

Chairperson and Committee Members
CORPORATE BUSINESS COMMITTEE

16 FEBRUARY 2012

Meeting Status: **Public**

Purpose of Report: For Decision

**UPDATE ON THE CLEAN TECHNOLOGY SECTOR
DEVELOPMENT ON THE KĀPITI COAST**

- 1 The purpose of this report is to provide the Committee with an update on recent developments at the Clean Technology Centre and Park and to seek approval for on-going investigations into a proposal for the future development of the Clean Technology Park concept.

SIGNIFICANCE OF DECISION

- 2 This report does not trigger the Council's Significance Policy.

BACKGROUND

- 3 On 2 February 2012, the Environment and Community Development Committee adopted the Draft Strategy for Supporting Economic Development on the Kāpiti Coast and approved its release for consultation (Report SP-12-460 refers).
- 4 Support for the clean technology sector is identified as a key strategic focus area in the Draft Strategy. This includes building on the Clean Technology Centre (the Centre) at Ōtaki and growing a successful clean technology park (the Park) around the Centre. Growing the Park will include establishing a new business model to provide direct services to clean technology business such as access to research and development facilities and commercialisation services.
- 5 Discussions on the importance of growing the Park have been on-going since the Centre was first opened. For example, at the opening Steven Tindall highlighted the need to provide services to help businesses commercialise their products.

CONSIDERATIONS

The Clean Technology Centre

- 6 As councillors are aware, the Clean Technology Centre at Ōtaki opened in November 2010. The Centre is managed by Grow Wellington. It provides physical space and a range of support services to a number of small clean tech businesses at the start up stage. It initially started with six businesses but has grown over time to 14 businesses. A list of the companies at the Centre is attached in Appendix 1. A number of other businesses have off-site connections with the Centre enabling them to network with similar businesses and gain some support from Grow Wellington. The Centre is designed to act as an incubator for start-ups.

- 7 At the present time, the Centre provides affordable space in which businesses develop their products. It also provides access to a range of clean tech networks locally, regionally, nationally and internationally. Grow Wellington provides support to help the development of business cases to take the first steps to commercialisation. During the course of last year, there was some concern that businesses at the Centre were not receiving the range of services they need to grow and develop. However, Grow Wellington has since strengthened its support for the Centre and it now appears to be functioning smoothly. For example, Grow Wellington now funds a dedicated business development manager to work with the businesses at the Centre.
- 8 The Centre is designed to act as an incubator for start-ups. It is not intended to be able to provide a full range of research, development and commercialisation services that more developed clean tech businesses might need. The expectation has always been that a clean technology park would develop around the Centre. The purpose of the park would be to provide physical space for the start-up businesses to grow into as they mature and to attract more fully established businesses as well.

Growing the clean technology park

- 9 As part of the background work supporting the development of the Draft Strategy, a report was commissioned to:
 - assess the potential for future development of the Park;
 - identify how it is likely to evolve in the longer term;
 - identify any risks associated with the development of the Park;
 - provide recommendations for future operations that will most effectively drive the commercial success of the Park's tenants and the district's clean technology sector at the national and international scale.¹
- 10 The report has been circulated separately to Councillors. Briefly this report concludes that significant progress has been made with the development of the Centre and that prospects for growth of the wider park are strong.
- 11 NZIER also independently assessed the potential outcomes that could be gained from a successful Park. Based on a scenario that clean technology design and manufacturing is successful at the Clean Technology Park in Ōtaki, the following potential economic outcomes were estimated:

¹ Green Chip Ltd. 2012. Ōtaki Clean Technology Centre and Park Economic Opportunities for the Kāpiti Region: A Strategic Operational Overview. Report prepared for the Kāpiti Coast District Council and Pritchard Enterprises Limited.

Table 2: Potential Clean-tech outcomes, 2021

Scenario and impact	Probability	GDP impact (\$m)	Employment impact (jobs)
Clean technology			
High	20%	41.2	350
Medium	40%	20.6	175
Low	40%	10.3	88
Expected value		20.6	175

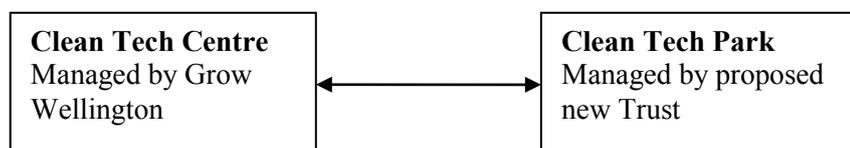
Source: NZIER, 2011. Kāpiti Coast’s new economy: An assessment of the ‘new economy’ approach to economic development on the Kāpiti Coast. Report prepared for the Kāpiti Coast District Council.

Note: this is a scenario designed to contribute to policy discussions. It is not a financial estimate. It includes only the direct impacts of the industries.

- 12 In this scenario, the high level impact assumes that the Clean Technology Park is as successful as planned. The medium level scenario assumes it is 50% as successful as planned and the low level scenario assumes it is 25% as successful as planned. The probabilities reflect an NZIER assessment as to the riskiness of the strategies and the likelihood of success. The expected value is what NZIER considers to be most likely to occur.

What is Required to Grow the Park

- 13 In order to facilitate the growth of the Park, a new organisation will need to be established. The purpose of the organisation will be to manage development, establish a full suite of customised commercialisation and research and development services for Park tenants, and to attract new tenants to the Park. The new organisation will be separate to the Centre but will obviously need to have a strong relationship with it (see diagram below).



- 14 The types of services that would be offered by this new organisation are outlined in the diagram below:

<p>CT business support:</p> <p>Full clean tech commercialisation services</p> <p>Strong commercial governance</p> <p>Best of breed technology advisory services</p> <p>Innovation fund established</p>	<p>Skill and technology support:</p> <p>Local tertiary skill development</p> <p>Local suppliers and technology developers</p> <p>Regional technology rollouts</p> <p>Cultivate/consolidate national and international linkages</p>
<p>Facility expansion and tenant recruitment:</p> <p>Attract major new companies to Stage 2 building and beyond</p>	<p>Technology development support:</p> <p>Testing technology</p> <p>Certification – carbon banking</p> <p>Eco village</p> <p>Fuel and EV testing and certification</p> <p>Sustainable housing</p>

Clean Tech Park:

New structure and governance body

- 15 The recommended structure for the new Park organisation is an independent trust. The Green Chip Ltd report (referred to above) advises that the trust should:
 - be efficiently structured, with a small staff and budget;
 - emphasize designing, coordinating and providing a comprehensive range of business and commercialisation services, utilizing existing programs and networks whenever practical, to maximize impact and to avoid duplication and the inefficient use of resources. “In-house” capabilities should be limited to services that are not otherwise available, affordable, or well adapted to the needs of the clean tech sector.
- 16 The report suggests a two-stage approach should be used to establish and govern the trust. The first step should be to appoint a transitional board to shape the form and function of the trust, followed by the establishment of a permanent governing board that includes key players with the connections and “mana” to effectively advance the clean tech agenda.
- 17 The new organisation will need to be steered and enabled by a well-connected, business-driven governing board that will actively champion the interests of the clean tech sector amongst key stakeholders, create access to national and international markets, and develop channels and relationships to investors.
- 18 The transitional board would initially be responsible for recruiting and appointing a chief executive officer and determining a draft strategy and establishment plan for the full Trust. The Council would be represented on the establishment board and the full board in due course. However, it is important to note that the Trust would be fully independent of Council.
- 19 An important part of this initial set up stage would be the construction of a building at the Park which would provide office space for the Trust and for new tenants. Pritchard Enterprises Limited is currently working through the design

and consent stage of a new building and expects construction to start during April 2012. This building will use green sustainable and clean technologies. Products developed by current tenants of the Centre will be used where possible.

Council support for the development of the Park

- 20 There is an opportunity for Council to support the initial development of the Park with potential for further investment over time. Supporting the Park would enable Council to be fully involved in its establishment providing the capability for influence and leadership. The development of the Park would be a key step in implementing Council's Draft Strategy for Supporting Economic Development on the Kāpiti Coast.
- 21 Three potential scenarios for how this might work have been identified:

Investment scenario	Benefits (+)& Risks (-)	Council Investment
1. Business as usual (hold investment at present levels)	+ Lowest cost option – Growth stage requires support – Risk to Park growth remains	\$<0.5m pa over 3 years
2. Measured start-up support	+ Measured risk – cost neutral + Opportunity for public-private partnership – Full growth unsecured	\$1.5m 1 st year
3. Council becomes full investor / park owner and manager		\$>5.0m 1 st year

- 22 Option Two is the preferred option. It represents the level of support that would be most feasible for the Council without supplementary funding from other sources and most likely to lead to the success of the Park. This option addresses the shortcomings of the status quo and positions the Park and the regional clean tech sector to achieve their combined growth and development potential.
- 23 The proposed mechanism for supporting in the Park would be via a loan of \$1.5 million to the Trust to be used to set up the new organisation and establish the services outlined above. This would be cost neutral over time with income generated by the Trust used to pay off the loan. The Trust income is expected to come from two sources – payments for services and revenue from some of the technologies as they become commercially viable. The new budget prepared as part of the economic development activity review includes funding to service a loan in the initial period until the Trust is generating sufficient income to cover the loan repayments. The pay back period is estimated at 4 years. However, Council staff are taking a more conservative approach estimated a payback period of 8-10 years as it works through the business case.
- 24 Option One is not recommended because it is unlikely that the Park will develop without significant intervention at this time. Option Three is also not recommended because Council does not have the skills or experience to run a facility of this kind. It is not core business and full Council control would also discourage involvement from the private sector.

Risks for Council

- 25 The development of the Park would be a key step in implementing Council's Draft Strategy for Supporting Economic Development on the Kāpiti Coast. It would cement the Kāpiti Coast's position as a district which is known as a place which supports innovation and clean sustainable technologies and helps entrepreneurs to take their ideas through to commercialisation. This is also consistent with the emerging technology innovation focus of the Wellington Regional Strategy for Sustainable Economic Growth. The benefits to the District of a successful Clean Tech Park include the strengthening and diversification of the economy and ultimately more job opportunities for local people.
- 26 There are a number of risks associated with the proposal. However, initial analysis suggests they can be mitigated. The risks to Council are outlined in the table below:

Risk	Mitigation
Failure to establish a credible and effective Trust	<p>Contract an appropriately qualified person to manage the process of setting up the Trust.</p> <p>Careful selection of trustees with relevant skill sets and careful selection of a Chief Executive Officer for the Trust.</p> <p>Establish a steering group within Council to manage input into the Trust set-up</p>
Failure to appoint a credible and experienced chief executive officer	Careful selection of trustees with relevant skill sets and experience in selecting a Chief Executive Officer for this type of organisation. Ensure that the trustees have sufficient 'mana' to attract strong candidates.
Failure to pay back the loan or delay in pay back	<p>Take a lien over the new building to ensure that Council has an asset which it could dispose of or gain income from to repay the loan. There is a further risk this may take longer than ideal but it should be manageable.</p> <p>Put in place robust accountability arrangements to ensure Council can monitor progress and take action at the earliest stage if required.</p>
Failure of the Trust to develop the Park effectively over time	<p>Careful selection of trustees with relevant skill sets and careful selection of a Chief Executive Officer for the Trust to ensure have the best skill sets.</p> <p>On-going involvement from Council in terms of leadership and influence.</p>
Failure of the clean tech businesses to develop products which can be	Advice via the Green Chip Ltd report is that while there are risks associated with this the

commercialised contributing to the failure of the Park	<p>clean tech sector is developing strongly and these risks are reducing. The timing is considered good for further development.</p> <p>Careful selection of trustees with relevant skill sets and careful selection of a Chief Executive Officer for the Trust so they understand and are able to manage these risks.</p>
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- 27 In addition to this opportunity to support the Trust establishment, there will be on-going opportunities for Council to invest in the clean tech sector. As part of the review of the economic development activity area, Council is proposing to establish an innovation fund. This fund could be used contribute to the commercialisation fund the Trust will set up. This will be consulted on via the 2012 Long term Plan.
- 28 Changes in some external circumstances will also be beneficial for the future development of the Park. Recent discussions in the Wellington Region Mayoral Forum have identified that a regional economic development strategy should be developed based around six key areas, one of which is innovation services, particularly, technology driven innovation including the Clean Technology Centre and Creative HQ. Grow Wellington has also recently confirmed its commitment to on-going support of the Centre. A robust Centre will contribute significantly to the success of the Park.

Next steps

- 29 The proposal is at an early stage of development. It will require further work to define how the Trust will be set up and managed. Should the Committee give approval for further work on the proposal, the next steps would be to prepare a detailed proposal defining how the Trust would be set up and clearly establishing the risks and opportunities for the Committee's consideration. The proposal would need to be included in the 2012 Long Term Plan process.
- 30 This will include establishing a project management structure comprising representatives of Council and Pritchard Enterprises Limited to oversee the process of establishing the Trust. It would be advisable to contract a person with experience in the clean technology sector to develop the requirements further. An initial task will be the preparation of Trust documents defining how the Trust will be set up and run.

Update on Council involvement with Clean Technology Centre Businesses

- 31 Councillors have asked for regular updates on work being done with businesses at the Clean Technology Centre. Recent significant developments are discussed below.
- 32 *Blended Fuel Solutions NZ & APT NZ* - A contract was signed recently to trial the use of emulsified diesel in a tractor mower. The trial will be run during February. Emulsified or blended fuel can be used to replace diesel. It increases combustion efficiency and significantly reduces tail pipe emissions. It can be used as a transition to bio-fuels or other solutions that will reduce dependency on

oil. Should the trial prove successful, it has been agreed to investigate on-going use of the fuel in the Council vehicle fleet.

- 33 *Zero Emissions Vehicles Ltd* – this company is developing electric vehicle solutions specifically for the heavy commercial road transport fleet. The potential for converting a council vehicle to an electric vehicle (specifically a rubbish and recycling compactor truck) is being explored. The cost of the initial proposal for a new truck was too high but new proposal was received on January 20th for a refurbishment of the existing truck which is more competitive and will be explored further.
- 34 *Regeneration Centres (NZ) Ltd* – this is a partnership of a number of companies including SpectionZ, Critchlow, Weltec, Silaca and Astara Technologies all of which are Clean Tech Centre members. They are developing innovative solutions for managing waste at source using a variety of different technologies. A key aspect will be research and development aimed at producing new products from waste materials. They would like to work from the Ōtaki transfer station so they can access the waste stream and have a base for activities located close to the Clean Tech Centre. The Council has previously made a decision to accept higher contract costs for running the waste service in order to make provision for the use of waste stream by other parties.
- 35 The proposal has a number of interesting aspects but we need more information to assess the costs and benefits adequately. Discussions are continuing.
- 36 *Therm R Duct* – Council has not been working directly with this company. However, in December 2011, it signed a royalty deal with CSR (one of the largest building product suppliers in Australia) which covers this technology being incorporated into a HRV type air circulation system. Manufacture and distribution will initially be in New Zealand and Australia with manufacturing beginning shortly and a marketing campaign set to kick off just before March 2012. The product will directly compete with HRV systems but has some points of difference including air warming and diffusion.
- 37 *Greenkeeper Systems* - During the first half of 2011, Council trialled Green Keeper on selected computers. The trial is complete and by June 2012 Council plans to have the system installed on all computers. The company won the 2011 Bright Ideas Challenge.

Financial Considerations

- 38 The financial considerations will be fully investigated as part of the preparation of a formal proposal should the Committee agree to that. Any such proposal would be incorporated into the 2012 Long Term Plan process.

Legal Considerations

- 39 The legal considerations will be fully investigated as part of the preparation of a formal proposal should the Committee agree to that. Any such proposal would be incorporated into the 2012 Long Term Plan process.

Delegation

- 40 The Committee may make a decision under Section B3 of the Governance Structure approved by Council on 21 April 2011 (clause 7.5):

“Authority to monitor performance of the Council’s financial activities, including income, operating and capital expenditure against budgets, remissions, key financial indicators and investment and debt/borrowings management”.

Consultation

- 41 There has been no public consultation at this stage. That would be dealt with as part of the 2012 Long Term Plan process.

Policy Implications

- 42 The concept of supporting development of the Park is consistent with the Draft Strategy for Supporting Economic Development on the Kāpiti Coast.

Tāngata Whenua Considerations

- 43 There are no issues at this stage. However, tāngata whenua have been involved with the preparation of the Draft Strategy for Supporting Economic Development on the Kāpiti Coast.

Publicity Considerations

- 44 No publicity is required at this stage.

RECOMMENDATIONS

- 45 That the Corporate Business Committee notes the work to date on the future development of the Clean Technology Park, Ōtaki.
- 46 That the Corporate Business Committee notes the update on work with businesses at the Clean Technology Centre, Ōtaki.
- 47 That the Corporate Business Committee approves further investigations into the potential to support the future development of the Clean Technology Park, Ōtaki with a report back to Council as part of the 2012 Long Term Plan process.

Report prepared by:

Philippa Richardson

Strategic Projects Manager

Approved for submission by:

Gael Ferguson

Group Manager Strategy and Partnerships

Attachments

Appendix 1: Tenants at the Clean Technology Centre (as at 9 February 2012)

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Nature Coast Enterprise

SpectioNZ Ltd

(Waste to Energy: Microwave pyrolysis)

Cquest (registered as SpectioNZ Holding Ltd)

(Reinventing Recycling)

Astara Technologies Limited

(EV roadbike + others)

Critchlow Limited

ESG Asia Pacific (was E. Sime Group/ESG Energy Ltd)

(Energy Pods)

Geozee Systems Ltd (Blue Kiwi Group Ltd)

(Instrumentation for Electric Vehicles)

Blended Fuel Solutions/Alternative Petroleum Technologies (APR)

Enviromanage

(ETS Scheme, Emission Standards)

Splice Group Limited

(Geospatial Systems)

Solar Zone Limited

(Solar PV and Inverters)

Zero Emission Vehicles Ltd

Weltec

(Carpentry Certificate Courses)

Greenkeeper Limited

(Green IT systems)