

# Sustainable Exmouth

Observations and views from Transition Exmouth

A paper for Exmouth Town Council



## Introduction and background

**Sustainability is now becoming the mainstream**, we may not have spotted it yet but its' become central to finding new solutions to old problems and raising new possibilities along the way.

It's all around us, from the humblest of re-cycling programmes and up-cycling to core business growth and development strategies. Think about the new business of converting Vintage clothing into new fashion statements, the transition of a traditional dump into a 'salvage yard' or re-using plastic bottles to create new high value garments and the adoption by large businesses in their new design thinking. There's a whole new movement and economic theory attached to this known as the 'Circular Economy' driven by one of our national heroines Ellen MacArthur, and if you're in any doubt about the power of her voice check out the Ellen MacArthur Foundation ([www.ellenmacarthurfoundation.com](http://www.ellenmacarthurfoundation.com)) which now has a seat at the highest levels of government and the EU.

**Sustainability permeates all aspects of our society and our community** and we can learn from BIG business. Almost all large corporations now have a sustainability agenda to guide and shape their future development. Companies such as O2, UPS Courier Services, Argos, B&Q, and M&S which in the UK possibly has the best kept secret, The A Plan, a 20 year vision for taking their business from a 19<sup>th</sup> century business model into a sustainable long term 21<sup>st</sup> century business that stretches around the world.

In fact, recent studies show that organisations with clear sustainability policies outperform competitors in terms of stock market and accounting performance – 'meaningful brands' beat the stock market by 120%. Source: The 2012 Harvard High/Low study by Eccles, Loanoo and Serafeim.

Similarly local food and drink producers who are leading the way through innovation in product, its presentation and usage have become a vibrant business category and perhaps not surprisingly one of the fastest growing economic sectors in the South West as consumers actively seek out more local foods (Reference: South West Foods)

This is clearly not without its challenges but begins to address the long term need for sustainable food security and the reduction of food miles. It's particularly apposite that communities move towards a local supplier strategy wherever possible particularly in light of findings from The World Wildlife Fund which reports that as populations continue to grow *"In the next 40 years we will have to produce as much food as we did in the last 8,000 years."* The consequences of this can only be 'imagined' at this time and demands new ideas and innovative new approaches.

**In response to chaos in our financial institutions** and a breakdown in trust **we're seeing innovation** in the form of Crowd funding, where capitalism meets socialism perhaps? In a busted financial environment where the banks have been caught like rabbits in a spotlight and are unable to plan ahead or move the people have taken over. It's a new model of behaviour and has significant implications for the way in which we plan and build our future local economy, and indeed the type of 'institution' and 'investor' we invite to become part of our community as we prepare for our new world.

Communities around the country have been held up by the **inadequacies of legacy institutions** and thinking, **driving Innovation and new models** which are emerging from, in some instance quite unexpected quarters. The concept of micro-financing started in what we would call the 'third world' or 'developing markets' whereby small businesses are supported with 'loans' which do not carry onerous rates of interest are made available to community enterprises, an approach now being made amongst the small and entrepreneurial business community in countries as diverse as India, Bangladesh, Denmark, Chile and now in the UK.

**Community energy schemes are gathering in momentum.** Designed to address one of the single most onerous charges on our lifestyles, health and well being today, the high cost of energy and the need to convert from fossil fuels to renewables these schemes put the community back in charge of the creation of clean energy. Not only does this present the exciting possibility of more negotiating power with the 'energy giants' but provides inspiration to a new generation of scientists and inventors willing to test and refine the possibility of re-inventing a 21<sup>st</sup> century industrial age driven by clean energy.

Similarly, water capture and re-cycling systems which, given our recent experience are becoming increasingly necessary as they could endanger us if we're not prepared for future climate change and extreme weather events.

**In transportation, the heightened interest in reducing the costs, environmental and financial, of transporting goods long distance,** and often irrationally back and forth across the country are finding local solutions as retailers and consumers alike use more local produce, and cycle or car share to work. Innovation in the shape of the hybrid and next generation electric cars are almost within reach and just a few years away from enabling a new clean, carbon free transport system.

**People are looking for and finding new solutions,** no more so than in the future physical infrastructure of their community (witness the need including deaths from heat waves in countries as close as France and Tsunami damage in Asia and North America). In looking forward and adopting a Sustainable approach we need to shrug off the legacy of tradition and embrace the futurism of new thinking....**Difficult perhaps...**but we believe it is achievable if we plan sensitively and recognise that in updating or replacing that which was excellent in a Victorian era may not be fit for purpose a century later....Our new age demands a new architecture...

**The new architecture of our society will however be built on similar principles to those we're familiar with.** Let's not forget that the Victorian era was one of our country's most productive, most inventive and most innovative. We in Great Britain may not be at the forefront of all the new technologies (although we are still inventing many of them), which are being developed for all of our futures but by searching for and applying new ideas and new thinking from around the world and rethinking how we conduct ourselves, organise, plan and build our communities we can embrace the new technologies which, intelligently applied will add value to our lives and embrace new design which thinks quite literally beyond the box and positively enhances all our lives in 21<sup>st</sup> century Exmouth.

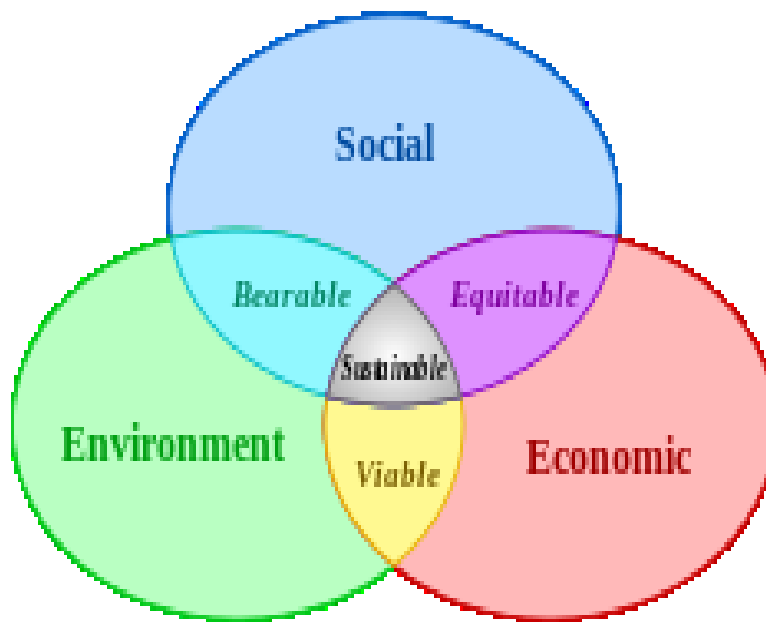
**So what do we mean by sustainability?**

**According to the United Nations** *'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'*

While we within Transition Town Exmouth would build upon this to ‘activate’ the possibilities that lie between these lines.

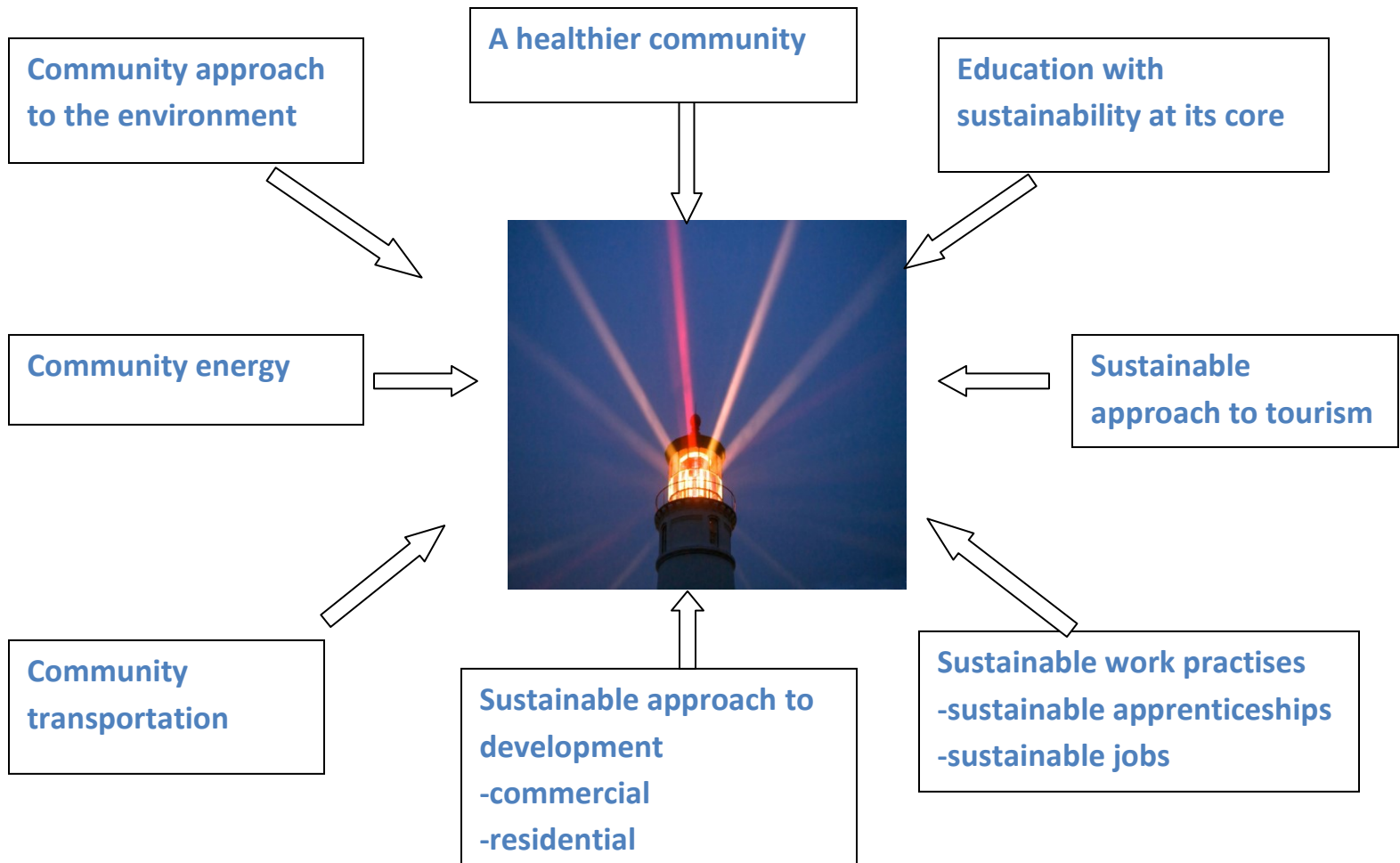
*‘A healthy, vibrant, environmentally secure community characterised, informed and driven by an understanding and passion for the positive impacts that ‘green thinking’ and new eco-friendly technologies that planners, developers, businesses and residents can bring to the physical infrastructure, economic,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

### Transition Town Exmouth



It's in these inter-relationship that we are finding new and innovative solutions; by building a vision and strategy to support it we can focus our best thinking, our resources and the benefits of new ideas and technologies.

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



**Sustainability provides a cohesive theme** which unifies the planning and development of the town and community. It joins all the dots to create an integrated framework within which all activities can be evaluated and built upon. It provides inspiration to children in education, direction for those seeking training, apprenticeships or new jobs in industries that support and build upon our sustainable vision, a business basis upon which to tackle the key industrial and physical infrastructure and a direction to services and utility provision across the entire town.

Perhaps most importantly, in becoming a beacon of excellence in sustainable practises it will put Exmouth on the map of '21<sup>st</sup> century towns' which are providing for the future of new generations and inspiring them to become part of the Victorian-New age transition.

## Creating a strategy for sustainable Exmouth: The 'Win-Win-Win' Scenario



There is now a considerable bank of research and knowledge which illustrates the advantages of sustainability, to business, to communities and to the environment. On our own doorstep the city of Bristol for example has become a national and international exemplar with benefits to business, the residents and the environment.

- 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' (at a time when the national economy was struggling to achieve any growth)
- 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.**

## Similarly, the TTE Vision is for a 'cleaner carbon neutral' Exmouth.....a Sustainable 'Eco Town' of national and possibly international repute

### 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

### 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'

## The Context

- The UK has a **legal commitment** to reduce its carbon emissions by 80% by 2050
- The '**built environment**' contributes between 25%-35% of carbon emissions. *'The construction and operation of buildings consume the majority of the world's natural resources and energy, and contribute the bulk of landfill waste'*

Source: RIBA

- **Climate change:** 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
- **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"*.

## Exmouth Today

- In 2009 the population was 47,950 which in the preceding 10 years, increased by 5.41% (source: Devon County Council)
- A business infra-structure dependent on retail , the licensed trade and 'regional/Exeter' based employment
- A tourism business worth £millions to the town
- **A family holiday town characterised by its' unique environment and people with a wide demographic and psychographic mix**





## Let down by a dated (but well loved) tourist infrastructure



## Our Opportunity:

- 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

**If the planning authorities are intent on making change happen then we should work with it to provide a 'sustainable approach' in all that they do.**

## 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 eco-friendly 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

## Imagining the possibilities: A TE mood board for the new 'Splash Zone'



Located on 'The Jurassic Coastline' and inspired by the imaginings of times past with Oceans present, any design concept has a wealth of ideas to draw inspiration from and a new approach to Eco-design

## Addressing the 'eco' question

### NOW

- Despite many initiatives around the world May 2013 saw the concentration of CO<sub>2</sub> 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.



**'ECO-SUPERIOR'**

**Some examples from around the world;** to become a centre of excellence in sustainable practises community we can find examples, learning and experiences in forward looking communities from any corner of the world.

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



The [Torre de Especialidades](#) 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



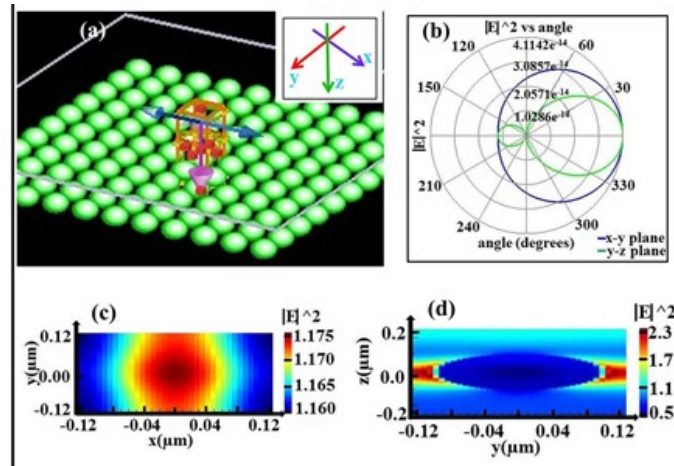
The [Zero Carbon Building](#) in Hong Kong produces more energy than it consumes. Using over 80 different green energy-saving technologies including photovoltaic solar panels, natural ventilation, micro-wind turbines and biodiesel fuel generators fed by used cooking oil, the building produces surplus energy of up to 99 megawatt hours per year, which is pumped back into Hong Kong's public power grid.



In 2012, Peru's University of Technology and Engineering (UTEC) created a billboard that [generates water](#) by extracting it from humidity in the air. In its first three months it collected over 9,000 liters of drinkable water, enough for hundreds of families per month.



Scientists at the [Chinese Academy of Science](#) have developed a 'smart' window that can save and generate energy. Coated with temperature-sensitive vanadium oxide (VO<sub>2</sub>), the window can regulate the amount of energy entering a building and store light energy in solar cells within the window frame.



[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. For every empty plastic bottle recycled using the machines, commuters receive discounts of between CNY 0.05 and 0.10 on their travel pass.



## The Anatomy of a Sustainable-Eco House



Creative skills: design & architecture

Planning skills: environmental considerations/local populations/demographics

The appliance of science: energy and water supply

'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 new sustainable community, an inspirational approach bridging classrooms, training and jobs, businesses and growth, tourists and richer experiences, and connecting residents to a healthier more resilient environment**

## Generally, if business wins the people win!

- 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 (Building Research Establishment Environmental Assessment Methodology) 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**

## Can Exmouth become a beacon of excellence in Sustainability?

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.



## A final thought

If, at the end of this development the management company simply plugs in the new buildings to the national grid and SW water supply we have failed in our mission.

We need to go on a journey together with the planners, developers and community leaders to ensure that the new Oceans Drive Amusement and leisure development is not only aesthetically sympathetic with the environment but designed and built using the latest environmental thinking and eco-superior technologies to ensure it can positively contribute to the long term health and wellbeing of the community which enable us to become a beacon of excellence in sustainability.

That will be a great legacy and set standards for future generations and be the first step in defining a healthy future for Exmouth as a centre of excellence for Sustainability.

## 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.....

Contact: [andyadslock@yahoo.co.uk](mailto:andyadslock@yahoo.co.uk)

