

THE WAY FORWARD

ENERGETICA – Its strategic economic importance for the future of the region

The Energetica Corridor is one of three zones identified within the 'Aberdeen City and Shire Draft Structure Plan' as a strategic growth area. It is anticipated that these three areas will accommodate 80% of growth over the next 20 years. The structure plan states that the initial focus for development within the Peterhead-Aberdeen Corridor will be for economic growth and diversification; however, there could be additional provision for housing land in the second half of the plan period if economic diversification is achieved.

The need for Energetica

There is no doubt that the Aberdeen City and Shire economy is extremely successful. Headline indicators of economic performance, in terms of Gross Value Added and the level of average earnings, show it to be amongst the best performing areas in the UK. There are however genuine anxieties about the medium to long term competitive position of the region which need to be addressed now. The 'tightness' of the labour and housing markets, and land market generally, have created something of a constraint, a brake, on development. Additionally there are real concerns concerning the need to 'anchor' the oil and gas production base in the region as well as develop a relatively new technology base in the area. It is because of the need to address such concerns now, whilst there is some development time to address them, that the concept of Energetica has been developed.

Energetica at its core, is a long term 'region-building' development proposition which has the potential to act as a powerful driver of economic performance in the future. It does indeed identify a world class, strategic development proposition around which a vital development path for the region can be constructed.

This inspirational proposition is structured around three strands;

- **those industrial and commercial sectors that will generate future wealth for the region.**
In this context Energetica will provide the economic and business infrastructure which will underpin these wealth creating sectors
- **supported by sectors which will support the 'quality of life' of the region**
In this context Energetica will provide new housing and good, sustainable neighbourhoods; quality education and healthcare
- **enhanced by indigenous assets and resources which provide a uniquely powerful 'lifestyle' offer**
In this context Energetica includes a dramatic natural environment, stunning coastal scenery and a wide range of leisure and recreational opportunities

The core objective of Energetica is to create a new, world class, competitive place – one that is internationally attractive to both technology-based businesses and talented and skilled individuals and families. Energetica, as currently configured, is capable of helping re-position the region.

The distinctiveness of the Energetica 'offer' derives from a series of outstanding features as follows;

- iconic natural assets
- unique physical environment
- global connectivity
- critical mass of global oil companies
- scale and quality of the oil and gas cluster
- strong group of research centres
- attractive new 'strategic business locations'
- attractive new zero-carbon neighbourhoods

This bundle of attributes will help create a new identity for the region. In addition, the 'offer' will need to be made more powerful by **international branding and outstanding architecture and design** – both vital components of the Energetica package.

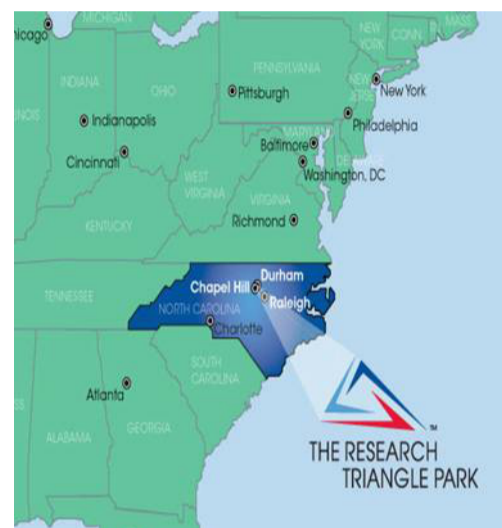
Comparator Developments

We might characterise Energetica as a **large scale, masterplanned, technology-business, residential and 'lifestyle' development**. Given this broad definition, there are similar development models which have been undertaken elsewhere and which because of their success will give some comfort to the Energetica proposition. There are probably at least five comparator developments which might have something to 'say' to Energetica and these are;

1. **Research Triangle Park (RTP)** – a large research park set up in North Carolina close to Raleigh, Durham and Chapel Hill. RTP developed a 50 year vision for the State of N.Carolina to “get out of cotton and tobacco” and diversify.
2. **Sophia Antipolis** – began in 1969 and was located around the University of Nice and Airport. The park is some 23,000 acres in scale and there are now 1300 businesses and 30,000 jobs.
3. **Woodlands** – which is a large suburban community of Houston. Begun in 1974 it comprises 28,000 forested acres structured around 9 new-build villages. The Airport is nearby and so is a waterway.
4. **Houston Energy Corridor** - a district of Houston covering 26,000 acres (105sqkm) of urban parkland and housing many of the world's largest oil companies
5. **High Technology Corridors (HTC)** – three HTC's are being developed in the West Midlands by the RDA. Although unlike the others in character nevertheless their aim is to secure economic transformation.

The development of those Corridors are seen as exercises in “strategic place regeneration” where the Corridor has been identified as “a functional geography for intervention”. The projects are mixed development projects including business space (flexible lab and office space, incubators, workshops), residential, retail, hotels, conference centres etc. The aim is to enable strong collaboration between business, academia and research institutions. All have close proximity to an airport with good connections and a good relationship with universities. The developments aim for a very high quality environment and quality image and comprise high quality accommodations and clusters of development in a semi-natural environment structured around new villages. These are clean, attractive, safe, well-managed environments.

Some of the comparators have developed a system of parks, trails and green spaces throughout the area and encourage jogging, healthy pursuits, picnic areas, wild flower mass plantings etc. All have a strong Corridor identity and branding with perimeter markers, signage and signposting. The Corridor is marketed as a prime location for technology-related and design businesses and often managed and serviced by a 'Corridor Management Team'. The determination of Energetica to provide a high quality, safe, people-oriented Corridor to live, work and visit ensures that it will be in keeping with the successful comparator developments elsewhere.



Research Triangle Park, North Carolina



The woodland setting of Sophia Antipolis, Nice



Sophia Antipolis Nice

How will Energetica help secure a strong economic future for the region?

It will aim to do this through five associated goals as follows;

- i) **The Energetica Corridor will provide attractive additional development capacity for future businesses and housing in the region**
 – “It will provide the space we do not have at present” Interviewee

Fig. 1 below shows the spatial distribution of land for business and for housing what has been identified in this study. The total is 627ha of which 364ha is for housing-related development and 263ha for business.

Fig. 1 Distribution of developable land within the Energetica Corridor

	Residential (ha)		Business (ha)		Total
Peterhead	84	(23%)	54	(21%)	138
Ellon	180	(49%)	29	(11%)	209
Cruden Bay	35	(10%)	0		35
Newburgh	30	(8%)	2	(<1%)	32
Bridge of Don	35	(10%)	178	(67%)	213
Total	364	100%	263	100%	627

The distribution illustrates a Corridor with about 2/3 of the business land available concentrated at the southern end, about 1/4 at the northern end in Peterhead and a reasonably chunky element of business land being available in Ellon.

Residential land shows a different distribution with about 60% being made available in the middle of the Corridor; almost 1/4 at the northern end and only 10% in the south at Bridge of Don.

These figure are, however, only indicators of 'holding capacity' in the Corridor – and simply reflect the supply of development land in the Corridor. In this context therefore, if the capacity of the whole Corridor was 'built out' then the area could provide homes for some 35,000 people plus capacity for some 38,000 jobs. The investment to realise these levels of activity would in the order of £2.7 bn.

This additional capacity will permit the targeting of major mobile investment projects, corporate expansions, research organisations, relevant government institutions, start-ups etc, in fact the whole range of business activity.

Besides corporate offices, an incubator infrastructure will be important; smaller buildings around a central courtyard where lab workers, business start-ups etc can interact. Some innovative business accommodation ideas might include;

- **The 'Graduator'** – this would be post-graduate housing linked to small start-up space thus making it attractive to graduates to stay and 'have a go' thus encouraging graduate start-ups and retention.
- **The 'Univator'** – this would provide a 'home' for short-term research projects emanating from both university and corporate organisations. Such accommodation might be part of a block, with flexible partitioning and flexible terms.
- **Multi-Use Facilities Complex** – these would be multi-use areas including cafe, restaurant, meeting space, services, laptop work areas, papers/journals, data/info centre. This would help optimise networking and interaction. Could also be housed in a distinctive and memorable hub building for the site.

ii) **The Energetica Corridor will create an outstanding opportunity to 'anchor', consolidate and strengthen the region's oil and gas production base**

The rationale of this case depends upon the opportunity, afforded by the creation of Energetica, to strengthen the cluster; to increase the breadth of available skills and still sustain a high level 'quality of life'.

iii) **The Energetica Corridor will provide sufficiently attractive capacity to pursue energy-driven diversification and 'renewables' business activity generally in the region**

Energetica will provide an opportunity for the region to attract and develop companies in associated technologies – as well as attracting other technologies and sectors, particularly the life sciences where the scale is targeted to double in 5 years.

iv) **The Energetica Corridor will provide an outstanding opportunity for the region to attract and retain talented and skilled people**

Energetica, by providing technology-related, highly paid jobs together with attractive sustainable neighbourhoods "as a package", so to speak, will be particularly distinctive and attractive to talented and skilled people; especially those attracted by, so-called, 'ethical living'/cutting-edge living.

v) **The Energetica Corridor will pioneer a new approach to environmental sustainability**

Estimating the short-term economic outputs of the Energetica Corridor

The numbers shown in Fig. 1 do no more than identify the supply-side capability of the proposed Corridor – its holding capacity. However, in order to identify the scale of the short term economic benefits we actually need to estimate the scale of the demand for this development land from both commercial business and potential homeowners. In order to make this forecasting exercise as realistic as possible we will consider demand estimates for the first 10 years of the programme only. Beyond 10 years it is extremely difficult to estimate likely demand.

The business programme; judging from the level of business space uptake elsewhere in the region and allowing for a degree of frustrated demand already in the system, we have assumed a reasonably ‘bullish’ programme of between 150,000sq.ft and 200,000sq.ft of business space per annum. Over a 10 year period this converts to a demand for between 1.5mn and 2.0mn sq.ft of gross floorspace.

The residential programme; although there is capacity within the Corridor for the development of some 10,000 homes, the take up of this allocation will depend on the strength of demand. We have assumed a reasonably optimistic level of demand as a result of promotion of the Energetica ethos, at around 200 annual housing completions within the first ten years. This converts to 2,000 houses over a 10 year period. The completion rate there after will depend on demand.

Fig. 2 Estimated Economic Impacts as a result of first 10 year programme

• Population increase as a result of housing completions	5,000 people
• No. of jobs created (excluding construction jobs)	between 7,000 and 9,000 jobs
• Level of investment required	£450mn
• No. of business attracted to the Corridor (SME’s & components)	between 50 and 60

The numbers in Fig.2 only refer to the estimated level of business and residential development identified for the Energetica Corridor over the first 10 years.

There are additional proposed developments for the Energetica Corridor in the first 10 years which, if they were all to proceed, would lead to the following estimated levels of investment;

ASP, JV and associated private development	£100mn	investment
Kingfisher	£80mn	
Airport Development Zone	£80mn	
Peterhead Harbour Infrastructure	£40mn	
Oceanlab Newburgh	£10mn	
Trump Golf Development	£1000mn	
Total	£1,310mn	investment

These additional investments might lead to a further estimated 3,000 additional jobs over the first 10 years.

Further job generation would also emerge from additional enabling investment;

- Aberdeen Western Peripheral Route = £500mn
- Dualling on the A90 = £20mn

One might reasonably conclude therefore that over £2bn of investment in private development and public infrastructure is likely to be made in the development of the Energetica Corridor to help create a new 'world class offer' for the Region.

How might Energetica be implemented

In effect the Energetica project is seeking to do two things;

- i) **To increase the 'demand' for the Aberdeen and Shire region;** this includes demand from businesses, oil and gas in particular; also from associated 'renewables' and other technologies, demand from skilled and talented people to live there, demand from visitors, demand from students etc.
- ii) **To increase the 'investability' of the region by creating an attractive and distinctive 'offer'**

The development itself will not be predicated so much on market failure as a coming together of 'market opportunity' and 'developmental necessity'. Consequently, the suggestion of 'special status' for the area is unlikely. However, some developmental support will be necessary in order to realise the bold ambition for a world class quality development Corridor.

In this context the idea of '**Energetica Bonds**' may be worth investigating. These would probably be saleable only to the currently cash-rich oil majors. The aim might be to seek to create a development fund of £20mn in this way. The bonds might have a repayment moratorium of 3 years of thereby. The funds would be used to leverage other funding and the sum used for investment funding for the early stages of the development.

Also, a **Deferred Purchase** scheme could be helpful whereby, say, the public sector or SE, would purchase land on behalf of the 'public sector developers' and would be re-paid when development was proceeding and money had been paid back from developers.

Finale

Aberdeen City Council and Aberdeenshire Council, like other public bodies, need to forward plan and put in place appropriate developmental infrastructure in order to secure a well-performing regional economic performance. By looking to its indigenous assets and creating something genuinely unique, the region may be able to secure an even stronger and better balanced economy for the future. The risks associated with Energetica are not particularly high as long term transformational projects go. This opportunity to develop and champion Energetica as a vital transformational project for the region needs to be grasped – and with some urgency.

Phasing Plan for Energetica

- Immediate Priorities** – In the next 2 years
- Short Term Priorities** – in the next 5 years
- Medium Term Priorities** – in the next 10 years
- Long Term Priorities** – after the next 10 years

Theme	Immediate Priorities	Short Term Priorities	Medium Term Priorities	Long Term Priorities
Economy	<p>There is a need to feed the project into the structure plan.</p> <p>Identify the level of funding required for renewables projects</p> <p>Educational presentations to the general public on 'Energetica' and sustainability</p>	<p>Consider the establishment of a joint venture company to deliver the project</p> <p>Examine ways of improving digital connectivity to world standards</p> <p>Forge links and partnerships with the Universities</p>	<p>Build on the foundations already laid in the initial stages of the project</p>	
Energy	<p>Discussion with farmers about the possibilities of biomass and biogas</p>	<p>Conduct a feasibility study on windfarm locations and secure planning permission through consultation</p> <p>Selective planting throughout the Energetica Corridor</p> <p>Begin the construction of AREG's proposed off-shore windfarm</p> <p>Research into the potential of marine renewables off the Aberdeenshire coast</p>	<p>Construction of on and off shore windfarms</p> <p>Installation of community heating networks in Ellon and Peterhead</p> <p>Consultation exercises regarding off shore wave and tidal renewables</p>	<p>Construction of wave and tidal farms</p>
Transport		<p>Construction of the AWPR</p> <p>Gather support from local authorities, NESTRANS and other stakeholder for the concept of 'Energetica Boulevard'</p> <p>Dualling of the A90 to Peterhead</p> <p>Introduce the concept of hydrogen cars and gather support from key stakeholders. Research sources of hydrogen and provision of infrastructure</p>	<p>Establishing car clubs and car pools for the 'Hydrogen Highway' and the development of hydrogen fuel stations along the Corridor</p> <p>Construction of 'Energetica Boulevard' connecting Bridge of Don and Dyce</p>	
Landscape		<p>Improvement to walkways and coastal routes</p>		
Built Development	<p>Construction of projects that bookend the development – need to give people a sense of belief in Energetica</p> <p>Discussion with Peterhead Port Authority on planned projects to identify timescales and priorities</p> <p>Discussion with HM Prison Peterhead about the new build project</p>	<p>Importance of constructing an exemplar project to give the project high visibility</p> <p>Begin the construction of the off-shore wind farm facility</p> <p>Begin development of proposed housing land</p> <p>Begin development of proposed employment land</p> <p>Put out tender for construction of iconic buildings</p> <p>Carry out consultation exercises regarding ;</p> <ul style="list-style-type: none"> • Windfarms • Off shore wave and tidal • Housing and employment proposals • Environmental and recreational potential in Ythan 	<p>Completion of Iconic Buildings in Bridge of Don and Peterhead</p> <p>Continue development of proposed employment land</p>	<p>Develop remaining housing land</p> <p>Develop remaining employment land</p>

