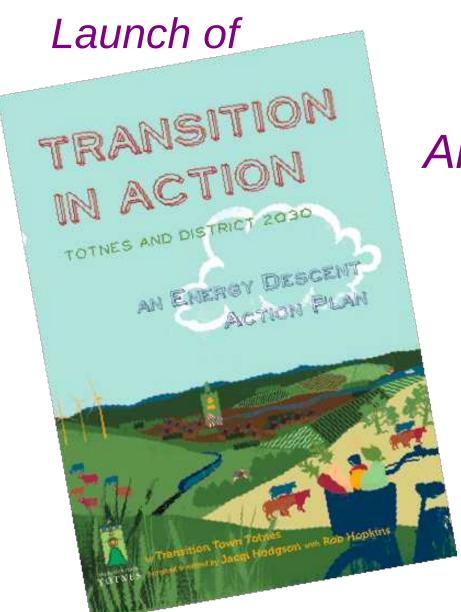
7th May 2010



An Introduction to the **EDAP**







TRANSITION TOWN TOTNES

Telling A new story About our future

Introducing the Wonder of the Oil Age

Here is a litre of oil. It is an extraordinary thing. The sit in this books contains more energy than you would breate doing hard physical work for five weeks. Just in this small bottle. It has made us powerful beyond the imaginings of previous generations, able to change landscapes, est hoods from the other side of the social in defance of the seasons, travel the world as though we had seven League Boots, and break for the first time, our connection to the land beneath our first.

It can also be transformed into the dazzing array of plastics, gives, materials and products, which fill nor fromes, workplaces and shops. We make our medicines from it, and our food system has become a system for turning it also food. Were we to pick our lives up and wrong from mat, they would the with oil. Yet this level into dependency, which tince determined our degree of prospertly and success, may determine our degree of prospertly and success, may determine heavy vulnerable we see. While in many ways the oil in this bottle has brought us wonderful though and exmandranty opportunities, we need, as faith shock, head of the international Energy Approximates we likely the world's governments, to fleave oil before oil levves us."

As part of the one testory interviews that start in part two, we select the tare Designs Matthews of Sovertion, shortly before his 100th technique, whether he considered the Ok Age he lived through to have been a bitisting or a curtic. A bitisting that it was also a blessing for the type of wars we were able to tight. Is it a blessing if you gut the two together? I don't know I am very glad though to have lived through the terrior that I have lived through.

The Assumptions that Underpin this Plan

When most Councils, businesses or Covernments as down to pure for the read 20 years, they still start by assuming that in 20 years the settlement in question will have more jobs, more energy, more cars, more houses, more businesses, more economic growth and so on Tr. the past few months it has become clear to mercy people that each of those securptions is becoming anomality questionable.

We are moving from a time in history when our degree of economic success and personal webbeing is directly brinks to our level, or oil consumption, to a time when our degree of oil dependency is our degree of valuerability. For many people, it is increasingly clear that we cannot continue as we have been and that three key trends are forcing our hands, making major and for reacting change they table. These include





TRANSITION TOWN TOTNES

WHY WE NEED NEW STORIES...

What you are about to read is as much a story as it is a community plan. It is a story about how a Devon-town and its surrounding paralhes embarked on an extraordinary journey, starting in 2009, harvesting all of its creativity and brillance to ne-imagine itself for a rapidly changing world. It is the story of ordinary people who come to see that their hause would be very different from the present, and that thange was an inevitability. Nather than participation off or stumptimo denial of the changes building around them, they took the breven more training but ultimately more requiring route, of seeing that change as a termendous and historic opportunity.

Like all great adventure stories, it begins with ordnary people failed with a task the scale of which intially looks impossible. By taking the first steps and rediscovering how to work with such other skills, strengths and previously unimageted miner resource es were uncovered, and a scale of transformation, was achieved that 20 years later, in the subject of the songs and stories of the generation that followed them. It is a story, but it is also a storement of intent. As a culture, we struggle for lack of appropriate cultural sturies in these times of great change if you gained 30 people chasen at random in Tothes High Street to describe their mental picture of the world in 20 years having begun to reduce to carbon emissions by 9% each year starting in 2009; the Skethood is that it would protistly be somewhere between the Finisiumes and Scepton and Son. We have many. cultural stories, and their billing in maintinearti morles and novels, of societies that collapse in various ways (Mad May), those that meen their way to a space age Neuro (Star Trek) or those that out contimue with business as usual, where the future is like the insert, except there's just more of everything-What might the stories look like of the generator, that locked peak oil and climate change square in the face and responded with creativity and maginafrom? That is what this document thes to do.

While on the theme of stones, we might wonder what future generalizes might make of this time as they look back. What will those in an energy lean world make of an age like ours, which wasted their





This is the Thursday was ing the Server dispute South Control of A Research to Control Ones



TRANSITION TOWN TOTNES



Totals than in the CARC Note maker genture and generitasses on what is now called The Southern Area 6 Years maps Sark and Sund Archive



2.7 Macon's Boothers at the kop of Turner Start, 1990s. G Terriso things Bank and Russ Archive.



2.8 Groups heart in one of the heart green.



George Heart, in the numbers, in what is now "Heart's Heavey Car Fert", & Tomes trough Berls and Toroid Archive



TRANSITION TOWN TOTNES

THE STORY OF TRANSITION TOWN TOTNES



TTT has been a story of criticary people microvated not by four and dispondency, but rather by inspiration and the desire to create a positive response to people of and climaty change. Instated in late 2005, it has grown, arce to Official Uniterating in September 2006, to become a significant influence in the town. TTT has always been seen as a datalyst its role being to inspire and numbers projectly and to support them with fundational, office booking hetworking and so on the work done here has providing for communities around the world drawfrom the Yothas experience in dissigning their own similar projects.

Transition is based on the following four assumptions:

- That life with dramatically lower energy consumption is inevitable, and that it's better to plan for it than be taken by exprise
- That our communities presently lack the resisence to enable them to weather the severe energy shocks that will accompany peak oil
- That we have to act cohectowly, and we have to act now.
- O That by unleashing the collective gentus of those around us to creatively and proactively design our energy flature, we can find a ways of living that are more connected, more enriching and that according the biological limits of our planet.

Since its inception, it has catalysed, supported and fundraised for projects as diverse as the Tothes Pound, the Corden-share Scheme, the Transition Together group study course, the Tomes Local Food Directory, the Nut Tree Flammus, re-skilling courses around gardening, run a wide and extensive programme of events and courses, run Transition Tales, a visioning the future project, with all of Year 7 at KEVICC tiwo years running!", dorasted slwhose £2,000 worth of blooks to Totrons Library, runan International Youth Mose: Feetival, held a series of Open Space events, run World Cale events with local councilors, Oil Vulnerability Audits for incal business the Solar Triermal Challenge, Tothes Renewable Chergy Society & community owned energy company), require most exchanges and much more."



CREATING AN ENERGY DESCENT ACTION PLAN

This EDAP has been crosted as an output of Transition Town Tottees Energy Descent. Publishers project, which was funded by Earner Fairbain Foundation and Artists Planet Earth It is a process that his rist been undergone before, and a number of tissis and approaches were developed during the process, which unfolded through a series of since.

Step One: Developing a Framework

The milital decision was to focus on the area defined by the Market and Coastal militarity in 2003, which identified market howes and their hadditional historiand and hading area, liesearch included reading about peak oil, climate change and economics, dentifying key players, conducting extensive oral histories, some broader historical newards, and a detailed survey of aniuma 220 historicals.



Step Two: Key Tools

We produced a positized, showing an artist's impression of what two familiar scenes of Totres might look like in 21 years time. A leaflet was also developed, and a 10 mater long Transition Timetine' was made and taken to all events and talks. This was used to indicate the Tuture we are looking at, and to enable people to contribute their ideas on posta notes about habor dates. A senior of large board posters were created to cover the content of the introductory presentation, and allow persists to browso during the workshop. All proved very popular.

Step Three: Engage the Community

The starting point was to build on what Transition Town Totnes (TTT) had already coolysed. This incoaded public events, Open Space sessions, the TTT working groups and practical projects, and also gloing talks and numing sessions with many local groups, Parish Councils and other bodies, getting media coverage and releting with relevant local people.

Step Four: The Public Launch

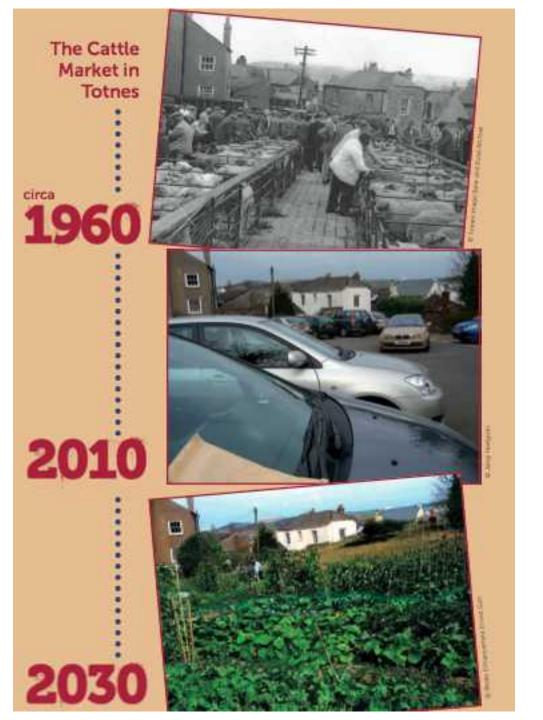
This was held at St. John's Church in Bridgetown, it September 2008. Speakers included the Major of Tomes, the Charl Escoutian of South Harris District Church, the head of Tomes Chamber of Commerce and Charman of the Devon's final Farmers Association. The celebratory event included a stort improvised piece of theatre acted with the storythe built with the audience. It chiefly with the storythe built with the audience. It chiefly with the for people to add their victims of the future to the Transition Timeline.







TRANSITION TOWN TOTNES





Indicators -Key Characteristics of a Resilient Community^a

These can be regularly revolted to see if the community is making progress in the right direction.

- Leadership is diversified and representative of age, gender, and cultural composition of the community.
- Elected community leadership is visionary shares power and builde community.
- Community members are involved in significum community decisions.
- 4. The community feels a serie of pride.

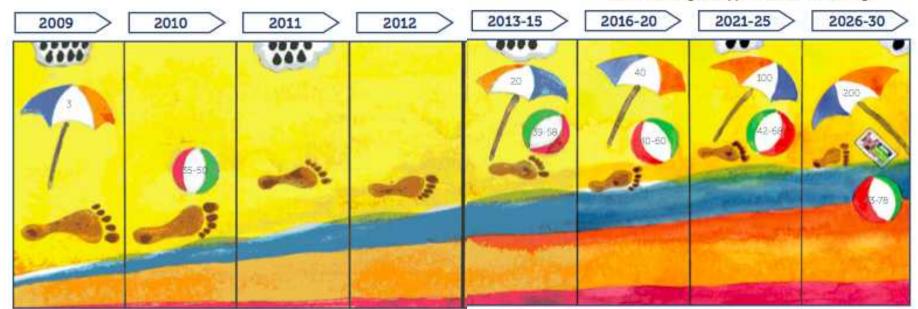
- Receive field optimistic about the future of the community
- There is a spirit of mutual assistance and co-operation in the community
- People leaf a survey of attachment to their community.
- The community is self-reliant and bloks to list? and its own resources to address major issues.
- There is a strong belief in and support for education at all invels
- There are a variety of Community, Enterprise and Development (LED) organisations in the community such that the key CED functions are well served.

TI

- 52 Organisations in the community have direct oped partnerships and collaborative working relationships
- Employment in the community is diversified beyond a angle large employer
- Major frustnesses in the community are locally switch
- The community has a strategy for increasing independent local ownershop
- There is openness to alternative ways of earning a living and economic activity
- 16. The community looks outside that to seek and secure resources thirth, expertise, financial that will activity areas of identified weakness.

- The pommunity is aware of its competitive position in the broader economy
- 58 Ottoms are myolyed in the creation and implementation of the community states and goals and have a CED Han that guides its development.
- There is on-going action towards achieving the goals in the CED plan.
- There is regular evaluation of progress towards the community's strategic goals

Key Challenges across the Timeline to 2030 with declining oil supplies and climate change.



JOINED UP THINKING -

Strategic themes: • Peak Oil • Climate Change: • Stabilising Population • Reducing excess consumption and waste to zero

The tollowing limetine diastratios the suggested key challenges based by UK society today and offers some enlacent for integration. We have used a timetine of the next 25 years to show the widening gap between flustrates as usual? Of we stort make and changest and how small but standard an applications on standard meanwhold tradewine and changest and how small but standard an application of the property of the



2009

Economic Downturn is Good News for DIY Enthusiasts

The economic downum: puts many people out of work many use their newfound time to stain growing food, insulating their horisis to keep bills down, and looking for other ways to make and save many.

Transition goes mainstream in Totnes

Through the sook Transition Town entiative, the rosing cost of energy is becoming more widely understood to be infeed to the deposition of reliable oil supplies. A new awareness and concern is evolving as poople respond to news about global warring. The concept of environmental limits to growth is garring momentum as the populationed cover stories of over population.

Major Report shows potential for behaviour change

The IPSOS Big Energy Shift Report reveals huge potential for secole to change their energy use and that people see overwhelmingly positive, but that They will need to be rudged along by the Covernment and other principal slawholders."

Community invests in Dairy Crest

The Armos Project for the Dairy Chest Bite is awartised on its first day of trading as a cosets for local investment. Investors in community bonds include prospective (offordable) frome buyers, economically proposed buyers, accommunity groups and reliving companies, who all want to be part of this comprehensive sustainable development. At the close of the day the investors symbolicially switch on the salar provised lights before a beginty coloured bibboard with a 3D statute of the proposed development and raise a glass of local with. The Whitelettip cafe has done a nature trade.

South Hams District Council hosts a Community Partnership Forum

to invite proposals under The Sustainable Communities Act. The event sittacts is wide attendance and document leading to over 180 proposals coming from the community, with eleven processis going forward to national government with SHDC backing.





A TIMELINE OF CHANGE

- Increasing renewable energy supplies * Repairing biodiversity
- · Maintaining clear) water supplies with less energy inputs



2026-30

The family is flocking back

A survey shows that more young people are likely to return to their home lower, after they feash their studies, than head for the ottes. The opportunities for processing and managed work has revenued in recent years and many are opting to work from family bases, often supporting older members or the family. Living units are more diverse reflecting extended family and friends sharing co-housing units.

Better health with less wealth

Long putric health unto are benefiting from reduced workloads due to people being more healthy resilient and enterprising in addressing their own resolt. The fleath gardiers and increased continuity supports are popular and having a marked effect on the general health and happiness of total people. Many become destining that having hewer possessors is less streamful other consider the general diversity of table in their day gives from an increased sense of acceptance, others but their increased sense of well-being down to less sociation and the strong sense of community they feel.

Happiness and calm reigns on the streets

Times and Disnet has quar a different ambience. There are more people on the streets and there is a general air of being thay yet consensational. The shoos in the town and villages have gione through many changes and there are many new food and general hardware shops as well as repair and reuse shops. Many of the products on sale are locally produced, more utilitarian and there are generally lewer exods and turkey goods for sale. Most fusionises offer a local delivery service which is generally by bicycle. The local Mostalgia Society has commercied horse and cart street deliveries for daily balery and dairy products, much to the delight of local small children and olders alike.

Global response to climate change

The international call to arms to implement become surport managem is more with orchiterant by the general public. White many measures have arready been undertaken, it is wately recognised that not enough is being done by the developed nations, and Ethiopia shows strong leadership again by solling for universal stringent energy responds and surport sequestration requirements per capita. The UK Government debates where it will plant all the trees to manage its carbon pacts and enters indirectations with other European countries to mobile commentates. We have still got too many people observes lianes Channel age 10 from South Beart.







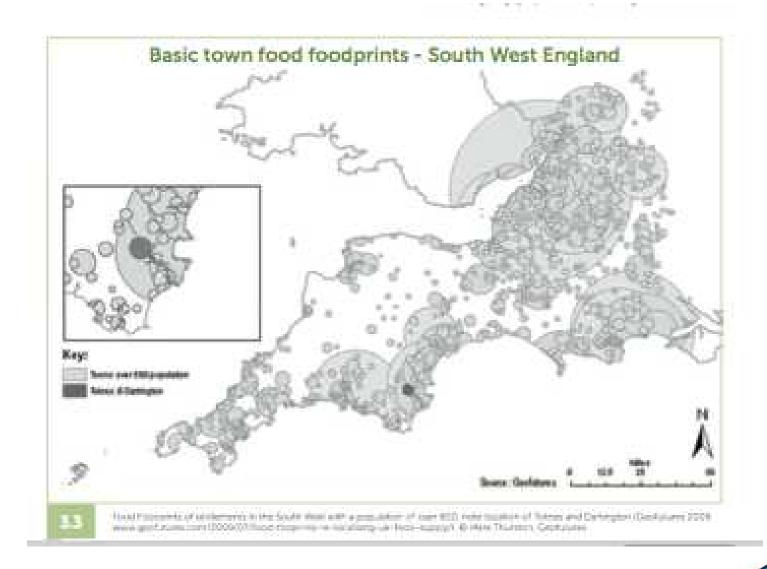
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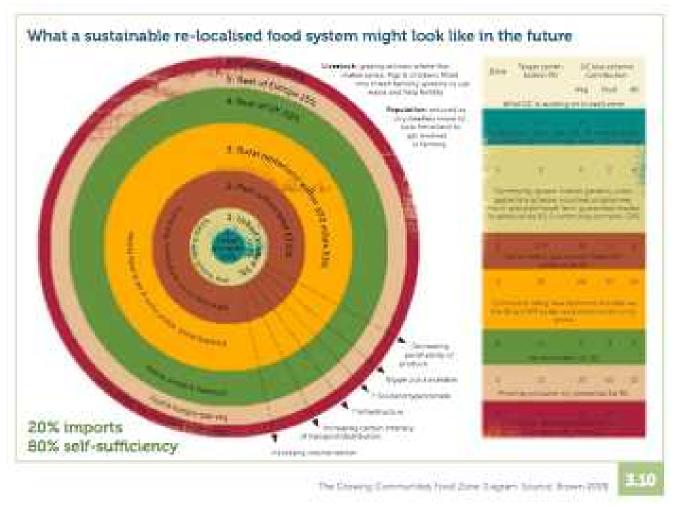
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2009

Can Totnes & District Feed itself?



Can Totnes & District Feed itself?





Can Totnes & District Feed itself?

Conclusions

This paper has offered a very rough, broad-brush at tempt at addressing the question 'Can Toines and District feed lesel?' Utilizing GIS mapping and the district feed lesel?' Utilizing GIS mapping and the district that are currently accessible it has explored the currentland dissensant how familiand is currently used, and then, using Smoon Fastiscs 'Liversiock Permanuature' model, has tried to assess whether or not Tothes and District could actually feed itself. Even if we were to assume roughly stable consist conditions, the shower is that yes, it could but only if:

- It lived in isolation from its neighbouring major comurbations of Psympurit and Torbay, when these artifements are factored in it becomes for more difficult.
- For far more people lived on, and worked, the land and
- We are a very different diet from the one we consume today



ENERGY SECURITY

"Sometimes people ask me. "Surely we used to live an remembles put fine before the industrial revolution?" Yes, but don? forget that hap things were different then: thestyles and population demalies."

> David J C Mackey, Professor of Physics, Cambridge University

The Challenge

At present despite pierry of Governmental not show a

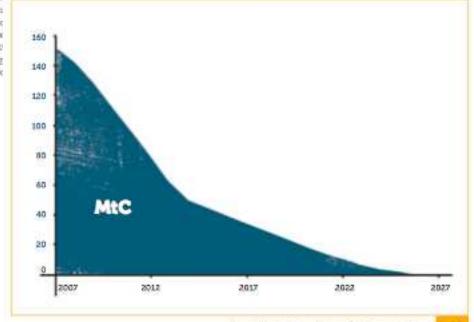
the need to create a low carbon economy. URLs energy supply or 2009 still comes for and cow, tossil fuels which are finite and no sble, and high emitters of carbon. Renewa use to now over £ times the tossil it was in 2 2007 contributed to only 1,3% of our energ. We lobe energy that to inefficient converse.

The National Energy Picture: Where our Energy Comes From at the Moment

Although different kinds of fluels are used for producing different types of energy, it is important to note that not all are interchangeable.

Fossil fuels

Oil has a high energy density and its liquid halure.



Carpon Budget Britain, Source, Zero Carpon Britain



Totnes & district Renewable energy Budget

Can Totnes and District Power Itself?

This is the question we will be exploring in this isotion. Is it feasible that Totries and Destrict might be able to meet its own energy meets through rentwable sources of energy, to take the lead in demonstrating the hugely beneficial impact that locationing energy generotion would have? What even a cursory look at this question reveals is that if we too at research current elegan demand the artiswer is no

Estimating annual Total Energy demand 2009 - 2030

by Mousehold in Tolines & District in line with predicted increasing population, increasing energy efficiency b energy reduction measures to achieve ZCE 50% of 2005 demand:

			1	Est. 100 of Personal solds	Ear, total energy demand based on 2008 unage per household 74.83 MWH;				
New	full country.	Coulded molition Said on bemales X contains	24 to of person perhapses?		Supposes in Chase Sawel on 250% unage in 2506 WMHs	Deep in 2009 severally demand - beautiful 200 store	Withing to Change jet trout demond 1940 With Y setuctors MWNby	Stat stead down and per States and self-th endument of YWNY	
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F011	12	28,576	255	160	790,684	115	600,075	62.62	
2018	78.)	25,515	285	9780	731.157	255	512.125	5441	
2023	Hts	25,436	2.65	9,650	1372/5	222	465.175	4632	
2026	19%	51455	275	9930	263,063	413	390,228	3830	
3035	38	201,737	214	33,000	W8.500	50%	254732	35,47 (\$2,630)	

I Deven County Council data with TTT carculations of THO as a percentage I based on 2006 of Seach Hamp population is See Probletion estimates and discussion in Cohert up Traveng section.



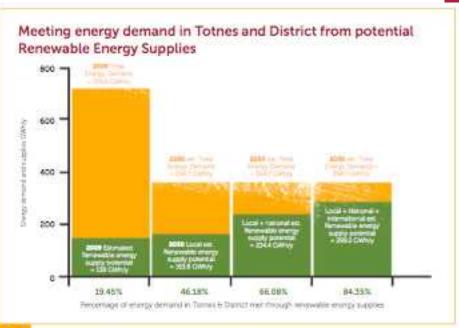


Summary of Potential Renewable Energy Capture in Totnes & District

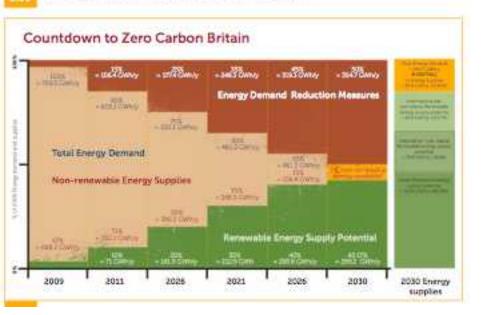
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Meeting printing printing of Estates and Dakker ham actioned Research Entering Taggins



Summary

Tolnes & District Reseline estimated total DEMAND of all energy = 709.5 GWh/y in 2009

> neducing to 354.7 GWNy by 2000 On line with ZCB 50%

T & D Baseline estimated potential REMEWABLE ENERGY PRODUCTION = 138 GWN/y in 2009

rising to 163.6 CWh/y by 2050

(2000 T6D estimated total renewable energy production INCLUDERS per capita share of National potential large scale renewable energy capture = 294.4 GWh/y)

(2000 T6D estimated total renewable energy production

IMCLUDDIG per capita share of National + International potential large scale renewable energy capture

= 299.2 GWh/y)



To What Extent can Reducing Personal Transportation Reduce our Energy Demand in T&D?

Annual average personal transport use per capita in 2008 to asswer:

Estimating reduction in annual energy demand for transportation for Totnes & District as population increases but access to personal motorised transport decreases

			Timal Energy demand the Theraport in T & D.					
Total Control	September 19	Colouries positioning with community 5 themself	Contrator positions with estimated 3 houses Market as Chief Seeming 700 state (1070 state) were		Without to Diverse for senant had settle entry efficiency monty	the say 1000 farmed for the case of the same 1000 farmed for the same 1		
zoca -	Tambro	13.661	256,436	Baselina GS	258.436	2726		
2001	n	19,579	266.191	304	500,733	1908		
2016	75.	25.588	276,522	375	1,00,083	1,854		
3021	3.00	26,489	295396	825	57,595	5.88		
2026	till	20443	297.597	Fernans at 80%	666456	539		
10011	13/5	100307	307340	Terriers at DOS	£1.500	16.55		

^{2.} Depart Councy Council fining with ETT companions of 74th as a \$ Boson on 2009 of South Here separation

Methanic B,345 MWh/y Rosing to 8,486 MWh/y by 2030

Bio-diesel 176 MWh/y Rixing to 351 MWh/y by 2030

Total combined = 8,521 MWh/y in 2009 Rising to 6,837 MWh/y by 2000

When those figures are compared with the estimated demand for transport as set out in Table 3.4C, even when reduced to 80% of present demand, there is a substantial deficit in supply.

Locally produced renovable transport fuel meeting demand in TMD:

> IBS21 + 258.436 =) 3.3% in 2009 naing to (8.837 + 61.508 =) 54.4% by 2030



If Wales stopply from All sentrely fathe S as this is completed from our claims figures of flame to

Transition in Action

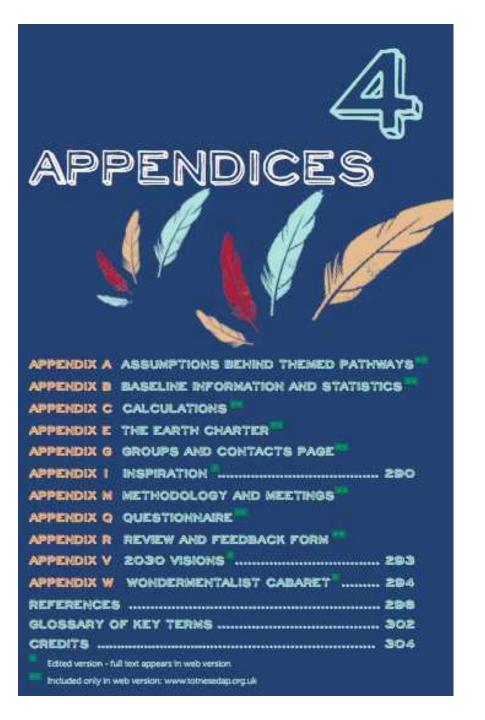


Transition Together

Transition Together is a very local programme designed specifically for anyone tiving here in Totnes, and its summarising villages. It is a simple workbook that enables you to take a number of effective, practical, money and energy-saving scop together with a group of resignature, your hands or your family. The workbook shows you the easiest ways to: The programme is very flexible. Together with your group, you arrange dates and venues where you'll make your way through the workbook together.

- The ideal size for a group to 5 8 households
- You'll meet about 7 times, usually once every 2-3 weeks:
- Group members generally take turns to foot a meeting at their homes, but other places can be







Thank you to all our sponsors & supporters of this project







ASHOKA

Sponsors of this launch:

Sharpham Trust

Greenlife





Thank you to everyone who has been involved in this project





Friday May 7th 2010

COME ALONG TO THE LAUNCH



all welcome bring your friends and neighbours

