions in some regions by up to 40%

Visit England says that sustainability isn't about doing business differently, it is about doing business better.

Sustainability, it argues, saves money, reduces business risk, increases profitability and allows the country to appeal to an increasing market of environmentally conscious customers

Context 4: Green tourism



In Exmouth we've made a start: The Sustainable Tourism event organised and hosted by TTE invited some key participants in the local tourist business to participate in an open discussion and workshop on how they might help make the difference

Are people interested?

Research by Visit England revealed:

- > 50% of people are interested in staying in environmentally-attuned places and about the same in 'break' locations that benefit the local community
- They don't want it thrust down their throats though: 'I don't want to have to think about being green on holiday, I just want to relax'
- > 71% of Trip Advisor members said in 2012 that they plan to make more ecofriendly choices in the next 12 months, compared to 65% that did so in the past 12 months
- 46% of consumers are willing to pay extra for products and services from socially responsible companies, according to a Nielsen Wire survey

Exmouth Today

- ➤ In 2009 the population was 47,950 which in the preceding 10 years, increased by 5.41% (source: Devon County Council)
- > A tourism business worth £millions to the town
- ➤ A business infra-structure dependent on retail, the licensed trade and 'regional/Exeter' based employment
- ➤ A family holiday town characterised by it's unique environment, people (wide demographic and psychographic mix), let down by a dated (but well loved) tourist infrastructure





Exmouth Today







Exmouth Today





Today's Amusements











Priority1: Queens Drive Leisure Area The 'Splash Zone'

Situation:

EDDC have planned to create a new permanent all weather 'tourist' destination to replace a large swathe of the seafront attractions from the old lifeboat station to the far edge of the Queens Drive car park with a more 'cohesive' and themed approach.

EDDC vision statement



















The core argument: Sustainability is a 'Win-Win-Win' strategy

- The greater efficiency and quality associated with sustainability drives down costs associated with maintenance and building operation, making the buildings more attractive for end-users and operators.
- There is growing evidence that BREEAM-rated buildings provide increased rates of return for investors, and increased rental rates and sales premiums for developers and owners.
- ➤ RICS Research found that BREEAM certified office buildings (in period 2000-2009) achieved a 21% premium on transaction prices and an 18% premium on rents.

Other benefits include...

- Lower healthcare costs
- Improved performance of local economy
- Greater energy efficiency and lower fossil fuel dependency
- Improved image
- Enhanced business efficiency
- Reduced long term costs
- Greater competitiveness through enhanced staff productivity
- Investing in good design and specification reduces whole life costs (staff, maintenance, repair and running costs)

Innovation, creating new skills and new jobs



An example on our doorstep? Bristol

In 2008, Bristol was named the UK's greenest city, because of its environmental performance, climate change strategies, recycling and biodiversity.

'a low carbon city with a high quality of life for all'

- In 2012 Bristol enjoyed 4.7% growth in the 'Green economy'
- ➤ Bristol has the ambition to become a European hub for low-carbon industry with a target to create 17,000 jobs in the creative, digital and low carbon sectors by 2030
- Under the auspices of an organisation called 'Bristol Green City' each year, the city hosts the Big Green Week, which is a festival of sustainable ideas, art and entertainment
- For its efforts in sustainability, Bristol was given the European Green Capital award for 2015, which will allow the city to strengthen its position on energy efficiency, air quality and cycle paths.

Addressing the 'eco' question

NOW

- ➤ Despite many initiatives around the world May 2013 saw the concentration of CO2 in the atmosphere pass 400 parts per million for the first time*.
 - * Source: U.S. Department of Commerce & National Oceanic & Atmospheric Administration

NEXT

The only real sustainable future will be rooted in products that are not just 'better' than (polluting) alternatives, but products or services that are truly ECO-POSITIVE: i.e. whose consumption or existence actually benefits the environment and leaves a lasting positive impact.



Some examples from around the world

The Bullitt Centre, Seattle: 'The greenest commercial building in the world'



The <u>Torre de Especialidades</u> building (part of the Mexico City hospital)
The construction features a layer of tiles painted with titanium dioxide,
which reacts with UV light to break down pollution



The Green Leaf Inn in Delavan, Wisconsin is a net-zero energy hotel that will generate more electricity than it consumes. Each bedroom features QR codes enabling guests to discover more about the energy initiatives throughout the hotel



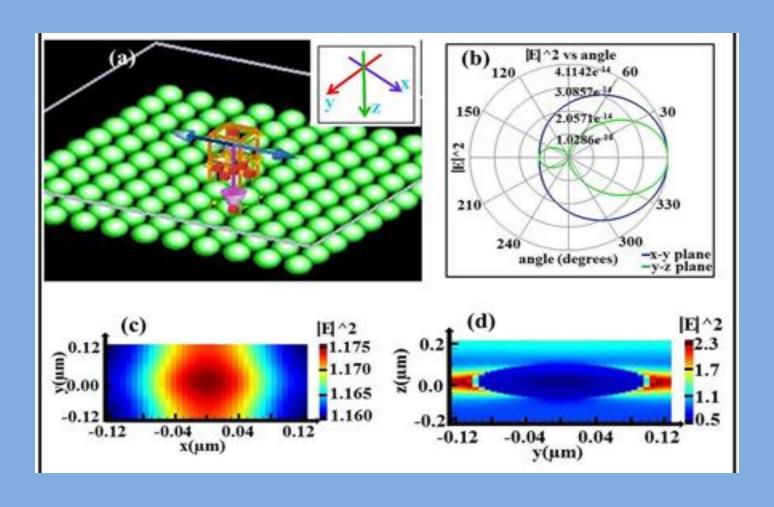
In Hong Kong, the Zero Carbon Building uses 80 green energy technologies to produce more energy than it consumes.



Peru's University of Technology and Engineering (UTEC) created a billboard that generates water by extracting it from humidity in the air. (9,000 liters of drinkable water in the first 3 months)



Scientists at the <u>Chinese Academy of Science</u> have unveiled a 'smart' window that can save and generate energy.

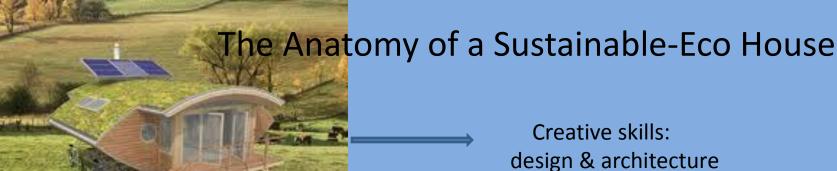


Nike's concept store is entirely constructed from trash, including drinks cans, water bottles and old CDs and DVDs. The store can be adapted to different retail layouts and the no-glue construction ensures all materials can be reused.

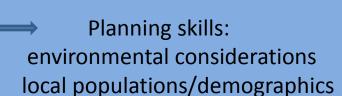


In May 2013, the Beijing Subway introduced 40 'reverse vending machines', which enable passengers to offset their travel costs by recycling plastic bottles









The appliance of science: energy water supplies

'Trade skills' new materials/building techniques



More than just a roof over our heads; the latest thinking, latest science, latest building methods, which combined set the standards for a sustainable community

Is Sustainability possible in Exmouth?

Yes.....if we keep it on top of the agenda

Yes.....if we merge our Vision for Exmouth with that of the planning authorities and other stakeholders

Yes....if we adopt an inclusive approach within the community and work together to build our knowledge with local, regional and national experts

Yes.....as the topic continues to grow in national importance, so it will also be reflected in local policy.

Next Steps

- > Open the discussion to the key stakeholders
- > Develop the vision together
- Become a 'Beacon of Excellence' by employing experts in the sustainable technologies, design and construction industries.





Thank You.....

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