

## FEASIBILITY STUDY for the development of the SUSTAINABILITY FORUM'S KZN MIDLANDS GREEN MAP

30 September 2013



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## **DOCUMENT DESCRIPTION**

### Client:

Wildlands Conservation Trust

### Submitted to:

**Dr Roelie Kloppers** 

### Funded by:

Critical Ecosystems Partnership Fund

### **Project Name:**

Feasibility Study for the development of the Sustainability Forum's KZN Midlands Green Map.

### **Authority Reference:**

n/a

**Date**: 30<sup>th</sup> September 2013

### Location:

KwaZulu-Natal Province

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### CITATION:

Zunckel Ecological & Environmental Services. September 2013. Feasibility Study for the development of the Sustainability Forum's KZN Midlands Green Map, South Africa.

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### **EXECUTIVE SUMMARY**

The introduction of a Green Map into the KZN Midlands would boost the concept behind the <u>Sustainability Forum</u> by providing a dynamic platform for the establishment of eco-communities where events, routes, demonstrations, guest speakers, academic debates, films, local and healthy food, music and fun activities can be promoted. In so doing it is hoped that the platform would inspire and challenge people to make the shift towards planet friendly lifestyle choices.

A small grant through the Critical Ecosystems Partnership Fund (being managed by Wildlands Conservation Trust) was awarded, and the feasibility of establishing a Green Map in the KZN Midlands and its proposed business model was conducted over a two month contract (August – September 2013).

The <u>Green Map</u> movement was born out of the Rio Earth Summit in 1992 which sought to provide ways of localising environmental action. Since 1995, the Green Map System (GMS) to date has engaged over 850 communities in 65 countries with 31,000 locally sourced and moderated sites in mapping green living, nature and culture with <u>adaptable tools</u> and award-winning funky, easy to use, green-themed <u>icons</u> that people could use to create Green Maps of their everyday spaces, their schools, universities, neighbourhoods, suburbs and cities. There are a number of limitations with Green Map, first is that all sites are registered on the map for free, so alternative income streams have to be sourced. Maps are slow to load and do not yet have a feature to navigate to one's mobile GPS; Open Green Map (GMS's mapping platform) does not allow for bulk uploads of data and layering is also problematic.

The government structures that have the legal mandate to counteract the negative environmental trends in the KZN Midlands currently lack the necessary planning and regulatory capacity. Therefore it is essential that urgent alternatives, such as incentives are put in place to bring about the required behavioural changes. It is envisaged that the KZN Midlands Green Map will provide a platform from which a variety of incentives and mechanisms can be developed.

The primary objectives of the Green Map should be to communicate to local residents that despite the dire state of the environment, sustainable living is achievable, and the KZN Midlands Green Map is a new, exciting initiative that will promote and celebrate sustainability in the KZN Midlands and thereby rehabilitate and preserve biodiversity and eco-systems services while also creating jobs in the green economy. The impact the Green Map has on visitors and the improved economic environment for tourism spend is an added bonus. The inclusion of the Green Map into the Sustainability Forum website sets it apart from other eco directories and with monitoring, the partnering of existing certification standards and verification mechanisms, users will be assured of its members' authenticity and compliance to sustainability best practice.

From a survey conducted to establish organisational support for the KZN Midlands Green Map, it would appear that there is strong support, people are willing to engage with the platform and they believe that it will have the desired result in changing the 'business as usual' approach toward more sustainable living.

Measuring the impacts of the KZN Green Map, once it has been in operation for some time, might present an attractive post graduate thesis, possibly co-supervised with the University of KZN and

Msunduzi Innovation and Development Institute (MIDI), that works out what the local spend is as a result of the Green Map and develops a system to measure if the anticipated benefits actually do materialise.

Interviews were held with the Green Mappers from Durban, Johannesburg and Cape Town to establish a collaborative relationship with the Administrators of these sites and to gain a better understanding of their models. The sole income generated by the Cape Town Green Map project from inception to end July 2010 was R 55,800 by way of sponsorship from Cape Town Tourism and paid-for photo listings on the print map while the total cost was R 806,796.00. City of Cape Town's contribution was R 518,364.00, the investment by Urban Sprout and A&C Maps amounted to R238,255.00 and paper for the print maps to the value of R 50,176.00 was donated by Sappi.

The aim of this study has been to focus on formulating a 'bankable' business plan to take to funders so that we can get the residents and business people of the KZN Midlands to see 'green' as something that they can latch onto and that is not an unachievable or nice-to-have concept.

While GMS has served its purpose for the Cape Town, Joburg and Durban Green Maps as an initiation start-up, there is unanimous agreement on the need to collaborate, develop a shared SA Green Map Brand and a new custom-designed web platform. The aim is for the website to be the first port of call for anyone seeking green information and advice. In order to achieve this it must become the most prominent green site in the country with the highest 'hit' rate. The Sustainability Forum too recognises the need for the KZN Green Map to be part of this greater information hub. Strategies and technologies are being investigated to develop a website that is easily managed by the SA Green Map team so that content management is shared and does not become too costly.

Funding via anchor sponsorship remains the most feasible way of taking the project forward in the short term. However, the primary focus of this feasibility study is to ensure that the project becomes financially sustainable in the long-term and that members will be prepared to contribute to the Green Map and website's upkeep. Limiting listings to paid members only may mean that the map would not have as wide a coverage and not be a true reflection of the Green Map. However, it is important that in addition to a basic (free of charge) listing, members will be able to upgrade their site to a Premium option (with a subscription fee on a sliding scale depending on the organisation size) which will allow them to interact more fully with their listing, link their site to Blogs, advertise and contribute in a more meaningful way. This will incentivise members to participate and be part of the solution and will bring about more traffic on the website.

In the long-term the possibility exists to extend the Green Map from Durban to Gauteng along the N3 corridor which runs from Tshwane/Pretoria in the north to the Valley of a Thousand Hills in the south, traversing four provinces, namely KwaZulu-Natal, Free State, Mpumalanga and Gauteng. The region incorporates cross-border tourism with Lesotho and includes the Battlefields Route up to Newcastle.

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## FEASIBILITY STUDY FOR THE DEVELOPMENT OF THE SUSTAINABILITY FORUM'S KZN MIDLANDS GREEN MAP

## 1 INTRODUCTION

In order to foster a sustainable future in the KZN Midlands, all those who are part of the complex system that makes up our society have a role to play. By involving individuals, civil society, businesses, and all levels of government in the implementation of an envisioned 'green' KZN Midlands, and by sharing knowledge about sustainable practices, we will have before us a set of infinite possibilities that can chart the path towards a future that embraces sustainability in its broadest sense.

### 1.1 BACKGROUND

The KZN Midlands has become synonymous with a number of green initiatives: the <u>Sustainable</u> <u>Living & Indigenous Plant (SLIP) fair</u> in its second year which provides a dynamic platform for stallholders, indigenous plant sales, demonstrations, guest speakers, academic debates, films, local and healthy food, music and fun; Pietermaritzburg is South Africa's cycling city, hosting the <u>UCI</u> <u>Mountain Bike and Trials World Championships</u> and many other MTB and trail running events; <u>Coffeeberry Café</u> and <u>Dovehouse Organics</u> that choose hormone free, additive and preservative free options and go out of their way to source the best local ingredients in order to maintain their high environmental and sustainable ethos; <u>Midlands Foodies</u> – an online directory for KZN Midlands foodies, restaurants, markets, artisanal, farmers, butchers, bakers, dairy, KZN food and more; the <u>Dargle Local Living</u> initiative which supports neighbours and friends in their creative endeavours – shopping for an antique teacup along the road, buying milk from Betty the cow on top of the hill, enjoying mindfully prepared meals in our restaurants and sharing seasonal veggies at their monthly Local Market; as well as a myriad of citizen science initiatives:

- <u>African Conservation Trust</u>'s (ACT) Gigabyte of Gardeners platform is capturing micro-farmers as part of their <u>Conservation Agriculture Programme</u>, which will bring together homestead gardeners, supporting networks and potential markets. It maps food garden locations, records grower details, crops planted and expected harvests. As cycling enthusiasts and the <u>Eco-Rider</u> <u>Campaign</u>, ACT's MTB mapping exercise is already quite advanced, starting in Howick and Karkloof. ACT is a founder member of Sustainable Alternatives to Fracking and Exploration (SAFE) Alliance who may want to add a 'fracking' layer to the map as the threat to the KZN Midlands and Drakensberg is real and imminent.
- The University of KZN's <u>Mathuba Schools and Citizens' River Heath Programme</u> as a means of developing an environmental reporting tool and network.
- The <u>Mpophomeni Sanitation Education Project</u> is a joint local government / NGO project which was initially funded by the uMgungundlovu District Municipality and is now funded by the WWF Nedbank Green Trust and managed by the Duzi uMngeni Conservation Trust (DUCT) and the

Wildlife and Environment Society of Southern Africa (WESSA). Under the new funding, the area of 'operations' is being extended to include not only Mpophomeni, but also Shiyabazali, Kwamevana and Siphumelele (all in the Howick area) as well as possibly places as far afield as Edendale, Lions River and Lidgetton. The Project involves identifying, training and equipping local environmental champions, or 'enviro-champs' drawn from the large number of unemployed people and a local co-ordinator. Wherever there are environmental problems that need to be addressed, e.g. frequently spilling sewers, illegal dumping hotspots these champions report and photograph the situation to the local authority, through their co-ordinator. This project works in close co-operation with a drama programme and school education programme which is linked to the Eco-Schools Programme. Eco-schools and DUCT have been working actively towards building a stronger community environmental ethic and awareness and activism in Howick and Mpophomeni for several years and are enthusiastic participants in the Mathuba programme.

 GroundTruth's <u>miniSASS</u> river health data is collected by local citizens comprising both adults and learners who conduct mini-SASS tests. The data is collated on the Google Earth platform in order to contribute to a growing picture of water quality across SA providing an important platform for a growing movement of Citizen Science and involvement.

The <u>Midlands Conservancies Forum</u>, <u>Duzi uMngeni Conservation Trust</u>, and <u>Wildlands Conservation</u> <u>Trust</u> and a myriad of other environmental NGOs are active in the area; just to name a few. The rapidly evolving uMngeni Ecological Infrastructure Partnership provides a potentially strong platform from which many of the initiatives of these stakeholders may be coordinated for maximum impact.

The current trend facing the KZN province is a loss of 1% of natural land cover per annum. Under the current trend, by 2050, there will be no more natural land cover left and so natural life support services in the KZN Midlands are under severe pressure to support and sustain existing social and economic development pressures. The political and economic capitals of the province are completely dependent on the water that comes from the KZN Midlands via the uMngeni River. The ability of this system to meet the demand has been exceeded and therefore it is vitally important that sustainability is integrated into all forms of landuse to optimise the potential of the Midlands to continue supplying water. **Despite the dire state of the environment, sustainable living is achievable, and the KZN Midlands Green Map is a new, exciting initiative being investigated that will promote and celebrate sustainability in the KZN Midlands.** 

The <u>Sustainability Forum</u> was established as a result of SLIP. Its aim is to showcase local service providers promoting reliable sustainable products and services which provide opportunities for the KwaZulu-Natal Midlands community to be exposed to ideas of implementing lifestyle changes that could reduce their impact on the planet. It was recognised that a 3-4 day event that takes considerable effort to organise may not have the desired impact in achieving its objective and so it was felt that the Sustainability Forum would have a year-round impact and far greater reach. The website was established with a Blog, About, Events and Contact Pages and a link to the Facebook page. A Twitter Account will also be added to the KZN Midlands Green Map website.

The introduction of a Green Map into the KZN Midlands would boost the concept behind the Sustainability Forum further by providing a dynamic platform for the establishment of ecocommunities where events, routes, demonstrations, guest speakers, academic debates, films, local and healthy food, music and fun activities can be promoted. In so doing it is hoped that the platform would inspire and challenge people to make the shift towards planet friendly lifestyle choices.

In order to find out more about the Green Map System to enable the Coordinator to draw up business model, the Sustainability Forum approached the Critical Ecosystems Partnership Fund (being managed by Wildlands Conservation Trust) for a small grant to establish the feasibility of developing a Green Map in the KZN Midlands. The contract was awarded and the study was conducted over a two month contract (August – September 2013).

### 1.1.1 Green Map System

The <u>Green Map</u> movement was born out of the Rio Earth Summit in 1992 which sought to provide ways of localising environmental action. Wendy Brawer, an enterprising New Yorker, decided that the best way to do this would be by allowing people to re-imagine their city spaces in a new greener

way. Green Maps play an important role in cities by bringing together diverse environmental projects and showcasing them in an easy to use format. Since 1995, the Green Map System (GMS) to date has engaged over 850 communities in 65 countries in mapping green living, nature and culture with <u>adaptable tools</u> and award-winning funky, easy to use,



green-themed <u>icons</u> that people could use to create Green Maps of their everyday spaces, their schools, universities, neighbourhoods, suburbs and cities. The key to the success of all Green Maps is that all sites can be registered on the map for free as long as they conform to the Map's predefined definitions. With 31,000 locally sourced and moderated sites already on view, Open Green Map (GMS's mapping platform) is revolutionising Green Mapmaking, creating an interactive space for everyone to share their insights, images and impacts about local green sites of all kinds.

A Green Map<sup>®</sup> is a locally-made map that uses Green Map Icons to highlight sustainability sites, pathways and resources in communities worldwide. Green living, nature, social innovation and cultural sites can be comprehensively charted or presented as theme Green Maps designed for residents and visitors.

Open Green Map connects the booming 'go local,' green development and ecotourism movements, empowering widespread participation in critical local environment, climate and equity issues worldwide. Based on open source and familiar mapping technologies like Google Map, Open Green Maps are always available, easily updated, expanded and explored in online, mobile and custom formats, to celebrate natural, sustainability and social resources without barriers. Open Green Map is an interactive social mapping platform – it is used online, on mobile phones and as embedded maps on one's own website using widgets.

In 2013, a mobile site <u>www.GreenMap.org</u> was introduced. By letting your smart phone know your location - or choosing a location, sites can be viewed on a phone's web browser as they load or select a list of sites and their proximity to your location. There is also a free Green Map iPhone App which includes a 'Suggest a Site' feature.

The first city-wide green map in South Africa was started in <u>Cape Town</u>. This map has been widely successful and has been produced into several different printed editions. It has been featured in the

media extensively and is the most visited Green Map in the world. <u>Durban</u> and <u>Joburg</u> also have Green Maps that hope to play their own small part by highlighting initiatives currently underway that enhance the green existence of the city and provide its inhabitants with sustainable choices.

### 1.1.2 <u>Rationale</u>

On a global scale, it is recognised that society has exceeded a number of critical life supporting planetary boundaries, more specifically those related to (and in order of magnitude), loss of biodiversity, nitrogen cycling and climate change. There is national acceptance of this global state through the development of a number of policy frameworks, such as the National Strategy for Sustainable Development (NSSD1), and The Green Accord signed at COP17.

At the local scale, it is evident that the KZN Midlands is a microcosm of this situation, i.e. depleted and compromised natural resources against a backdrop of poverty alleviation and service delivery requirements. Natural capital, and its associated natural life support services, in the KZN Midlands are under severe pressure to support and sustain existing social and economic development pressures and are unlikely to sustain those planned for the future unless immediate and meaningful steps are undertaken by government, business and civil society to avert the un-avoidable consequences. It is also noted that as climate change projections begin to manifest, so will the vulnerabilities associated with the current state of the natural environment. As already stated, the current trend facing the KZN province is a loss of 1% of natural land cover per annum. Under the current trend, by 2050, there will be no more natural land cover left.

A recent study carried out for the uMgungundlovu District Municipality (UMDM) has shown that approximately 50 million tons CO<sub>2</sub>e are produced in the District per annum. A substantial portion of this is attributed to transport, with the N3 corridor carrying the bulk of this load. The capacity for the KZN Midlands, which falls predominantly within the UMDM, to sequester this carbon is negligible. Although it appears that there are still large tracts of natural land to which sequestration capacity may be attributed, much of this is grassland which is not recognised for its sequestration capacity, but rather the storage of carbon. Consequently the emphasis of any response to this emission figure needs to be towards mitigation measures, although adaptation will, and must, also play a role. The rationale behind this project is to facilitate and encourage both mitigation as well as adaptation responses to climate change projections in the face of current development trends.

In addition to climate change threats and related response requirements, are the challenges that are being faced with the sustained provision of potable water. The N3 Corridor runs parallel to the main supply of water to this economic growth hub which is Pietermaritzburg and Durban, namely the uMngeni River and its associated catchments. As previously stated, the trend in terms of the loss of natural capital severely impacts on the potential of these catchments to function optimally and therefore to augment with ecological infrastructure, the expensive engineering solutions that are in progress and planned, to address the supply-demand deficit.

The government structures that have the legal mandate to counteract these negative trends currently lack the necessary planning and regulatory capacity. Therefore it is essential that urgent alternatives, such as incentives are put in place to bring about the required behavioural changes. It is envisaged that the KZN Midlands Green Map will provide a platform from which a variety of

incentives and mechanisms can be developed, and this feasibility study will help to confirm if this is the case.

The primary objectives of the Green Map should be to communicate to local residents. The impact one has on visitors and the improved economic environment for tourism spend is an added bonus.

### 1.1.3 The Vision and Objectives

The overall vision of the KZN Midlands Green Map is to create a platform which stimulates far greater popular participation in the green economy through citizen participation, education and the creation of incentives, as a model which can evolve through linkages and collaborations and be replicated in other areas. The project will create the opportunity to bring all sectors of society together where they will be exposed to ways in which they can implement changes to their lifestyles and the way they do business that will reduce their negative impact on the planet.

The objectives are:

- 1. To provide a central hub where information on the diverse sustainable, natural and social initiatives in the KZN Midlands can be found, mapped and showcased to local residents in an easy to use format.
- 2. To bring about collaborations and partnerships at a global, national and local scale sharing issues of environmental concern and success stories where a momentum is generated to perpetuate the livelihood changes that are required.
- 3. To educate and raise awareness around the need for sustainability.
- 4. To put in place incentives and programmes to bring about the necessary changes towards a planet-friendly society.
- 5. To improve the economic environment for tourism spend and a transformation towards maximising spend on goods and services bought within the local community so that local businesses can grow within the context of the green economy and create green jobs.
- 6. Support nominated causes (SLIP<sub>2012</sub> supported Project Rhino KZN while SLIP<sub>2013</sub> championed a public campaign for the purchase of indigenous trees in support the river rehabilitation efforts of the Duzi uMngeni Conservation Trust).

### 1.2 PROJECT APPROACH

The benefits of initiating a Green Map in the KZN Midlands are that the tool will be a mechanism to entrench and institutionalise sustainability best practice and thereby rehabilitate and preserve biodiversity and eco-systems services. It is an internationally recognised tool that local and the discerning tourist will use and thereby create jobs and increase local economic spend. The inclusion of the Green Map into the Sustainability Forum website sets it apart from other eco directories and with the partnering of existing certification standards and verification mechanisms, users will be assured of its members' authenticity and compliance to sustainability best practice.

### 1.3 TERMS OF REFERENCE & METHODOLOGY

The terms of reference of this feasibility study were essentially to investigate established Green Maps in the country and to build an understanding of how these are managed and maintained, as well as for the benefits they have brought to the societies they serve; and to extrapolate these findings to the socio-economic and political environment of the KZN Midlands with recommendations as to its potential as a sustainability tool for this region. In order to achieve this the Feasibility Study included the following steps:

- Cape Town, Johannesburg and Durban have Green Maps and our first point of departure was to
  meet with the Administrators of these sites to establish clarity on their financial models; the
  criteria for membership inclusion; and the roles and responsibilities of Administrators in terms of
  populating, maintaining, assessing and auditing members. A virtual learning exchange session
  between all parties was held on the 9<sup>th</sup> September 2013 to discuss SA Green Map offerings to
  potential donors/sponsors; identify target donor/sponsor groups; and a shared web platform,
  the pros and cons of the Open Green Map or developing our own mapping platform (see Section
  4.2). The outcome was the unanimous agreement of the need and will to collaborate.
- Building on our existing <u>Sustainability Forum</u> website, a 'Go Green' page which provides access to relevant reference material is proposed. <u>Alive2Green</u> and Imagine Durban were approached with regards to linking their 'green guide' handbooks to our web site and were happy to oblige.
- The participation of other certification bodies, , i.e. <u>World Fair Trade Organisation SA</u>, <u>Fair Trade Tourism</u>, Forest Stewardship Council, <u>Heritage Standard</u>, SuSFaRMs<sup>™</sup>, etc., will contribute to the success of the greenmap. The feasibility study tested whether these organisations were willing to use the KZN Midlands Green Map as an entry point into the Midlands. In turn, if the Sustainability Forum's requirement is for members to be associated with a certification standard, it will elevate the reputation of the Forum to reduce 'green washing' and enhance the relevance of the Green Map as a mechanism to bring about meaningful change.
- Other relevant stakeholders were approached to determine the extent to which they would buyin to the KZN Midlands Green Map and promote it to their members and a presentation was given at the Pietermaritzburg Chamber of Commerce's Agric and Enviro Forum on the 19 August 2013.
- All of the above was collated into a draft Feasibility Study for circulation to a core team for critical review. The feasibility study addresses the following:
  - Goals (why project was initiated), philosophy and key issues.
  - Methodology, intended and actual impacts.
  - About the community (size of area, population, key aspects).
  - Description of the team, partners and audience.
  - Team Skills Briefly, what related skills, data and network do you and your team already have?
  - What are the big issues in the KZN Midlands.
  - Marketing.
  - A business model.
  - Registering the Business Entity.
  - Environmental and Corporate Social Responsibility.

- A core team workshop was facilitated on 11<sup>th</sup> September 2013 to discuss the draft Feasibility report and formulate a proposal to potential seed funder/s. The proposal needs to demonstrate financially viability after a few years in order to provide investor confidence. In addition, it needs to demonstrate that it can carry critical mass in terms of web traffic that will make it attractive to potential sponsors and advertisers.
- The final step will be to revise the funding proposal on the basis of the workshop proceedings and submit this to potential funders. The N3 Toll Concession has been earmarked for this purpose because the N3 corridor is a major source of GHGs (as described above) and it is currently assumed that it is in their interest to seek carbon offset projects.

## 2 ABOUT THE KZN MIDLANDS COMMUNITY

Historical visits by the likes of Gandhi, Mandela and Twain, museums, art galleries, rolling hills, waterfalls and a special style of country living and an escape for urbanites are some of the things that make the KZN Midlands famous.

The Midlands is fast becoming known as the outdoor sporting capital of the Country. Pietermaritzburg is the town in which the annual Dusi Canoe Marathon starts, and is the beginning or ending point of the world-renowned annual Comrades Marathon between Durban and Pietermaritzburg, which attracts about 15 000 participants. Pietermaritzburg hosted the UCI Mountain Bike and Trials World Championships in 2013 which has earned the city the reputation as being the 'Bike City' of the African continent as entrenched by the awarding of the rights to host the 2014 UCI MTB World Cup and Marathon World Championships and 2015 Confederation of Cycling Forum. There are many other MTB and trail running events. The world largest open water swim is hosted annually at the Midmar Dam, i.e. the Midmar Mile. More recently the Mandela Marathon, which starts in Edendale and ends at the Mandela Capture Site near Howick, completed its second annual event and is rapidly increasing its profile and attracting athletes from other countries.

The Midlands Meander, the first route of its kind in the country, opened up the wonders and beauty of the interior of KwaZulu-Natal over a decade ago. It has grown into an eclectic and fascinating mix of arts and crafts, quaint antique shops, markets, world-class restaurants, art galleries and museums, and homely comforts, with a wide range of sporting, environmental and historical pursuits.

Locals and visitors are often attracted to the forest and grassland walks and picturesque farmlands of the Midlands, home to prize dairy herds. These productive areas, however in many cases, have been monocropped and over-cultivated resulting in expansive green deserts in the catchments, often times, infested with alien vegetation. But this presents opportunities for these environmentally dependant sectors to become part of the 'green movement'.

The Midlands has a number of protected areas. The <u>Midlands Birding Route</u>, starting in the Ukhahlamba Drakensberg World Heritage Site at the location of the world famous Giants Castle Vulture Hide, the route finds its way through the foothills of the Drakensberg and into the picturesque rolling hillsides of the KwaZulu-Natal Midlands. The Karkloof Crane Information Centre offers birders the opportunity to see all three Crane species in one outing. Other key Midlands birding attractions include some of the most reliable sites for Cape Parrots and Blue Swallows.

BirdLife South Africa has promotes country-style B&Bs, or guest lodges that operate in an environmentally and social sustainable manner

The magnificent Howick Falls has become an established tourism destination and supports a plethora of formal and informal traders of crafts as well as eateries. Trout and bass fishing are plentiful and for the more adventurous there is paragliding off Bulwer Mountain or taking a zip line across the canopy of Karkloof's indigenous forests.

### 2.1 PROJECT LOCATION

The project boundary's extent is loosely limited to the KwaZulu Natal Midlands of South Africa (rather than a municipal demarcation), including the N3 freeway corridor which connects the harbour city of Durban with South Africa's economic hub of Gauteng, bisects the Midlands. Initially, it will most likely centre around the towns of Pietermaritzburg, Hilton, Howick and Mooi River and the surrounding rural environs (an area in excess of 10,000km<sup>2</sup> with a population of over 10 million people), but could extend further afield to the Drakensberg foothills, Battlefield areas, etc., depending on where potential members are situated.

In the long-term the possibility exists to extend the Green Map from Durban to Gauteng along the N3 corridor which may prove very attractive for the N3 Gateway Association whose region runs from Tshwane/Pretoria in the north to the Valley of a Thousand Hills in the south, traversing four provinces, namely KwaZulu-Natal, Free State, Mpumalanga and Gauteng. The region incorporates cross-border tourism with Lesotho and includes the Battlefields Route up to Newcastle.

Experience from the Johannesburg and Cape Town Green Maps is that the printed map covers the municipal boundary while the online map allows for sites to extend to within a two-hour drive of the city centre, which is a realistic guide for the KZN Midlands Green Map. However, while these existing Green Maps have an urban focus, the KZN Midlands urban/rural mix may require a different approach. The approach of using themes to build the Green Map, as discussed in Section 4.4, also suggests that the boundaries need to be more flexible to accommodate these layers, ultimately growing beyond the provincial borders.

So while the geographical boundary is most likely to extend beyond the Midlands, the KZN Midlands is a known 'brand' and is preferred over KZN Inland or other possibilities.

### 2.2 LINK TO CEPF INVESTMENT STRATEGY

This project fits within Strategic Direction 3: *Maintain and restore ecosystem function and integrity in the Highland Grasslands and Pondoland corridors* because it is only through the development of incentives aimed at reducing our footprint on the environment that we can bring about the necessary restoration of ecosystem functionality. The KZN Midlands is in the heart of the Maputaland Pondoland Albany Biodiversity Hotspot (MPABH) and which is bisected by the N3 freeway, a corridor with negative environmental impacts discussed in Section 1.1.2.

### 2.3 CORE TEAM MEMBERS

Championing the KZN Midlands Green Map project is Karen Zunckel, who is the Founder and Coordinator of the Sustainability Forum. She is an Environmentalist, Ecologist and Sustainability Consultant with GIS, web design and social networking skills. She has founded and voluntarily coordinated the Sustainable Living and Indigenous Plant fair for two years and has a large database of existing sustainability service providers in the Midlands. She has been a Wilderness Foundation Green Leaf Environmental Standard assessor and auditor and is a registered TravelLife auditor. She is also a champion of the <u>Sustainable Tourism Partnership Programme (STPP)</u> which assists the smaller tourism business to implement Sustainable Tourism Practices aligned to the National Tourism Sector Strategy and SANS 1162:2011. She played a technical advisory and assessor role in the compilation of the book <u>Africa's Finest</u>: The Most Responsible, Sustainable Safari Destinations in Africa, showcasing the top 50+ sustainable safari destinations in sub-Saharan Africa in 14 countries and 27 "other green places to visit" finalists. She also played a major role in the Strategic Environmental Assessment for the uMgungundlovu District, so has a very good understanding of the environmental issues facing the Midlands.

She is supported by a strong team that includes:

- Rob Symons is an organic farmer at <u>Broadleeze Organics</u> situated on the Historic New England farm outside Pietermaritzburg, growing lettuce, herbs and other vegetables for retail stores in the Durban / Pietermaritzburg area. Rob is also a blogger on issues relating to organic farming and the environment. He has a monthly column in the Mercury Food and Wine supplement and writes his own blog, "The Farm Gate". Rob is currently involved in an initiative to set up a Participatory Guarantee System (PGS) through the International Federation of Organic Agriculture Movements, to bring together organic farmers and farmer groups in the Midlands under a certification system. The aim is also to promote organic and sustainable farming and to provide a support and mentorship structure for new and emerging farmers. Rob can assist with the Green map project in bringing a sustainable agriculture perspective and contributing as a blogger; and
- **Nikki Brighton** (Freelance Journalist) who posts relevant and inspiring stories onto the Sustainability Forum blog and will also use her local media connections to publicise the concept of the KZN Midlands Green Map, Forum, general green issues;
- Dr Pam McLaren Haynes (Disability Action Research Team DART) would like to share resource information, ideas, poems, books, courses, movies, etc. that are related to sustainable living. She would also like to link people with initiatives that are concerned with environmental and social justice. Being trained as an Occupational Therapist and living and working in rural areas has taught her that community health involves understanding the many connections between our physical and mental health and the health of the environment. To sustain life on earth we must focus on resilience and adaptation to change for all creatures, including ourselves. Clean water, nutritious food, sound relationships are such basic concepts for sustainability her wish is to use this platform to connect the dots.
- **Penny Rees** (Duzi Umgeni Conservation Trust) led an epic walk down the length of the uMngeni River, from <u>source to sea</u> in May 2012 to raise awareness of the plight of this and all South African rivers. She is involved in a lot of monitoring work in the Midlands and she loves writing

so will Blog, actively recruit new listings and assist with monitoring of sites once they are up and running.

 James Martin - Midlands Economic Development Agency (MEDA) has been established to drive economic projects across the Midlands. MEDA is busy with upgrading the Howick Falls, establishing a multi sectorial Agricultural School of Excellence in the Camberg, establishing a Vegetable Processing Plant in Weenen and a number of other initiatives. One of their overarching mandates is to see to the greening of the Region so James has been included on the team as a source of support and lobbying partner.

The team have proven valuable when assessing inclusion of participants in the SLIP events and will continue to do so for site inclusion into the KZN Midlands Green Map.

It is our intention to expand the above network to include additional people with local as well as broader environmental knowledge as additional Bloggers and Social Media contributors. Such people would also be called upon to verify places wishing for listing, or to monitor places actively listed.

### 2.4 POTENTIAL PARTNERSHIPS AND LINKAGES

### 2.4.1 Project Partners

The vision for the KZN Midlands Green Map is that it be a collective resource for all who are keen to participate to use constructively for the good of our area. It is dependent on a number of strategic partners to make it successful. It is the intention to form partnerships with the following people / organisations:

- Francois du Toit, CEO of the <u>African Conservation Trust</u> (ACT). ACT has a platform where microfarmers and mountain biking routes are being mapped in the KZN Midlands. ACT has mapping expertise in house and have offered in kind GIS support. They are also willing to allow the Sustainability Forum to rest within their NGO so that Donors can receive a tax rebate.
- Matthew Drew is contracted to the <u>N3 Gateway Tourism Association</u> and is willing to provide strategic, marketing and branding advice if funding becomes available.
- Pandora Long has recently initiated the "Happy Earth" Environmental Education Sustainability Forum, which we see as a sub-group of the Sustainability Forum.
- Mark Dent, University of KwaZulu-Natal's <u>Mathuba River Heath Programme</u> is doing river health monitoring in the District and is pulling together a few players to explore this as a means of developing an environmental reporting tool and network.
- Niki Glen, Programme Director of the <u>Sustainable Tourism Partnership Programme</u> is looking at a strategic partnership which will bring small tourism businesses as well as community programmes related to tourism onto Green Maps.
- It may also be feasible and desirable to partner with the Johannesburg, Cape Town and Imagine Durban Green Map Administrators, as well as other certification schemes / standards, i.e. <u>World Fair Trade Organisation SA</u>, <u>Fair Trade Tourism</u>, Forestry Stewardship Council, <u>Heritage Standard</u>, SuSFaRMs<sup>™</sup>, etc.
- <u>Alive2Green</u> is a media company focusing on advocating sustainability. They have published Handbooks in the Sustainability Series which are strongly driven by editors who are market leaders in their respective fields. The chapter contributors are experts in their sectors and



produce highly relevant content for the South African context. The Handbooks are linked to <u>Continual Professional Development (CPD) credits</u> in some instances as well as to learning modules. We hope that Alive2Green will partner with us and allow us to use their materials in the 'Green Guides' page of our website.

• Ambassadors / Patrons, yet to be identified, would make another important component of the project to encourage buy-in and participation.

It is likely that there will be additional people / organisations which would register as Map-Makers on the site.

### 2.4.2 <u>Stakeholders</u>

The following stakeholders were identified as being able to add value to the KZN Midlands Green Map and were engaged with during this Feasibility Study. Their initial comments are summarised in the table below:

Contact Person	Company	Comment		
	Carbon Offsets			
Darryn van der Poel & Harmke Immink	Carbon Protocol of SA, The	A Skype meeting was held on 9 <sup>th</sup> September 201, the outcome of which was that they are excited by the Green Map initiative in SA and the Midlands. The Green Map presents a potential additional <u>Platform for Programmes of</u> <u>Activities (POAs)<sup>1</sup></u> and they see the Green Map as a potential Carbon Reduction project, working towards neutrality which would potentially include offsets in time. A potential funder should recognise the potential of the GM as a platform to stimulate organisations that want to identify and implement sustainability initiatives to enhance operational efficiencies, mitigate risk from unmanaged GHG emissions (as well as waste, water, and biodiversity offsets) and maximise shareholder value. The accumulative benefits of all of the listings on the GM can collectively be attributed to the funder. Caution was given to the risk of double accounting where, e.g. <u>Belgotex Floorcoverings</u> has been assessed as a Voluntary Carbon Disclosure project, so to include them in the GM's carbon footprint would be double accounting, although this does not preclude them from being listed. They		
Anton Cartwright	Credible Carbon	are keen to include us as members of the Carbon Protocol. Sounds like a great project but the green maps themselves are likely to provide too general and tenuous a causal link to auditable carbon savings to make for a carbon project. Perhaps some of the actual projects - renewable energy, soil carbon, afforestation etc would be a better fit. In this regard it helps if a project has a clear boundary and sequestrates/ avoids at least 600tCO2 per annum.		

<sup>&</sup>lt;sup>1</sup> The Carbon Protocol of SA (CPSA) acts as a platform for the hosting of a Programme of Activities (PoA) under the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) of the Kyoto Protocol (KP). CPSA is now the Coordinating Management Entity (CME) for three PoA's (two Mining Energy Efficiency PoA's are still under development):

- 2. Solar Energy Programme for South Africa
- 3. South African Wind Power Projects PoA

<sup>1.</sup> Grid Connected Photovoltaic (PV) Renewable Electricity Generating Facilities PoA

### Feasibility Study for the development of the Sustainability Forum's KZN Midlands Green Map

Contact Person	Company	Comment	
contact r croon	company	Commerce	
Michael Porter	Harvard House Group, Howick	Sponsors Friends of the Falls.	
Desiree Hickinbotham	HiltonVillage.co.za	Supportive of the project.	
Jean	HowickVillage.co.za	Yet to contact.	
James Martin	Midlands Economic Development Agency's Renewable Resources Project	Attended PCB Agri and Enviro Sense Forum presentation and contributed meaningfully around the economics of the green Map and its importance to job creation for Governmental support.	
Melanie Vaness	Pietermaritzburg Chamber of Commerce & Industry	<ul> <li>Wrote to the PCB CEO on the 22 August 2013 requesting that</li> <li>the Sustainability Forum be considered to join PCB's Business</li> <li>Facilitation Centre at 2013 UCI Mountain Bike and Trials</li> <li>World Championships because of the proposed KZN Midlands</li> <li>Green Map, but received no response. The PCB however</li> <li>remains a potentially strong link to this initiative and efforts</li> <li>to engage with them will be maintained.</li> </ul>	
Buddy Melville	Sibanye Recycling	Attended PCB Agri and Enviro Sense Forum presentation and was outspoken about the need for a recycling map.	
Dr Rob Smorfitt	SME Finance	Rob is an affiliate to the inaugural SME Funding Fair, to be held in Pietermaritzburg on 25 October 2013, at the Royal Show Grounds. He specialises in finance for small and medium businesses. The KZN Treasury is funding an opportunity for businesses seeking finance to present their business or project to groups of funders/financiers. A concept note was provided which will be completed and returned by 26 November 2013 to be eligible for assessment.	
	Envir	onmental Education	
Pandora Long	Happy Earth' EE Sustainability Forum	Would love to seat the Green Map initiative firmly in the forum. Hoping to meet soon to discuss the feasibility of kick- starting the map with an Environmental Education layer.	
Eiden Griffin	Midlands Meander Education Project & KZN Midlands Seed Savers	No response.	
Jim Taylor	SADC-REEP and WESSA EE	Met at PMB Airport on 6 August 2013 and was very interested to hear more and discuss funding possibilities.	
Lynn Hurry	Sustainable Development Matters	Has funding from UMDM to compile booklet on jobs in the environmental sector. Very supportive of online platforms.	
Mark Dent	UKZN's Mathuba School & Citizens River Health Programme	Very keen on the development and the opportunity to explore synergies between Mathuba Programme and Green Maps. I can't see the full road a head but I do know for sure that both initiatives are headed in a good direction and those who interact with Mathuba must become more and more aware of synergies with Green Maps and I will certainly try an influence all whom I come into contact with to explore those opportunities along with those offered by Groundtruths mini- SASS; Andrew Muirs EIA Mapping on Google Earth; ACT million gardens and other citizen science initiatives.	
		I am finding increasing opportunities to put the some academic learning at post graduate level into "citizen Science" type themes and the study of the deeper social learning and connections that will occur through Green Maps	

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Contact Person	Company	Comment	
		and other related endeavours is of great interest to me.	
	En	vironmental Law	
Vumani Msimang	Venn Nemeth and Hart	Championing the Pmburg City Improvement District and	
		Fracking in KZN.	
		Food	
Peter Hall	Midlands Foodies	No response to email.	
Debbie Montague,	East Coast Radio	Approached for ideas on potential sponsors for the Foodie	
consultant to ECR on	published the book	layer of the KZN Midlands Green Map, possibly linked to the	
the book	East Coast Tables: The	book. No response to email.	
	Inland Edition		
		Government	
	CoGTA	Yet to contact.	
Clive Coetzee	KZN Provincial Treasury	Thanks very interesting indeed. Yes Rob Smorfitt is dealing the SME Funding fair. I suggest you meet with Rob to discuss your possible inclusion in the upcoming SME Funding Fair.	
		But in principle you are most welcome. Where we can help we will gladly.	
Liesel Bieres	KZN Department of	No response to email.	
	Economic		
	Development and Tourism		
Nisaar Mahomed	Trade and Investment	No response to email.	
Nisaar Manomea	KwaZulu-Natal	No response to email.	
lan Felton	KZN DAEARD	No response to email.	
Debra Roberts	eThekwini Municipality	Valuable Skype discussion on 27 August 2013 around carbon	
		offsets as a possible income stream; funding opportunities	
		generally; and the feasibility of KZN Midlands Green Map	
		considering its local context.	
Riaz Jogiat	uMgungundlovu District Municipality	No response to email.	
Rodney Bartholomew	Msunduzi Local Municipality	No response to email.	
Marc Hattingh	uMngeni Local Municipality	Sent apologies for the PCB presentation. Unlikely to support KZN Midlands Green Map because of their "Turnaround Strategy" (a strategy implemented by the KZN Dept of Treasury and Co-operative Governance and Traditional Affairs	
		to rescue the Municipality from going under Administration).	
Arne Purves	Cano Town Groop Mar	Green Map	
	Cape Town Green Map	Met in CT on 20 August 2013 and provided huge input into this report. Participated in the Virtual Learning Exchange.	
Philip Todres	Cape Town Green Map		
Bongumusa Zondo eThekwini Green M		Met in Durban on 6 August 2013 and provided valuable insights into their green map. Participated in the Virtual Learning Exchange.	
Wendy Brawer	Green Map System	Responded to various enquiries via email.	
		Participated in the Virtual Learning Exchange.	
Tracy Frayne	Joburg Green Map	Met in Joburg on 8 August 2013 and provided valuable insights into their green map. Participated in the Virtual Learning Exchange.	
Rhian Berning eco ATLAS		Supportive of a collaborative partnership (see Section 3.6.2).	
NGO Environmental			
Allen Goddard A Rocha South Africa No response to email.			
Andrew Muir	Air Quality and	Met at Old Main Brewery on 4 <sup>th</sup> September 2013. Intern	
-	Environment Forum of	assistance to get EIA and PDA development applications onto	

### Feasibility Study for the development of the Sustainability Forum's KZN Midlands Green Map

Contact Person	Company	Comment	
	the UMDM	Google Earth. Hope to have a trial system up in the next two weeks focussed on uMgungundlovu. We then aim to roll it out for the whole country but this will require logistical / funding support. We should consider an interface between OGM & this initiative.	
Doug Burden	Duzi uMngeni Conservation Trust (DUCT)	Supportive of the project. Suggested the use of Groen Sebenza interns to help populate the map. Recognises the opportunity also to expand sustainability efforts through this platform and explain what is green. One Planet Living framework of ten sustainability principles creates Action Plans and is an opportunity to structure a holistic approach to sustainability for specific projects / developments. eThekwini's plea for business to invest in ecological Infrastructure presents a possible revenue for the Green Map.	
Penny Rees	Duzi uMngeni Conservation Trust - uMngeni River Walk	<ul> <li>Contributed comments on the draft report concluding that DUCT support:</li> <li>Duplication of the Cape Town Green Map as far as possible.</li> <li>Approaching NTC3 for funding - as the roads under their control contribute to carbon emissions, as do the road users, who via their toll fees will be contributing to the green map should NTC3 fund the project.</li> <li>To include carbon credits.</li> </ul>	
Judy Bell	Greater Midlands Conservancy Forum	Felt that it was a great idea.	
Liz Taylor	Mpophomeni Sanitation Education Project	Met at PMB Airport on 8 August 2013 and was very supportive of the project and interested to hear more.	
Rob Fincham	Msunduzi Innovation and Development Institute (MIDI)	In response to the PCB presentation, 'Your portrayal of the concept was exciting and offered both business and others a glimpse of what may be possible. So I do hope that we can move from an idea to a concrete reality of the Green Map in the Pietermaritzburg city region, and by implication, the KZN Midlands. 'Your emerging work on the Green Map concept is exemplary and we look forward to following the development of the idea, and its taking root in this part of the world.'	
Sarah Alsen	One Planet Living Programme (OPL) in SA	Suggested we touch with Provincial Government contacts e.g. Liesel Beires, or Nisaar Mohamed, of Trade and Investment KZN as last year they spearheaded a green economy strategy for the department so might have some funding available. I would love to be involved, in some way, if feasible? Be good to meet sometime.	
Nora Choveaux	PMMB Trust	No response to email.	
Andrew Venter	Wildlands Conservation Trust	Was not able to secure a meeting.	
Rielie Kloppers	Wildlands Conservation Trust		
Sponsorship Potential			
Andy Visser	N3 Toll Concession	This letter serves to confirm that the N3 Gateway Tourism	
Con	N3 Gateway Tourism Association	Association and N3 Toll Concession endorses the Sustainability Forum – Greening the Midlands organisation and their efforts to establish a Green Map of the KwaZulu-	

Contact Person Company		Comment		
		Natal Midlands.		
		The N3 Gateway sees this project as being important in		
		respect to developing a more sustainable tourism economy in		
		the region, providing a resource to tourists and as a		
		marketing vehicle from which responsible tourism businesses		
		will hopefully benefit in future.		
		Should the Green Map project progress, we hope to establish a closer working relationship with the Sustainability Forum.		
		Tourism		
Stan Goodenough	Friends of the Falls	Yet to make contact.		
Karen Kohler	KZN Tourism Authority	No comments received.		
Ingrid Anderson	Midlands Meander	Met on 10 September 2013 and looks forward to working		
	Association	with us.		
Sdu Ndlovu	Msunduzi	No comments received.		
	Pietermaritzburg			
	Tourism Association			
Niki Glen	Sustainable Tourism	Very keen on promoting the GMS nationally as part of the		
	Partnership	STPP. Also provided valuable contributions and insights into		
	Programme	this report.		
Water				
Mark Graham	GroundTruth	Happy to endorse, just need to know more first about the		
		scope, etc. of the project.		

### 2.4.3 Survey to gauge organisational support for the KZN Midlands Green Map

In order to gauge the level of support for the proposed map by organisations that would potentially listed be on the Map, an online survey was compiled (see http://www.surveymonkey.com/s/KHKR2NB). This was directly sent out to a database of over 200 organisations, posted on the Sustainability Forum Blog and Facebook page and people were asked to distribute it further, where relevant, through their networks. ACT sent it out to their database of 3,500 and Together SA shared it with their network. A total of 31 responses were received which are captured in full in APPENDIX 1: Survey to establish the level of support for the KZN Midlands Green Map by potential business members and summarised below:

- 1. The vast majority (83%) of respondents would like their organisations listed on the KZN Midlands Green map, while 13% were not sure. Only one respondent refused.
- 2. When asked how respondents envisage this initiative will benefit their organisation most said it would increase the exposure of their products / services to an informed audience; networking with similar sustainability service providers ranked high; increase traffic to their website and increased sales was less important. One respondent added that it would expose their product to public critique and in so doing, be a way of improving them.
- Most organisations are not currently listed on any eco-directories or online map with the exception of one respondent being listed on <u>Eco Atlas</u>. One respondent on the Durban Green Map said there has been no perceived benefit to their business.
- 4. Most people would commit to keeping information on their listing current, few said 'maybe' while only one respondent refused.
- 5. Just over half the respondents said that they would contribute to other listings they are familiar with by adding comments, impacts, etc. many said 'maybe' while only one respondent refused.

- 6. Most respondents were prepared to promote the KZN Midlands Green Map through their social media and other networks, suggesting sites for possible inclusion on the KZN Midlands Green Map; and contributing articles for the Blog from time to time. One respondent added that they would lead by example.
- 7. There was a more-or-less even spread of responses (~23%) to contributing in the following ways: making a donation to Open Green Map; corporate donations to the Sustainability Forum for the maintenance and upkeep of the KZN Midlands Green Map; corporate advertorials on the website; and paying for a photo listing add-on (±R1,500) to the Print Map for distribution at Information sites in the Midlands. 42% said they were not in a position to contribute in any way.
- 8. In response to seeing how the KZN Midlands Green Map can play a role in helping people to make planet friendly lifestyle choices, almost all respondents chose awareness raising and education; most said it would promote the green economy; many said it would help to maximising spend on goods and services bought within the local community and improve the economic environment for tourism spend. Creating jobs and learnerships specifically for youth (18-25 year olds); and incentivising people to make the change were less important to respondents.

From the survey, it would appear that there is strong support for the KZN Midlands Green Map, people are willing to engage with the platform and it will have the desired result in changing the 'business as usual' approach toward more sustainable alternatives.

# 3 REVIEW OF THE CAPE TOWN, JOHANNESBURG AND DURBAN GREEN MAPS

Interviews were held with the Green Mappers from Durban, Johannesburg and Cape Town (6, 8 and 20<sup>th</sup> August 2013, respectively) to establish a collaborative relationship with the Administrators of these sites and to gain a better understanding of their models. The following sections are a summary of the findings from these engagements.

### 3.1 BACKGROUND

The motivation behind both the Cape Town and Durban green maps was large events. <u>Cape Town</u> <u>Green Map (CTGM)</u> was launched on World Environment Day, 5 June 2009. The launch of the Cape Town Green Map (CTGM) website was timed to coincide with the launch that same day of the OpenGreenMap.org online mapping platform. Cape town GM was one of the projects of Cape Town's <u>Green Goal 2010 Programme</u>, the environmental programme of the 2010 FIFA Soccer World Cup. Four editions of the print map have been published to date with over 300,000 copies of the maps distributed locally, nationally and internationally. The 3<sup>rd</sup> print edition featured the Mayor, Patricia de Lille, on the cover on a folding commuter bicycle and Climate Smart Cape Town branding in support of the Climate Smart campaign and featured at the COP17 in Durban. The CTGM was also on-board the Climate Train to COP 17. In 2012, CTGM was included in the bid book for the <u>World</u> <u>Design Capital 2014 (WDC2014)</u> and is uniquely poised as a very successful communication platform for *Cape Town - Green By Design*. They have undertaken to ensure that information about Cape Town would reflect the City's World Design Capital designation, highlighting how design impacts on issues of sustainability. Together with the <u>mapmyway</u> site, routes based on themes, specific areas of interest and events, and sites within close proximity to one's location may be selected; and one can be informed about what's 'hot and happening' in and around Cape Town. With very limited resources CTGM has managed to harness the power of social media, regular web content, print maps and direct contact with many stakeholder groups.

In 2007, the eThekwini Municipality launched the Imagine Durban Long Term Sustainable Development Framework which, after a long participatory process, was formally adopted in June 2010, in time for the 2010 FIFA Soccer World Cup. The Imagine Durban project was modelled after a series of visionary long-term planning initiatives that have taken place in cities all over the world. The 'Imagine Movement' has spread to over 70 Imagine projects in 20 countries and spanning 6 continents. The Imagine Durban project was developed in conjunction with Sustainable Cities International (SCI), an NGO from Vancouver, Canada whose mission is to "catalyse action on urban sustainability in cities around the world." The Imagine Durban project was jointly funded by the Canadian International Development Agency (CIDA) and the eThekwini Municipality. A multitude of sustainable initiatives can be found. Consequently in August 2012, several stakeholders within the Municipality came together to formally launch the Durban-eThekwini Municipality Green Map, with Imagine Durban coordinating the process. By establishing the Green Map, it is their hope to provide exposure and visibility to all sustainable initiatives within the Metro, no matter how small. The Durban-eThekwini Green Map is also a place to share, learn and be inspired.

The Joburg Green Map (JGM) was borne in 2012 out of the recognition that much green innovation exists with which to inform its own environmental future. With the city being the centre of economic life in the country it is imperative that sustainability as a way of life and business be made a reality for all its citizens. The JGM hopes to play its own small part in this process by highlighting initiatives currently underway that enhance the green existence of the city and provide its inhabitants with sustainable choices.

These green maps are all inspired by a love for the environment and its people, the recognition of earth's fragility because of population pressures; and a desire to grow a green and sustainable living consciousness in the places we call home. Out of which green projects, markets, events, accommodation, eco products and services, green attractions, alternative energy sites, recycling projects and responsible tourism and more; are rapidly emerging through the Green Map movement - a community of over four thousand local green living sites around the world. These Green Maps are powered by Open Green Map - an interactive mapmaking tool that quickly allows one to share these green sites. From a South African perspective, there is currently no existing central hub where information on all of these initiatives can be found, and this feasibility study has recognised the need for some form of coordination and/or collaboration between the South African Green Maps.

### 3.1.1 <u>Staffing</u>

It was important to look into the staff composition associated with the establishment and maintenance of the Durban, Johannesburg and Cape Town Green Maps.

Leading the **Cape Town** team is Arne Purves from the City of Cape Town's Environmental Resource Management Department. Philip Todres of <u>A&C maps</u> which has been publishing special interest map guides, focusing mostly on Cape Town and surrounds, is championing the project. He is also driving <u>Mapmyway</u> which has been shortlisted as an official submission for World Design Capital Cape Town 2014. <u>Urban Sprout</u> was involved and brought to the team a web and green focus background. Unfortunately they are no longer involved as they decided to focus on other matters.

The Joburg Green Map team consists of two individuals, Benji Shulman and Tracy Frayne, who are both passionate about both Johannesburg and greening, and are keen to share their knowledge. They are not yet registered as a business entity but plan on becoming an NGO. They are both working voluntarily on the Green Map in their spare time.

Bongumusa Zondo, Senior Manager of Imagine Durban heads up the Durban eThekwini Green Map and he is supported by a number of staff, each responsible for the various sectors in their Long Term Development Plan (LTDP), i.e. National, Provincial and Local Governments; Non-Government Organisations (NGO's), Faith Based Organisations (FBO's), Community Based Organisations (CBO's) and Individuals; Businesses and Tertiary Institutions; Schools; eThekwini Municipality Line Departments; Community engagement, communications; and Green economic development; youth and community led sustainable development; Youth capacity building. Each member is responsible for the Green Map according to their area of work focus. All are salaried employees and the budget for the Green Map secured from the Metro's treasury.

### 3.2 PARTNERSHIPS AND LINKAGES

All Green Maps are required to pay a subscription to Open Green Map (OGM) which help support OGM's continual, inclusive development and in so doing, are linked to OGM. In return, one receives services and use of OGM's 'Mapmaking System' which includes Green Map's copyrighted icons, concept and mapmaking resources, outreach (online, press, exhibits, etc.), support network, trademark name use, goodwill and Greenhouse resources. <u>Mapmaker Fees</u> are calculated by type of organisation and if unable to pay the fee, one can provide an Exchange Service for all or part of this amount. A volunteer-run community/grassroots or NGO will pay an annual fee of US\$50, as is the case with Johannesburg. Cape Town GM and eThekwini are government entities that pay US\$150 per annum and will be the case with the KZN Midlands GM if funds are secured.

As mentioned above, the Imagine Durban project was developed in conjunction with <u>Sustainable</u> <u>Cities International (SCI)</u>.

Taking their lead from Cape Town, the Joburg Green Map was recently established. The website replicates the Cape Town site and extends the 'green brand'. Johannesburg currently has no partnerships or linkages, other than to the CTGM and GMS, though they are pursuing opportunities.

The CT Green Map is part of the City of Cape Town's Environmental Resource Management Department and <u>A&C maps</u> in an 'unofficial public-private partnership'. They are linked to Cape Town Tourism and the <u>GreenCape</u> Initiative, a Sector Development Agency established by the Western Cape Provincial government and the City of Cape Town. The GreenCape Initiative was established to unlock the manufacturing and employment potential in the Green Economy in the Western Cape. Through partnerships with WESGRO (the official Destination Marketing, Investment and Trade Promotion Agency for the Western Cape, located in Cape Town), Provincial Government and academia; The GreenCape Initiative provides a platform to build a competitive business infrastructure in the Western Cape. The GreenCape Initiative was established in November 2010 and has made significant progress to date. As already mentioned, CT Green Map is part of the <u>World Design Capital 2014 (WDC2014)</u> together with the <u>mapmyway</u>.

### **3.3** Measuring Impacts

By making use of GreenMap.org's web mapping platform Opengreenmap.org, Green Maps have been able to make use of the Open Green Map global icons and adaptable tools, and engage with communities worldwide in mapping green living, nature and cultural resources since 1995. Both the mapmaking process and the resulting Green Maps have tangible effects that:

- Strengthen local-global sustainability networks;
- Expand the demand for healthier, greener choices; and
- Help successful initiatives spread to even more communities.

### 3.3.1 <u>The Green Map Impacts book</u>

A <u>Green Map Impacts</u> book project came about in 2007 in order to help people worldwide see and understand the many tangible results that can stem from Green Mapmaking. The book's purpose was to bring about a growing awareness and involvement of Mapmakers and their communities and to highlight when positive environmental changes take place around the globe. Below is a summary of some such examples:

- 1. USA the current NYC GM focus addresses climate change. Adapting to Change post-Hurricane Sandy map and tour series.
- 2. JAPAN 70 Japanese cities have created Green Maps. Many support eco-tourism and pilgrimages to Temple Towns.
- 3. COLOMBIA A Hopeful Environmental Education Resource for Public Schools.
- 4. THAILAND Stop Global Warming Initiatives.
- 5. TAIWAN Wetland Restoration in Taipei County.
- 6. UNITED KINGDOM Reusables Categorised and Mapped.
- 7. INDONESIA Annual Green Map trainings help local villagers and Indonesian mapmakers preserve Borobudur World Heritage spiritual site.

### 3.3.2 <u>Cape Town's experience with Open Green Map</u>

Cape Town's experience with Open Green Map has been a positive one, but has not yielded the exposure initially envisaged as described in the opening paragraph of Section 3.2. While there were unquestionably savings gained in terms of set up costs and tapping into an existing infrastructure, they believe that a number of limitations need to be resolved in order for their Green Map to be a more valuable partnership, i.e.:

- Web traffic referred by the GMS website is miniscule because links back to the CT Green Map were not obvious;
- The availability of a Cape Town GM on the GMS home page is not obvious an icon needs to be developed for each city-wide green map, otherwise visitors zoom into a random site listed for that Green Map, rather than the map as a whole;
- The fact that sites are listed free of charge even commercial undertakings need to be reassessed, in their opinion.

In 2009, Cape Town Green Map entered the <u>Impumelelo Awards</u>. The Impumelelo Innovations Award Trust rewards exceptional projects, which involve partnerships with the public sector that enhance the quality of life of poor communities in innovative ways. Out of a field of over 250 applicants the Cape Town Green Map made the short list of 100 projects which were formally interviewed and assessed. Whilst the project was not amongst the top 40 projects that were awarded the feedback was positive and useful. Their major concern was that at that stage it was impossible to measure the impact and provide the stats that they are now in a position to present. It was also felt that the environmental criteria for inclusion of members might need refinement. However, the impact of the Cape Town Green Map project has been felt through online marketing as well as in material form, as evident in the continued support of their partners.

### 3.3.2.1 Website statistics

**Website statistics** have been tracked since inception for <u>www.capetowngreenmap.co.za</u> using Google Analytics software, and Green Map System has provided access to the website statistics for Open Green Map using AWStats (Cape Town Green Map Project Report, July 2010). Statistics detailed below are for the period 1 April 2009 until 30 June 2010. There are a number of key details to note about the value the website is providing:

- It is attracting a following of over 1,900 visitors per month, on average.
- Fifty percent of these visitors are arriving at the site directly or having been referred by another website, and the other fifty percent are arriving via search engines results pages.
- The search engine traffic is valuable as it results in new visitors arriving at the website that may not otherwise have found it.
- The site is relevant to the visitors as 25 percent of visitors return to the website.
- The fact that <u>www.capetowngreenmap.cpo.za</u> directs 200% 400% more traffic to <u>www.opengreenmap.org</u> than other cities indicates that it is visited more than any other city with a green map site. We can only conclude that this is because the site has a blog with rich content, including news and events and is a site that is both attractive and easy to navigate. The search engine optimisation that has been set up is also an important factor in drawing traffic to the website.

### 3.3.2.2 Cape Town Green Map Print Map

Four editions of the Cape Town Green Map **Print map** has been published to date with over 300,000 copies of the maps distributed through the City communications network (Libraries, Nature Reserves and other points were they were available to the public); Events (Hout Bay Green Faire in November

2009, the National and Organic Product Exhibition at the CTICC in February 2010, the Biodiversity Exhibition at Kirstenbosch in March 2010, Smart Living breakfast events, induction courses for new staff, the Civic Centre info desk, Wolfgat clean-up campaign, Energy Efficiency and Sustainability Training, etc.); as an insert in the March edition of VISI Magazine; to all site members; markets; and at 'green' conferences. The print map has been formatted as A3 (two pages) and A4 (six pages) PDF files and are available for download from www.capetowngreenmap.co.za.

### 3.3.2.3 Social media and blogging network

A Facebook group and Twitter account were set up for the Cape Town Green Map. These were used at the website virtual launch and launches of the various editions of the print maps to drive more traffic to the website. Bloggers were informed of the launches and this generated more awareness of the map via blog posts on other websites and increased traffic to www.capetowngreenmap.co.za.

### 3.3.2.4 Other

Radio and TV coverage – the CT Green Map has also been featured on various television and radio platforms.

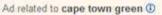
Print exposure - The Cape Town Green Map's slogan and website address was printed in the message area of the City's account statements which are sent to over 900 000 residents, and has been featured in community newspapers.

### 3.3.3 Imagine Durban's Monitoring, Reporting and Evaluation

Niall Haygarth is part of the Imagine Durban team responsible for Monitoring, Reporting and Evaluation - to measure the impact of Imagine Durban interventions and track the progress made towards attaining the goals and targets of the Long Term Development Plan (LTDP). However, no impacts have been measured to date on their Green Map as it is still in its infancy.

By contrast with Cape Town's web statistics, the Durban Green Map is hardly benefitting from web traffic at all.

- A Google search for 'Durban Cape Town Green Map Ask com green' or 'green Durban': Jeffares and Green comes up first, followed by green corridor (Green Map does not appear). 'Cape town green' or 'green cape town' brings up the green map first off.
- The Durban Green Map does not have its own domain; it is nested within the Imagine Durban website





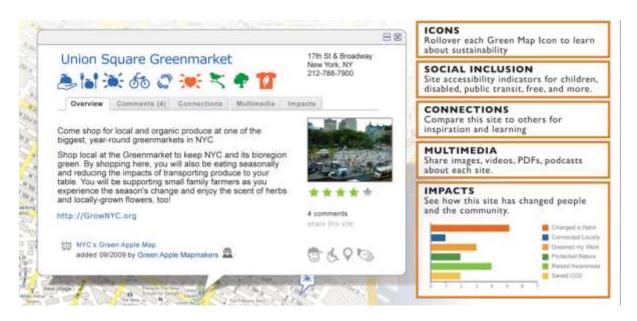
- The photos are all of the city, nothing that's green.
- There is no blog or green info other than the map on home page. If one searches for 'green' on their blog, only two posts appear: on 7 July (one an ad for Woolworths) and the only other one from before is 27 Nov 2012. There is also no Twitter account.
- Outcomes: only one person discovered green places because of the Green Map and just 19 comments have been made.
- In discussion with Debra Roberts (who heads up eThekwini Municipality's Environmental Planning and Climate Protection

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Department, 27 August 2013), she confirmed that the Durban Green Map site is static and does not have the web traffic needed for the desired impact. With Durban, being at the forefront of efforts through the <u>Rockefeller Foundation's 100 Resilient Cities Challenge</u> to develop a comprehensive strategy to build resilience in the face of a range of evolving risks and vulnerabilities, from climate change to water security, biodiversity loss and rapid urbanisation, the green map needs to be more meaningful and they need to be getting interactive visual data out into the public domain. She says that Durban is increasingly becoming more infrastructure and industry-based, while Cape Town and the KZN Midlands is more attractive to visitors so their Green Maps could be more successful. She says that Cape Town has a number of iconic interventions speaking to a certain mind-set / culture and not a lot of what they do is transferable to the Durban context. The take home message is the importance of a champion to gain the critical mass to sustain a Green Map project.

### 3.3.4 Adding comments, images, videos and impacts

The Open Green Map platform which the KZN Midlands Green Map will be built on, allows anyone to add comments, ratings, images, videos and notes how each of the sites on the map has changed their lives. The Impact tab allows one to rank the site by choosing one of the following: 'Because of this site, I changed a habit, greened my work, saved CO<sub>2</sub>, protected nature, raised awareness, connected locally, took action, or other'. The example below shows how impacts have been ranked for a site in New York.



Measuring the impacts of the KZN Green Map, once it has been in operation for some time, might present an attractive post graduate thesis, possibly co-supervised with UKZN and Msunduzi Innovation and Development Institute (MIDI), that works out what the local spend is as a result of the Green Map and develops a system to measure if the anticipated benefits actually do materialise.

### 3.4 Membership

### 3.4.1 Process of listing members

There are a number of ways to list sites on the Green map System. One can actively recruit members, known from the area and probably on existing databases; public can suggest a site; or green enthusiasts who would like to volunteer to help build the green map can register to become Map-Makers. Actively listing sites would probably be the starting point and most frequently-used method, as concurred by the three other SA Green Mappers. It has been their experience that few people suggest a site until the website has a strong following.

### 3.4.1.1 Existing databases

As part of this feasibility study, we have been in touch with Wendy Brawer, the Green Map Founder in NYC, asking if integration of the Open Green Map with GIS, Google Earth and Google Map is possible and one can upload multiple sites onto the OGM from an Excel spread sheet - whether it follows the same procedure as for Google Maps (bulk upload from Excel template <u>http://www.communitywalk.com/bulk/edit</u>). Currently it can be done but Map Makers have to provide the spread sheet to OGM and they do the upload ten sites at a time. She is hoping that in the coming year, adding and layering existing data will be much easier. Until then, each listing is on a site-by-site basis, making it time consuming and expensive. This, however, presents an opportunity for volunteers, students and intern involvement (see Section 4.1.3).

Where Administrators intend listing a site, their method has been to approach the members for permission first.

### 3.4.1.2 Suggest a site

Anyone can suggest a green site – one does not necessarily need to be the owner or manager of a site but one does need to be registered on the site, or login to submit one's site. So in the case of the Joburg Green Map, 'if there is a nature reserve, recycling project, organic veggie scheme, solar water heating installer near you, but not yet on our map, chances are they're already on our to-do list, but just in case, please let us know about sites you feel should be on the map'. However, sufficient detail is needed about what makes the suggested site 'green' to make it worthwhile adding it to the map. If insufficient information is provided, one is encouraged to contact the owner of the potential green site to submit the correct information.

People are asked to refer to the Green Map Icons and their definitions to see if the green site they wish to add is suitable. Sites not meeting these definitions will not be added. All submissions are moderated by the Green Map Administrator before being put on the map.

eThekwini, Johannesburg and Cape Town Green Mappers have taken the stance to upload only positive icons and to avoid listing Hazards and Challenges, i.e. 'Air' and 'Water Pollution', 'Oil or Gas' sites, etc. While we might agree that listing 'Poor Labour Practice' sites for instance could bring the map into disrepute, the KZN Midlands Green Map team would like to constructively engage with the many citizen science and eco-activist initiatives, i.e. the Mpophomeni Sanitation Education Project, and others described in Section 1.1.

### 3.4.1.3 Become a Map-Maker

One can also help build the map by registering as a Map-Maker to help grow the green map.

The Imagine Durban team led two community asset mapping pilot projects with youth in the communities of KwaNdengezi in Ward 12, and another in KwaMukhuta, Ward 93. Youth explored sustainability features of their community, and participated in a series of mapping workshops. Sites of significance were collected and put on the Green Map. The project aimed to empower the youth to tell the story of their community, share its initiatives, and inspire others.

It is envisaged that organisations with relevant programmes, i.e. UKZN's Mathuba Schools & Citizens River Health Programme; GroundTruth's River health data collated on the citizen science miniSASS Google Earth platform; African Conservation Trust's Gigabyte of Gardeners platform; ACT's MTB mapping exercise in Howick and Karkloof; etc. All have expressed their support of the KZN Midlands Green Map project.

# 3.4.2 <u>What are the trends in terms of other SA Green Map's listings (growing, tapering, losing members)?</u>

Johannesburg and Durban are still new sites and their listings are growing. Durban is actively recruiting additional sites and apart from the community asset mapping pilot projects example given above, they are currently running a campaign with sponsored prizes to attract more business listings to their site. Within the City, they have run Internal Sharing Sessions within the various

Departments to inform them about the Green Map and encourage them to contribute sites. The Departments, however, have not been all that forthcoming.

Johannesburg and Cape Town's main challenge has been to secure funds to ensure the project's financial sustainability and so both sites are operated by the goodwill of champions which is not sustainable in the long term.

Cape Town notes that maintenance of the website in general has been on-going and visitors have been drawn by marketing efforts, i.e. newsletters, fresh news stories, press releases - directly related to publicity efforts. Sites no longer open have been removed from the website. Listings are edited to ensure consistency, conciseness and to check accuracy. Pictures have been added to the site listings and video content was added to the Cape Town Stadium site at the time of the Soccer World Cup. It is important to reiterate that Cape Town Green Map is consistently one of the highest website referrals to OpenGreenMap.org.

### 3.4.3 <u>What are the criteria for listing members?</u>

The key to the success of all Green Maps is that all sites can be registered on the map free of charge as long as they conform to the GMS's predefined set of environmental standards. However, although there are definitions associated with each icon, there are currently no defined criteria. Cape Town Green mappers have also found that more specific or rigid criteria need to be included. They agree that engagement with accreditation providers is necessary (see more in Section 3.5 below).

### 3.5 CREDIBILITY OF MEMBERS

The Open Green Map is not the end of the process; rather it is the starting point for a new appreciation of and engagement with community sustainability. It applies a citizen science approach where the Green Map Administrators perform a verification assessment of each potential listing based on the definitions the GMS icons provide. It is then open to the public to comment, criticise, score the impact of their experience and contribute in other ways. Should anyone have a negative experience or wish to challenge the credibility of a member, they are free to do so via the comment function of the site (see Section 3.3.4). Comments are modified by the Green Map Administrator and the procedure, depending on the nature of the comment, would then be to approach the member (possibly verify on site), allow a period for remediation and if there is no change, the member will be removed from the Green Map.

At the same time, there is a definite need for monitoring of listed sites as sometimes so-called environmentally friendly activities are not well planned and implemented resulting in some potentially negative environmental impacts.

Green maps are therefore inclusive and evolving for those who want to see a better future for their city and surrounding community. While this approach may apply unreservedly to well-managed nature reserves and recycling depots for instance, other sectors like shopping, accommodation, businesses may need special requirements outlined.

### 3.5.1 Links to any other certification bodies

If the Sustainability Forum's requirement is for members to be associated with a certification standard, it will elevate the reputation of the Green Map to reduce 'green washing' and enhance the relevance of the Green Map as a mechanism to bring about meaningful change. The feasibility study's objective was to test whether certification bodies / standards, i.e. <u>World Fair Trade</u> <u>Organisation SA</u>, <u>Fair Trade Tourism</u>, Forest Stewardship Council, <u>Heritage Environmental</u> <u>Management Company</u>, SuSFaRMs<sup>™</sup>, <u>International Federation of Organic Agriculture Movements</u>, <u>Foundation for Environmental Education</u>, etc. would be willing to use the KZN Midlands Green Map as an entry point into the Midlands. Some interesting and unexpected discoveries were made.

### 3.5.1.1 Responsible Tourism

Through our links to the <u>Sustainable Tourism Partnership Programme (STPP)</u> as a champion, we have had discussions with both <u>Heritage Environmental Management Company</u> and <u>Fair Trade Tourism</u> and they both are in agreement that collaboration and partnerships are a good idea. STPP are also in discussions with Go Green Global. Heidi van der Watt (International Centre for Responsible Tourism South Africa), who assisted Anna Spencely with the writing of the standards, is a patron of STPP and supports the programme in its approach to sustainable tourism implementation.

It is important to note that both at a recent UNEP / RETOSA event, an STPP facilitated industry workshop, and responsible tourism related events and discussions with local tourism establishments and organisations where STPP has participated, it has become more and more apparent that certification bodies are not being perceived as the best or only option for responsible tourism implementation, especially amongst smaller tourism businesses. While there is awareness about Sustainable / Responsible Tourism amongst many tourism businesses, certification remains elusive to most organisations (only 300 accommodation establishments out of a potential 60,000 have been certified since 2004 when the first certification body entered the market). Also, sustainable tourism implementation extends beyond tourism businesses to include local government, associations, chambers, tourists themselves, the youth, other business, e.g. restaurants, suppliers, art and craft outlets, etc. One of the key barriers to implementation of sustainable tourism is the lack of awareness and accessible and user friendly information relevant to these stakeholder groups. There has been so much focus on certification – this comes up in every conversation about responsible or sustainable tourism, yet with this industry battling financially, there are a vast number of accommodation establishments that would prioritise starting the journey and implementing green initiatives over and above costly certification. As per the Sustainable Tourism Partnership Programme model, we need to look at mechanisms to provide validation to the business owner every step of the way and Green Maps can contribute significantly to this approach.

A recent Situational Analysis <u>Advancing Sustainable Tourism</u>: <u>A Regional Sustainable Tourism</u> <u>Situation Analysis in Southern Africa</u> compiled from contributions, comments and suggestions from countries and tourism experts in the region confirm that various forms of technical tools and guidance for sustainable tourism include guidelines, standards, certification programs, manuals and toolkits, and value chain analysis tools do exist in the region. At least 340 accommodation facilities have been recognised for their sustainable business practices, through third-party certification, international awards, or inclusion on an online booking platform that promotes sustainable products. These accolades are notable for the operations involved, but level of uptake currently represents a fraction of all tourism enterprises across the region. Principal challenges and barriers to mainstreaming sustainable tourism reveal that there is a lack of voluntary certification programs throughout all southern African countries; certification schemes are seen as prohibitively expensive; and there is no uniform system for assessment of sustainability, and no penalty for non-compliance.

The four main recommendations that arose out of this situational analysis for future project interventions to mainstream sustainable tourism were:

- 1. **Tourism products and services**: A greater supply of sustainable tourism products needs to be stimulated in order to reach a 'tipping point' where sustainable practices are the norm in the region. Therefore incentives and technical support for sustainable tourism developments are needed, as are mechanisms to ensure that sustainable products have preferential market access.
- 2. **Training and capacity building** for people working within government agencies, tourism boards and protected area agencies. They have a key role in developing and promoting sustainable tourism, and sustainability must be fully integrated into their work.
- 3. **Technical tools and guidance**, in accordance with country priorities. Research should be undertaken to establish the business case for sustainable tourism, particularly on cost-savings and improved market access. Tools need to be provided in a balanced manner, to reflect social and economic as well as environmental sustainability.
- 4. **Networking organisations** need support to build relationships and linkages between people working on sustainable tourism, and those that need to be encouraged to do so.

Implications for the KZN Midlands Green Map are that through working with the local (Midlands Meander Association, N3 Gateway Tourism Association, Pietermaritzburg-Msunduzi Tourism, etc.) and national tourism organisations, i.e. STPP, the Green Map has the potential to spatially promote sustainable tourism products. The Green Map System is seen internationally as a prestigious platform to trigger and inspire the required change in behaviour.

It is recommended that the KZN Midlands Green Map be built in themes / layers and that responsible tourism will be one such map within the overall KZN Midlands Green Map. Midlands Meander Association has already indicated their willingness to work with us. N3 Gateway sees this project as being important in respect to developing a more sustainable tourism economy in the region, providing a resource to tourists and as a marketing vehicle from which responsible tourism businesses will hopefully benefit in future. Should the Green Map project progress, N3 Gateway hopes to establish a closer working relationship with the Sustainability Forum.

### 3.5.1.2 Fair Trade

The new <u>World Fair Trade Organisation (WFTO)</u> Guarantee System (GS) received final approval at the AGM in Rio in June 2013. Things are moving along quite slowly at WFTO at the moment. The first batch of FT organisations that took part in the pilot testing of the new Guarantee System are going through the approval process (Carol Wills, pers. comm., 18 August 2013). All members are now able to access the documents and start the process leading to approval and then use of the Label. The

Board meets in October and the new GS will surely be on their agenda. The GS Working Group meets at the beginning of November and training will definitely be on their agenda. A GS Manager will be appointed in the New Year and it would be this person, I think, who would need to discuss any partnership with the Sustainability Forum. Our details have already been forwarded to the WFTO Secretariat and are listed as potential WFTO approved auditors.

### 3.5.1.3 Environmental Education

The Eco-Schools Programme is an international programme of the Foundation of Environmental Education (FEE) and is active in 51 countries around the world. The programme is aimed at creating awareness and action around environmental sustainability in schools and their surrounding communities as well as supporting Education for Sustainable Development in the national curriculum. Eco-Schools were initiated in South Africa in 2003, with WESSA as the implementing agent. There are over 1,200 registered schools with the programme, many of which are in the KZN Midlands.

The KZN Midlands has the fortune of seeing a new Environmental Education initiative emerge, known as the 'Happy Earth' Sustainability Forum which is not limited to the Eco-Schools programme, but is for environmental educators to enable them to respond to the urgent need to enact projects raising awareness around environmental issues. 'Happy Earth' have expressed their desire to seat the KZN Midlands Green Map firmly in the forum. This fledgling grass roots forum recognises the need to operate in a new space that they are creating. Because of these strong links, Environmental Education could be the starting point of the KZN Midlands Green Map and a print edition of the EE Green Map could be launched in time for the Eco Schools Day in April 2014. They have a young IT student that is going to be assisting them with media and this may be the very platform that she can use to help build the vision that we have for developing an interactive Environmental Education site that reports our work.

### 3.5.1.4 International Federation of Organic Agriculture Movements

The sporadic efforts made by Organic farmers' organisations over many years to set up their own professional network have begun to take root within the <u>International Federation of Organic Agriculture Movements</u>. South Africa is still in the process of forming an autonomous self-organised structure within IFOAM. The first practical steps are being taken in the setting up of minimal infrastructure that belongs specifically to Organic farmers organisations, that can facilitate a relationship allowing them to consult and cooperate and, eventually, to speak with a legitimate common voice on matters of common concern.

It is within this context a Midlands participatory guarantee system (PGS) is being developed as an affiliation to IFOAM to bring together organic farmers from large to small, individuals and groups and create a certification system to open markets and ensure all agro ecology is done to certain standards. An added benefit is that it will promote agri-tourism in the Midlands. There is an exciting vision for organic agriculture in Midlands and PMB/Durban corridor and they have indicated their desire to use the Green Map platform.

3.5.1.5 Midlands Economic Development Agency's 'Made in the Green KZN Midlands' accreditation Midlands Economic Development Agency (MEDA) are hoping to soon launch a 'Made-in-the-KZN Midlands' accreditation process, whereby companies from any sector can apply for accreditation and they will assist them in marketing and profiling their business.

### 3.5.1.6 Conclusion

It has been our experience from working in the sustainability realm for a number of years now that civil society is not ready for rigorous and expensive certification schemes, but are looking for an endorsement or verification by credible bodies which need not necessarily be certification bodies. Nor are some of the certification bodies organised yet in SA and able to provide this service.

The way forwards with regards to the KZN Midlands Green Map is not clear. However, there are a number of policies in place, i.e. the National Strategy for Sustainable Development, National Minimum Standard for Responsible Tourism (NMSRT, 2011), etc., which can be applied. Of local relevance are the Strategic Environmental Assessment (SEA) and its Environmental Management Plan (SEMP) as well as the Climate Change response strategy for the District.

### 3.6 MARKETING AND BRANDING

The target audience for the green map is two-fold: those who want to receive information on sustainability through Blog posts, newsletters, and social media platforms, as well as our Go Green page (see s1.3); and those members who wish to receive marketing benefits from demonstrating their sustainability initiatives through listings and interaction through the website. The challenge is how to reach people who are not yet on the sustainability journey and to make the Green Map attractive enough to convince them to 'hop on board' and start to implement change at home, school, work and play.

### 3.6.1 <u>What sets the Green Map System apart from its competitors</u>

Open Green Map has taken mapmaking into an interactive space that provides a collaborative resource centre for map makers around the world. The GMS is a form of citizen science which has the potential to connect the many themes of sustainability under a single 'mind map', bringing about a recognised relevant and meaningful brand whose purpose is to act locally while promoting sustainable communities worldwide.

The Green Map provides an opportunity to look at the Midlands through a sustainability lens, and offers a new perspective of the area. The real value of the Green Map is primarily to local residents in the following ways:

• By getting South Africans to see green as something that they can latch onto and not just as a concept;

- By providing a valuable resource of where the consumer can visit to find reliable products, produce and services locally which will make it easier to make the necessary lifestyle changes;
- The Go Green page, newsletter and Blog posts will inspire and suggest how to go about it;
- It will also expose the wealth of interesting features the Midlands has to offer recreational users, i.e. green spaces, bike routes, libraries, farmers' markets and eco-friendly restaurants, craft markets, historic sites, lively spots and other places related to environmental sustainability, or points of cultural or social significance, presented in an online tool;
- The Midlands is possibly unique in that it has a number of existing citizen science initiatives and a single GMS will provide a one-stop online tool to share and convey eco-information and constructively engage in environmental activism, using the relevant GMS icons.

To the discerning tourist, being part of a recognised global Green Map System, it puts these initiatives in the KZN Midlands on the worldwide map, connecting us to sustainable communities worldwide, while also increasing local economic spend.

Having said this, the GMS does have some limitations, i.e. slow to load, self-generating income streams, bulk uploads of data and layering, but all programmes have their challenges and suggestions of how these can be overcome is presented in Section 4.2.

### 3.6.2 Other similar initiatives

The <u>Eco Atlas</u>, has been initiated in Knysna by Rhian Berning and is an ethical directory to accommodation, restaurants, activities, products and services in South Africa. It provides a one-stop green guide for conscious consumers and travelers empowering one to choose where to eat, play and stay based on sound environmental and ethical practices. Using the twenty icons,

divided into Resource Use, People and Earth, Animal Friendly and Earth Friendly eco choices, one is able to see who is achieving sustainable goals, thus enabling one to make informed decisions about which businesses to support. An ECO STAR is awarded when an exemplary establishment qualifies for at least 10 Eco Choices. Eco Atlas, is at present



not charging places to be featured on the site, their focus is on building a reliable database. They have recently introduced online booking and will receive a small amount of commission for that. From 2014, they will be charging a small subscription fee to be listed on the site, something in the region of R60 per month. Rhian Berning has indicated that 'it would be great to collaborate with SA Green Map as Eco Atlas has a different role to fulfil as an ethical directory and the symbols we use focus on different criteria'. She suggests a reciprocal collaboration whereby we each encourage specific places to be listed on both the SA Green Map and on Eco Atlas sites and put in a link to the other website in their site description.

<u>mapmyway</u> is a new initiative by A&C Maps cc using the Wordpress Content Management System in <u>GeoThemes</u>. They have been publishing special interest map guides, focusing mostly on Cape Town and surrounds and are part of the Cape Town Green Map team. Using their large and informed database they have created the new mapmyway website sharing this extensive store of knowledge, so that you can make informed choices and create your own personalised routes. <u>www.mapmyway.co.za</u> is a one-stop, user-friendly, personal information centre. And the print maps will be available through Cape Town Tourism Visitor Information Centres (including Cape Town

International), leading hotels and listings on the map. Nationally, selected maps will be available through the Mail & Guardian – Africa's best read. As already mentioned, CT Green Map is part of the <u>World Design Capital 2014 (WDC2014)</u> together with the <u>mapmyway</u> so is not in competition with the green map.

#### 3.6.3 <u>Brand</u>

An identity, or brand, was created for the Cape Town Green Map in preparation for the 2010 FIFA World Cup<sup>™</sup>. This was necessary to drive the success of the project. The Cape Town Green Map logo and mission statement were developed as part of the brand identity. The Cape Town Green Map brand is a valuable asset that is becoming more widely recognised. The cost of the logo development was included as part of the web design costs.

Although there was communication between Durban and Cape Town, Ethekwini took the decision to couch their Green Map independently within the Imagine Durban site.

When Johannesburg came on board, to save costs and connect with an established and successful brand, the CT Green Map was duplicated and populated with information relevant to the Johannesburg context. Their logo too is based on the CT logo and they are encouraging the KZN Midlands Green Map to become part of what will become a SA Green Map Brand.





Collaboration being key, the CT Green Map is

promoting the idea of all SA Green Maps, including the KZN Midlands Green Map, taking on a 'Green by Design' focus to establish a strong SA Green Map 'brand' in the belief that this would make it an effective platform to attract national sponsorship support from government and/or the corporate sector. Individual Green Maps will most likely also need to do their own fund-raising which will be more attractive to sponsors with geographically defined limits. Open Green Map has agreed to their suggestion to create a Green by Design icon which CT will design – a neat design coup for World Design Capital 2014 (WDC2014).

#### 3.6.4 Marketing

Details of Cape Town's public relations, marketing and advertising costs is given in Section 3.7 where, despite there being limited budget, it has been the CT Green Map's biggest impact; making it the most visited Green Map in the world. However a small sum was allocated to the virtual launch of the website, and the ingenuity of the City, A&C Maps and Urban Sprout was harnessed to obtain considerable marketing exposure, without incurring additional costs to the City. This included print, radio, television and online media.

<u>Google AdWords</u> and Facebook advertising are relatively inexpensive ways of getting ones organisation to show up more on Google Maps or Google Search and Facebook, respectively. One can set a daily budget and adjust it as one sees results. One only pays when someone actually clicks on one's ad and visits one's website. When potential customers search one's local area for what the ad is offering, one's ad is eligible to appear on their results page.

#### 3.6.5 Advertising Options

Aside from a group of voluntary Bloggers who we hope to grow in number and theme, it is important that the SA Green Map platform that is proposed provides a basic (free of charge) listing to members with a Pro or Premium option (with a subscription fee on a sliding scale depending on the organisation size) which will allow them to interact more fully with their listing, link their site to Blogs, advertise and contribute in a more meaningful way. This will incentivise members to participate and be part of the solution and will bring about more traffic on the website.

#### 3.6.5.1 Advertising Rates

Still to be confirmed but listings could be as follows:

- 1. FREE Listing: Up to 30 words to include your organisation name, green map icon/s, address & basic contact details, location plus 1 photo: Up to 30 words to describe the place/ organisation and how you can pay e.g. credit cards/senior or children rates.
- 2. PREMIUM listing: R60 per month (based on signing up for 1 year in advance). In addition to the above, up to 200 words to describe your organisation, detailed contact details, and up to 5 additional photos. Suggestion include opening hours and average prices (if appropriate).

Facility	Basic Listing	Premium Listing
Green Map Icons	Y	Ŷ
Business Name	Y	Y
Brief Description (30 words)	Y	Y
Address	Y	Y
Telephone Number	Y	Y
Pin up on map (location)	Y	Y
Category / Theme Map	-	Y
Detailed address & contact details	-	Y
Full description (200 words max)	-	Y
Up to 5 additional pictures	-	Y
Email address	-	Y
Web link	-	Y
Blog contributions	-	Y
Green tip contributions		

3. CALENDAR EVENT: Free (if listed). Approx. 25 words. Includes event details page supporting the event. There would be a cost involved if not listed, depending on the type of event. Only listings

that promote the good of the community will be accepted, (corporate advertising of courses for instance should be sold as advertising space).

- 4. EVENT ADVERTORIAL: e.g. add content for an event. 300 words, add link to downloadable documentation and 2 pics. Include offering a pre-determined amount of coverage via our social media channels (e.g. 1 facebook link, 2 twitter mentions in the preceding week to the event. This could also be used to supplement a Calendar Event. Cost dependent on event type and payment on invoice.
- 5. NEWSLETTER BANNER ADVERTISING: The Green Map e-newsletter will be sent out on a 2monthly or quarterly basis. There is 1 banner slot per newsletter, 600 pixels wide by 90 pixels high. If you book for example 3 banner slots, this means you are booking a banner slot in 3 different newsletter issues.

Rates:

1 banner slot	R500	Total R500 for 1 banner
3 banner slots	R450 per banner	Total R1350 for 3 banners
6 banner slots	R425 per banner	Total R2550 for 6 banners
9 banner slots	R400 per banner	Total R3600 for 9 banners

- 6. PRINT MAP PICTURE LISTING: R1,500 photo listing add-on to the Print Map, unless an overall sponsor can be sourced.
- 7. WEBSITE BANNER ADVERTISING: various options apply:
  - a. Leaderboard Banner: The Leaderboard Banner (728x90) appears in a hotspot for web viewers and is prime position for advertising. Your banner can be animated and changed as often as you like and will be shown across the entire website. The cost of a full banner is R100 per 1000 impressions.
  - b. Skyscraper Banner (120x600): The Skyscraper Banner (120x600) appears vertically on every page and is prime position for advertising. The industry standard sizes for Skyscraper banners is 120x600. Your banner can be animated and changed as often as you like and will be shown across the entire website. The cost of a skyscraper banner is R100 per 1000 impressions.
  - c. Section sponsorship: There can only be one sponsor for each of the 8 main sections, such as Extreme, Entertainment or Outdoors. The sponsor's 234x60 banner will appear at the top of each page.

## 3.7 BUDGET

The total cost of the Cape Town Green Map project from inception to end July 2010 was R 806,796.00. The total cost to the City of Cape Town was R 518,364.00, the investment by Urban Sprout and A&C Maps amounted to R 238 255.00 and paper for the print maps to the value of R 50,176.00 was donated by Sappi.

The main cost components of the CTGM project for the period 1 April 2009 until 30 June 2010 are detailed below:

#### Feasibility Study for the development of the Sustainability Forum's KZN Midlands Green Map

Task	Description	Co	st
	finalise brief	R 5 000	
mark tables and so that the	icons + criteria	R 4 000	
Establishing and maintaining the database of "green" sites	compile sites, map to icons	R 4 250	R 129 449
the database of green sites	add initial sites	R 23 000	
	admin, maintenance, updates	R 93 199	
	Graphic design	R 24 220	
	Specifications, programming, testing	R 64 200	
Establishing and maintaining	Writing initial content	R 21 250	
the website and website	Website hosting, support, upgrades	R 5 000	R 188 759
content	Newsletter template	R 2 500	
	Initial events calendar	R 1 000	
	On-going website content (news, events)	R 70 589	
	Website launch	R 10 000	
	Radio & TV engagements	R 3 900	
	Social media, engaging bloggers	R 7 200	R 127 659
Marketing, advertising and promoting the Cape Town Green Map	Bookmarks	R 2 777	
	Roll-up banner	R 7 109	
	Advertising notice	R 25 000	
	1st Edition launch	R 2 823	
Greenmap	2nd Edition virtual launch	R 2 303	
	VISI magazine promotion	R 5 335	
	Networking & events	R 31 800	
	Website newsletters	R 22 059	
	Press releases	R 7 353	
Print edition 1 cost	Content, admin	R 42 750	
composition	Design, layout	R 26 220	
(75 000 copies in total printed: 25 000 large format (DL size) maps and	Printing	R 27 523	
50 000 pocket-size)	Paper	R 20 085	D 264 405
Print edition 2 cost	Content, admin	R 46 200	R 264 405
composition	Design, layout	R 21 660	
(125 000 copies in total printed: 100 000 large format (DL size) maps and	Printing	R 49 875	
25 000 pocket-size)	Paper	R 30 092	
TOTAL			R 710 272

The costs do not take into account the cost of project management from the City of Cape Town (CoCT), or any interdepartmental costs that may be accounted for within the CoCT. For example the distribution of the print maps to City outlets or the provision of communications services is not accounted for. All other City of Cape Town expenses that were known have been included in the cost calculation.

The sole income generated by the project was R 55,800 by way of sponsorship from Cape Town Tourism and paid-for photo listings on the print map.

# 4 BUSINESS MODEL

The legislative requirements in South Africa are currently limited to the amended National Building Regulations, which stipulate that all new commercial and residential buildings will have to receive at least 50% of their hot water requirements from renewable energy sources such as solar water heating. The regulation also stipulates that buildings should be designed with the region's climate in mind to prevent the use of extra energy to heat or cool the building. The South Africa Government is planning to introduce a carbon tax effective from 1st January 2015, the proposed tax amount of R120/t of carbon dioxide ( $CO_2$ ) equivalent. There is currently no other national law and not much appetite for investment outside of that due to the economic recession.

Significant to this feasibility study is the fact that the only Green Map with secure funding is the Durban-eThekwini Green Map through municipal coffers. While the CTGM is driven by the City of Cape Town and A&C Maps, they have received very little funding. The main challenge for the project has been to secure funds to ensure the project's financial sustainability. The take home message from the CT Green Map was that without the City of Cape Town's financial investment through the FIFA World Cup and further, without a team of dedicated champions to gain the required critical mass to sustain a Green Map project, it probably would not have succeeded. While the leverage of the FIFA World Cup gave it an initial tourism spin, which is important because travellers are becoming more informed and demanding of eco-friendly destinations, their major success is based on getting local buy-in – a bottom up approach.

Our aim would be to focus on formulating a 'bankable' business plan to get the residents and business people of the KZN Midlands to see green as something that they can latch onto and that is not an unachievable or nice-to-have concept. That also makes it an attractive space for local and national support whether this is from Eskom, the banking institutions, the Cities/Provinces/Regions or national corporates.

A realistic view of the way forward is required in the light of there currently being limited scope for an income stream derived from the GMS (see Section 4.1). It is within this context that a number of options are considered below.

# 4.1 GREEN MAP SELF-GENERATING INCOME POSSIBILITIES

The initial financial model considered a mixture of income sources:

## 4.1.1 Website and Online Map

Observations by the Cape Town Green Map Team is that their website has played a valuable, even essential role in making more people aware of the map, with the interactive online map clearly being used and the fresh content driving visitors to the website.

A photo listing add-on was offered to all the sites listed in the CT Green Map for the second edition print map, priced at R 1 425.00. The uptake of the photo listings was very poor with only six sites electing to pay for the additional exposure. Feedback from some businesses was that they could not

afford the photo listing fee, but were very happy with the free exposure they were getting - why pay for something when you're getting it for free. The web traffic, whilst demonstrating the value added by the website in a short space of time, is not persuasive enough for an income stream to be derived from website advertising or advertorials.

Advertising revenue from a website placing advertorials ('green' media releases) depends on building page views and high visitor numbers. No advertising revenue, however, is likely to be derived from the outset as the website has to build up a following in terms site visitors and page views for it to be attractive to potential advertisers. Once the City of Cape Town committed funds for the continuation of the project ahead of the 2010 FIFA World Cup<sup>™</sup> additional advertising was not pursued as the City wanted to retain control of the branding of the website ahead of and during the world cup. With the current number of website page views on the CT Green Map, some revenue could be realised, but website advertising will not be significant enough for it to be a feasible source of revenue. Sponsors may be interested in on the site as part of a sponsorship package, but the advertorial feature on its own without requisite website traffic will not contribute revenue to the project. Increasing the page views and visitor numbers further could be achieved but there have been no funds for an online marketing campaign or advertising programme (e.g. Google Adwords). CTGM suggest that a specific budget allocation for online marketing would be an astute investment to develop the site to its full potential.

It is important that the web presence is maintained, however, as a contributing factor to attracting sponsors to the project and keeping the project in the public eye (see Section 4.3).

Updating the website with fresh content like news and events in the absence of an income stream becomes secondary to the aims of the project and to reduce project costs, the updating of website content will have to be kept to a minimum.

## 4.1.2 Charge for listings on Website and Print Map

The terms and conditions of the agreement with GMS prevented income being derived through charging sites to be listed on the website or the print map. The possibility of deriving income from commercial (for profit) sites listed on the Green Maps' print maps was considered by the CT Green Map Team. Limiting listings for paid listings may mean the map would not have as wide a coverage and not be a true reflection of the Green Map. The Green Map product and map has greater integrity with all qualifying green sites being listed for free on the map. However, the print map could have different categories of paid-for listings including basic listings, photo listings, section listings and service provider adverts which could yield an income flow. Discussions with Ingrid Anderson of the Midlands Meander Association revealed that their advertising sales have decreased with the economic recession so first prize would be to secure a major sponsor.

#### 4.1.3 <u>Work experience for Interns or Students</u>

Durban's two community asset mapping pilot projects with youth in the communities being trained up as map-makers to record sites of significance was a tangible way of empowering the youth to capture traditional knowledge, share initiatives in their community, inspire others and provide valuable work experience.

This is more a cost saving option and not an income generating one. However, the availability of interns, students and/or volunteers to assist with the adding of sites to the Open Green Map platform (including edited to ensure consistency, conciseness and to check accuracy, adding pictures and videos, etc.) and updating the website with news, Blog posts, press releases, Green Tips, events, etc. is also recognised as an effective way of trimming costs.

# 4.2 A SHARED SA GREEN MAP BRAND

As already mentioned, the CT Green Map is promoting the idea of all SA Green Maps taking on a 'Green by Design' focus to establish a strong SA Green Map 'brand' in the belief that this would make it an effective platform to attract sponsorship support. Open Green Map has agreed to their suggestion to create a Green by Design icon which CT will design – a neat design coup for <u>World Design Capital 2014 (WDC2014)</u>.

A Virtual Learning Exchange between all the Green Map Teams was held on 9 September 2013 where there was unanimous agreement on the need to collaborate and develop a new web platform (see Section 1.3). The aim is for the website to be the first port of call for anyone seeking green information and advice. In order to achieve this it must become the most prominent green site in the country with the highest 'hit' rate. The KZN Midlands Green Map recognises the need to be part of a greater information hub. Strategies and technologies are being investigated to develop a website that is easily managed by the Green map team so that content management does not become too costly. The site needs to have the following:

- Good **content** including original and well-written pages and posts, and first class images that people are drawn to and want to use which as a direct result, benefits the community.
- Be **search engine optimised** (SEO) to attract maximum web traffic. Google will rank the site well if content is well-written, without spelling and grammar errors, and information already in the public domain is not duplicated. Traffic comes as a result of such rankings, and then, over time, builds up.
- Functionality: needs to be fast to upload, especially the map, and optimised for mobile, include a pull-through to navigation on a cell phone GPS. A free Android APP should also be developed as Android now accounts for 70-80% of smartphone market. Have the capability to manage paid listings.
- <u>HootSuite</u> can further allow one to manage and share posts instantaneously across all of one's social media platforms, including Facebook, Twitter, Google+, U-Tube, Instagram, etc.

Every City is different and has completely different draw cards, attractions and people, but the ethos behind Green Maps is the same. Unified themes such as waste minimisation, energy efficiency, biodiversity protection, local markets, urban agriculture, local NGO's, etc. are always going to be common denominators.

The primary objectives should be to communicate to residents. The impact one has on visitors is a bonus. It takes time to build an audience and the Municipalities should take every opportunity to build these communication networks. A great selling point to the Municipalities is that through a SA Green Map we can really start interacting and communicating effectively between Cities. This opens up a range of opportunities for the sharing of ideas, concepts, project support, new markets, etc., all valuable to residents.

The <u>South African Cities Network</u>'s (of which Cape Town, Johannesburg, Durban and Pietermaritzburg are members with nine other cities) aim is to find the best way to help cities grow their economies, reduce poverty, tackle urbanisation and deliver good governance. Their <u>Sustainable Cities</u> programme highlights the need for cities to develop strategies that take into account the sustainable use of finite resources.

## 4.3 FUND RAISING AND SPONSORSHIP

Experience from the CTGM reveal that there have been a number of constraints in raising sponsorship for the project:

- The global economic recession, as already discussed.
- Public sector reluctance A lot of effort was expended convincing Table Mountain National Park to come on board as a sponsor of the map. TMNP received television coverage as well as the inclusion of Table Mountain sites in the online and both editions of the print map for free. There appeared to be a reluctance in committing funds to the project, perhaps as they were already aware the project was receiving funding from the City of Cape Town and possibly also government procurement processes.
- 2010 FIFA World Cup impact With the project forming part of the Cape Town Host City Green Goals environmental programme for the 2010 FIFA World Cup<sup>™</sup> it was subject to limitations in terms of securing sponsorship. Initially it was thought that the website and print map would be branded with the Green Goal logo and this meant that sponsors other than official 2010 FIFA World Cup<sup>™</sup> sponsors could not be approached.
- The effort involved in sourcing sponsorships was not trivial and is now better understood by the project partners. It is also not an activity that the project partners have experience in. The option of a professional fundraiser may have helped secure funding.
- It is believed that in many instances sponsors need to be approached by the City rather than via 'Cape Town Green Map' as this would add weight to such applications.
- City resources may have to be co-ordinated to leverage other City departments budgets as potential funding streams as the map is relevant as a communication tool across a number of departments, e.g. Solid Waste, Transport, Tourism, Social & Economic Development. However Durban's experience is that there has not been much buy-in from other departments.

Funding via sponsorship remains the most feasible way of taking the project forward in the short term. The raising of sponsorship is a time-consuming and risky activity, often with complicated application processes and a significant amount of time has already been invested by Zunckel Ecological + Environmental Services for the two SLIP events in trying to secure sponsors to date. All of our sustainability work to date has been pro bono and therefore we have not had an adequate

track record (nor do we have the luxury of time going forwards) to continue approaching and/or following through with potential funders.

It is highly recommended that the services of a professional fundraiser should be considered in approaching potential national and international funders and media sponsors. They would have the wherewithal to run campaigns to attract funding. It is reiterated here however that the main aim of this feasibility study is to be able to approach an anchor sponsor, i.e. the N3TC, KZN Treasury, etc. with a proposal, but to take it beyond that will require additional resources.

#### 4.3.1 International Fundraising

It is recognised that this feasibility study has been made possible through funding from the Critical Ecosystem Partnership Fund and that similar opportunities will emerge from time to time. When these do emerge and if their calls for proposals match what is intended for the KZN Midlands Green Map, these opportunities will be followed up. However, considering that they are not local and cannot be predicted, it is recommended that they be seen as remote possibilities at this stage.

#### 4.3.2 Provincial and National Funding

Given the growing number of 'green' initiatives in the KZN Midlands, we believe we should be looking at appropriate departments within Provincial and National Government to support and further this project.

KwaZulu-Natal Department of Economic Development and Tourism (KZN DEDT) is currently in the process of championing and driving the development of the Green Economy in KZN and have initiated and supported a number of turnkey / pilot Green Economy Projects both within existing businesses and industries and those that establish new green products and services that support the development of new technologies, supply chains and capacity to unlock the green economy within the Province.

uMgungundlovu District Municipality, in collaboration with the Midlands Economic Development Agency and the NL Agency, the Netherlands Government, is undertaking a feasibility study to understand the production and viability of organic waste conversion to electricity and fertiliser and is being used to engage farmers, industries, municipalities and restaurants across the KZN Midlands for anaerobic digestion, and so converting organic waste into revenue. It will further support local enterprises in understanding their own renewable resources of solar, hydro and wind in increasing their energy efficiency.

The KZN Midlands Green Map can be seen as a vehicle through which the green economy within the UMDM can be promoted and through which numerous related job opportunities may be created, i.e. those providing technology and services associated with the Green Economy, the possibility of creating learnerships specifically for youth (18-25 year olds) and many new job opportunities.

In order to bridge the divide between funders and entrepreneurial project promoters, a publicprivate partnership between Deloitte, the KZN Treasury and the KZN DEDT, realised the launch of the <u>KZN Funding Fair</u> in April 2013. They conservatively believed that R8 billion to R10bn in investments for KZN could come about through the initiative. Deloitte, with provincial government officials, pre-selected 31 project promoters in the agri-business, tourism and manufacturing sectors who had the opportunity to pitch their business plans to a large group of funders during the fair. Clive Coetzee, of the KZN Treasury, said they were looking for 'bankable' business plans, hence the selection process, but those who submitted projects that were not selected were also allowed to attend the event. The success of the KZN Funding Fair incited a need for a similar platform to be developed for infrastructure and small business focussed projects. As a result, the KZN Funding Fair now includes the Business Funding Fair (originally the KZN Funding Fair), Infrastructure Funding Fair (October 2013) and SME Funding Fair (2014), the latter appears to be a possible avenue for funds. KZN Treasury is funding the SME Funding Fair, to be held in Pietermaritzburg on 25 October 2013, at the Royal Show Grounds and presents an opportunity for businesses seeking finance to present their business or project to groups of funders/financiers. A concept note was provided which will be completed and returned by 26 November 2013 to be eligible for assessment. The limits are projects that are seeking between R2,000,000 and R15,000,000 in funding.

The uMgungundlovu District Municipality (UMDM) has recently been awarded a grant of approximately US\$8 million from the Global Adaptation Fund via the South African National Biodiversity Institute (SANBI) to promote adaptation and climate change resilience in the District. However, the concept of a Green Map was not part of the funding proposal and the Adaptation Fund who are looking for specific deliverables which exclude any possibility of support emanating from this windfall. Further to this, it is our experience that the UMDM has limited capacity in the realm of environmental management and sustainability, despite their commissioning of the SEA and Climate Change Response Strategy, that they avoid involvement in civil society initiatives such as this. In addition to their limited capacity to engage, the government financial management mechanisms and legal frameworks make it very difficult for them to respond positively to such initiatives. Perhaps a lesson needs to be learned here from the way the CoCT has been able to engage.

At a national level much effort went into submitting an application to the Green Fund for the sponsoring the SLIP<sub>2013</sub> event. The submission made it into the second round, but was then turned down. It would appear that it was too small a proposal and that the fund administrators would prefer fewer larger projects as seen in the launch on 23 August 2013 of a R22-million grant in the uPhongolo Local Municipality, KZN by the National Green Fund. *Farming the Wild* is a community based project to green the rural economy of the uPhongolo Local Municipality. The project aims to create green jobs and sustain two rural communities in the province through game farming initiatives, thereby supporting the objectives of the Green Fund.

## 4.3.3 <u>Corporate Social Responsibility</u>

CSI funding streams need to be tied to intervention on the ground – community benefits - and these are generally dependent on individuals and goodwill, as well as initiative champions having the time and where-with-all to engage with potential corporate sponsors. Naturally it also depends hugely on the appetite within the corporates to embrace the opportunity presented to them. Again the experience with SLIP<sub>2013</sub> has shown that even logical corporates such as Nedbank and others known for their support of green initiatives, were not willing to provide sponsorship. However, as specified

in Section 1.1.2, there is a belief that the carbon offset link with the N3TC may well leverage the required sponsorship at least for seed funding.

## 4.4 Building the Green Map in Themes or Layers

It might be easier in the short term to kick start the KZN Midlands Green Map if it is built in themes, as in this way, the various sectors may be able to find funds to cover the costs of maintaining and administering their contributions to the map.

The Happy Earth Forum have indicated their willingness to seat this initiative firmly in their fledgling programme so Environmental Education (EE) could be the starting point. A print edition of the EE Green Map could be launched in time for the Eco Schools Day in April 2014 but for that they would need to budget funds. They have a young IT student that is going to be assisting them with media and this may be the very platform that can be used to help build the vision for developing an interactive Environmental Education site that reports the Happy Earth Forum's work.

African Conservation Trust is investigating the use of the OGM for their Gigabyte of Gardeners programme which could form part of a Food Map.

East Coast Radio have published <u>East Coast Tables - Inland Edition (the Midlands and the Berg) by</u> (Erica platter and Clinton Friedman, 2013), an authentic portrayal of local food, life and culture. They may be willing to extend this project into a spatial domain by funding a 'Foodie' layer. They were approached but declined to comment.

African Conservation Trust is a founder member of the Sustainable Alternatives to Fracking and Exploration (SAFE) Alliance. The other alliance partners are Treasure the Karoo Action Group, Wilderness Foundation and Endangered Wildlife Trust. There is the potential to use the OGM to build a fracking 'layer' as part of the KZN Midlands Green Map.

This way sector-specific maps could be produced of the KZN Midlands Green map, i.e. Recycling, Responsible Tourism, Culture, Energy & Climate, Food, Getting Around, Green Living, Nature, Rural, Water, Youth, etc.

The cost of the sector-specific Green Maps for the KZN Midlands would depend on the number of sites (CT Green Mappers have suggested a charge per 50 sites and a requirement for organisations to share a database from which to work). However, organisations with in-house mapping or intern capabilities may wish to register as Map Makers and populate and manage the site themselves.

# 4.5 TAPPING INTO EXISTING LOCAL PROGRAMMES

It may be possible to engage with different agencies to support the SA Green Map brand.

#### 4.5.1 <u>PCB's Business Facilitation Centre</u>

The 2013 UCI Mountain Bike and Trials World Championships take place at Cascades in Pietermaritzburg from the 21 August to 1 September 2013. The Pietermaritzburg Chamber of Commerce (PCB) in partnership with Vodacom and Nashua Pietermaritzburg set up a Business Facilitation Centre at the event to explore possible future collaboration. We wrote to the PCB CEO on the 22 August 2013 requesting that the Sustainability Forum be considered because of the proposed KZN Midlands Green Map, but to date have not received a response. The PCB however remains a potentially strong link to this initiative and efforts to engage with them will be maintained.

#### 4.5.2 Midlands Meander Association

The Midlands Meander Association is a well-known and established brand, for tourists and outsiders. It may be possible to promote the KZN Green Map with their existing brand. A KZN Midlands Green Map would have to develop its own brand and reputation in its own right, which may take time and hard work, while the MMA has a ready audience with a wide reach. As well as greening the establishments and businesses within the MMA, this partnership will start to open tourists' eyes as well; and will be a way of starting to penetrate the mainstream, rather than keeping 'green' as something separate.

#### 4.5.3 <u>City Improvement District</u>

Pietermaritzburg is in the initial stages of implementing a City Improvement District (CID) in the city centre, also known as a Special Ratings Area (SRA), which is a non-profit organisation operating within a defined geographic area within which property owners agree to pay a levy for supplementary and complimentary services set to enhance the physical and social environment of the area.

A CID, according to the SRA by-law collects a CID levy from the ratepayers in the area over and above the normal rates charges. The money collected, unlike the rates, is a dedicated levy which can only be spent in the specific CID area and is used to provide "top up" services according to an approved Business Plan. These services provided by the CID are supplementary to those provided by the City of Cape Town, which continues to provide normal services.

The advantages of establishing a CID are:

- The cost of providing supplementary services will be borne by all property owners
- Costs are borne in proportion to the value of the property
- The Improvement District approach is holistic
- Provides enhancement of the environment and strengthens investor confidence
- The Improvement District creates a positive identity for the area
- The Improvement District provides private sector management and accountability
- The improvement of property values
- To put forward ideas for change to council

At the KZN Green Map presentation to PCB's Agric and Enviro Sense Forum on 19 August 2013, Vumani Msimang, one of the champions of this project, expressed his support of the KZN Midlands Green Map initiative and suggested its possible application for promoting Pietermaritzburg's CID.

#### 4.5.4 One Planet Living Programme

There are many shared similarities between the objectives of the GMS and the <u>One Planet Living Programme's (OPL)</u> 10 guiding principles: zero carbon, zero waste, sustainable transport, sustainable materials, local and sustainable food, sustainable water, natural habitats and wildlife, culture and heritage, equity and fair trade and health and happiness. Its principles are good and there are other carbon calculators that have been developed for application in a developing southern hemisphere economy. Sarah Alsen of BioRegional SA who directs the One Planet Living project in KZN was contacted as part of this project. She conducts workshops and training on the One Planet Living framework and its implications for sustainable urban development in the South African context.

Overseas, BioRegional used their experience in building the UK's first eco-village (BedZED, in Hackbridge, south London) to develop regional One Planet Programmes and Action Plans for businesses,



10 principles of sustainability This Calculator & Action Plan is based on the 10 One Planet Living principles. Your Action Plan will help you achieve One Planet Living.



e.g. for the London borough of Sutton; B+Q DIY chain. Sarah feels that this is an approach that could be used in SA, e.g. a regional plan for the KZN Midlands; individual plans for businesses/institutions.

## 4.5.5 <u>uMngeni Ecological Infrastructure Partnership</u>

Ethekwini Water and Sanitation and the Environmental Planning and Climate Protection Department of Ethekwini Municipality, SANBI, KZN DWA and Umgeni Water; together with the addition of the UMDM, Msunduzi LM, the Duzi uMngeni Conservation Trust and WWF-SA; are driving a process to establish the uMngeni Ecological Infrastructure Partnership (UEIP) to apply the concept of ecological infrastructure and investments into catchment management to enhance the delivery of water and sanitation services. Arising out of this is the potential for a suite of credits, to which the KZN Midlands Green Map could apply. This would have the advantage of introducing water as an added leverage mechanism together with carbon.

# 4.6 ECONOMIC INSTRUMENTS AS INCENTIVES AND A SOURCE OF FUNDING

Investments in the KZN Midlands Green Map could be sought in emerging markets for carbon, water, and biodiversity credits—the so-called 'umbrella ecosystem services'. Such incentives may even be used to 'grow' green, sustainable projects, or assist small organisations to switch to more sustainable practices.

#### 4.6.1 <u>Carbon Offsets</u>

Durban initiated two projects to offset the carbon from COP17 and the FIFA World Cup 2010, but these projects do not generate income for the City. On the contrary, they will continue to require dedicated budgets from the city treasury to maintain (Debra Roberts, pers. comm.). Further than this the City is not pursuing carbon offsets in any other way as they are focussing their resources on ensuring that developments, where relevant, secure biodiversity offsets. As a competent authority for environmental management decisions, the City will ensure that biodiversity offset agreements are honoured, but this cannot be considered as a source of revenue that could support an initiative such as the Green Map.

However, the loss and degradation of natural capital has diminished the KZN Midlands's ability to sequestrate carbon and so the Green Map, through its promotion of greening initiatives, presents an opportunity to promote the restoration and maintenance of natural systems to enhance their capacity for the sequestration of carbon and mitigation of projected climate change impacts. As previously stated, the production of greenhouse gases (GHGs) in the UMDM far exceeds the natural environment's ability to sequester carbon in the KZN Midlands (50 million versus 2.1 million tons  $CO_2e$  sequestering potential), so a carbon offset initiative may be a longer-term sustainable strategy to fund the green initiatives through the KZN Midlands Green Map. In so doing, it may be possible to imagine a community where children play freely in indigenous gardens, where you and your neighbours share cars, where cycling lanes take you to nearby restaurants and shops, where all waste is reduced, reused and / or recycled and where fresh fruit and vegetables are produced locally and organically and are dropped off on your doorstep.

In implementing this option it is recommended that the ecological and carbon footprint of each new listing on the KZN Midlands Green Map should be calculated which provides the member with a detailed action plan of which areas they need to improve and how to go about it in order to reduce their footprint. Typically, this could be achieved by first reducing their emissions through mitigation and then purchasing carbon credits which will assist with making up the balance of their emissions that cannot be reduced in the short term and enable the member to offset their emissions to achieve carbon neutrality. For organisations in South Africa the purchase of carbon credits but is important that the credits purchased are from legitimate projects.

The voluntary market helps to achieve emissions reductions with projects that are too small to be registered under mandatory schemes or where countries do not have a Kyoto target. One of the difficulties with the voluntarily market is surety that carbon emission reduction has actually taken place. To increase surety regarding carbon credits many sellers either get their credits **verified by a third party** or subscribe to a **voluntary standard**.

Perhaps a better approach, and considering the possibility of using the carbon argument to persuade N3CT to sponsor the initiative, would be to apply the measure of reduced carbon footprints in an accumulative way for the N3TC to purchase credits in lieu of their sponsorship. Individual initiatives to reduce carbon footprints may be inadequate in themselves, but collectively they may be sufficient to make it meaningful and financially viable, either directly or indirectly for N3TC.

#### 4.6.1.1 Voluntary Standards

In the case of voluntary standards the carbon project selling the credits signs up with one of the many voluntary standards that exist (<u>Urban Earth</u>). Each standard has its own set of requirements that need to be met for a carbon project to be approved under that standard. Some of the voluntary standards that currently exist are:

- <u>Voluntary Carbon Standard</u> (VCS): A recognised Green House Gas (GHG) accounting programme that can be used by projects to verify and issue carbon credits in the voluntary market. This standard requires third party verification.
- <u>Gold Standard</u> (GS): Established by the World Wildlife Fund for renewable energy and energy efficiency carbon offset projects. In order for a project to be certified under the GS, the project must positively impact on the environment and the local community hosting the project. This standard requires third party verification.
- <u>VER Plus Standard</u> (VER +): The VER+ Standard was designed for developers who want to follow similar procedures to the Clean Development Mechanism (CDM) but whose projects cannot be implemented under CDM. This standard requires third party verification.
- <u>Climate, Community and Biodiversity Alliance</u> (CCBA): The CCBA has developed voluntary standards to help identify land management activities that minimise climate change, support sustainable development and conserve biodiversity. The Climate, Community and Biodiversity Standard (CCBS) does not quantify emissions reductions but rather evaluates land based carbon mitigation projects in the early stage of development against biodiversity and community development criteria. For this reason CCBA is often used in tandem with another carbon standard. This standard focuses on land use, land-use change and forestry projects.
- <u>Plan Vivo</u>: A standard for designing and certifying community-based payments for ecosystem services (PES) programmes. This standard focuses on land use, land-use change and forestry projects. Third party verification is advised but not a requirement under this standard.

#### 4.6.1.2 Types of Carbon Offset Projects

(This section is taken from Urban Earth)

- Carbon sequestration through reforestation or agriculture One of the most popular ways that
  organisations offset their emissions is through the planting of trees. Whilst trees do sequester
  carbon dioxide and can have benefits for communities and biodiversity, planting trees cannot
  viably offset the entire globe's emissions because of the scale of industrial carbon emissions.
  Carbon sequestration projects using trees typically have a long time frame as trees only reach
  maturity after many years. The carbon offset of these projects also vary considerably depending
  on factors such as the vegetative cover of land prior to the project, the species of trees, density
  of planting, the local climate and future potential local climate change.
- 2. **Renewable Energy** Investment in renewable energy projects, such as wind energy, solar or hydropower, displaces fossil fuels as a feedstock for energy production.
- 3. **Energy Efficiency** Similarly investments in energy efficiency projects reduce the amount of energy required to deliver the same service and so result in reduced emissions from fossil fuels.
- 4. **Methane recovery** Methane is a GHG with a high global warming potential (GWP) of 21 times the GWP of carbon dioxide. When methane is combusted it is converted into carbon dioxide,

reducing its GWP. Methane recovery projects include landfill gas to electricity projects, methane recovery from animal manure, and methane recovery in wastewater treatments.

5. **Fuel switch** - Another way that carbon emissions can be reduced is through projects that switch from one fuel source to another fuel that emits less carbon.

#### 4.6.1.3 Who can one buy carbon credits from in South Africa

There are a number of organisations in South Africa that facilitate the buying of voluntary carbon credits. However, there are not many organisations in South Africa that design and implement carbon credit projects themselves. Two organisations that do are:

- <u>Credible Carbon</u> which is a voluntary market carbon registry that certifies and trades credits from Southern African projects. The registry is reserved for abatement projects that make a direct contribution to poverty alleviation. Credible Carbon is motivated by the need to make this market work for public benefit.
- Food and Trees for Africa which launched <u>The Carbon Protocol of South Africa</u> is a non-profit collaboration of concerned and interested parties in South Africa that sets consistent and transparent standards to calculate, verify and publicly report greenhouse gas emissions into a single registry. The Registry supports both voluntary and mandatory reporting programs and provides comprehensive, accurate data to reduce greenhouse gas emissions.

To this end, both organisations were approached asking them to provide suggestions as to how this might work for the respective Green Maps - whether individual site members would have to be assessed, or each Green Map could be registered as a project, and who would buy the carbon credits.

Anton Cartwright of Credible Carbon also responded saying that it sounded like a great project but the Green Maps themselves are likely to provide too general and tenuous a causal link to auditable carbon savings to make for a carbon project. Perhaps some of the actual projects - renewable energy, soil carbon, afforestation etc. - would be a better fit. In this regard it helps if a project has a clear boundary and sequestrates / avoids at least  $600tCO_2e$  per annum.

The Carbon Protocol of SA's Board reviewed this 'fantastic initiative' and a Skype meeting was held on the 9<sup>th</sup> September 2013 as referred to in Section 2.4.2. They felt that the N3 corridor would be measuring their Scope 2 (energy related indirect) emissions which would include the road users' purchase of petrol and diesel. The collective sustainability inputs from the Green Map could reduce this footprint, making the N3TC more visible in their carbon reduction initiatives. Members on the Green Map will have to measure their carbon footprints as a baseline from which to start their sustainability journey. Members should ideally conduct a self-assessment, but where they are not able to, the Green Map team have the necessary acumen to provide this support. This would be followed up by random on-going verification by the Carbon Protocol Assessors. Individual offset projects could be established which would generate a potential offset opportunity for the N3TC. As the listings on the Green Map become more carbon neutral (and offset projects increase in number), the amount N3TC contributes to the Green Map can be reduced as the Green Map will start to generate money out of these projects, while N3TC gets additional recognition.

# 5 CONCLUSION

## 5.1 RECOMMENDED BUSINESS MODEL

Considering all of the above it is recommended that in order to establish and maintain the KZN Green Map the following will be required:

- Compile a detailed budget on what will be required to establish and maintain the KZN Green Map (see Section 5.3);
- Integrate this budget into a funding proposal for sponsorship from the N3TC on the basis of their investment being for the offsetting of carbon generated from the N3 corridor through the accumulative reduction in carbon footprints of listing;
- Complete and submit the SME Funding Fair concept note by 26 November 2013 to be eligible for assessment. All concept notes will be evaluated and the best projects selected to pitch their business opportunity to potential funders.
- The proposal should be aimed at a reducing level of sponsorship of ~90% for the 1<sup>st</sup> year, ~65% for the 2<sup>nd</sup> and then ~40% from then on, assuming that within three years web traffic will have increased to a critical mass sufficient to provide an adequate return on investment in terms of marketing benefits; and
- The backup motivation for N3TC sponsorship is the possibility of the accumulative carbon reductions being sufficient enough to offset a substantial portion of that generated from the traffic on the N3 corridor, acknowledging that this is set to grow substantially once the proposed expansions to the Durban harbour are complete.

In addition to this are a number of aspects that will contribute to enhance the overall viability of the KZN Green Map initiative as a mechanism to address current climate change vulnerabilities and to increase social and economic resilience, and these are:

- Implement the establishment process in a phased way using the theme approach;
- Encourage the various theme champions to use interns and other options to populate their Green Map layers;
- Engage with and strengthen partnerships with other Green Maps, certification bodies, related spatial initiatives, etc.; and
- Regularly engage with relevant government agencies, particularly at the provincial and local levels, to increase their use of and buy-in to the Green Map, as well as its expansion up the N3 corridor to include the Free State, Mpumalanga and Gauteng.

# 5.2 Long-term Sustainability / Replicability

The primary focus of this feasibility study is to ensure that the project is financially sustainable in the long-term and that members will be prepared to contribute to the Green Map and website's upkeep. It is envisaged that the project can either grow to include the entire KZN province and/or beyond (following the full length of the N3 corridor), or alternatively it could be replicated in other distinct geographic localities depending on a willing driver. An example of the latter could be the Ekangala

Grasslands Project which has similar dynamics within it, i.e. transformation of high altitude grasslands and the need for incentives and tourism spend.

# 5.3 KZN GREEN MAP BUDGET

Description	Total Amount			
Description —	Year 1	Year 2	Year 3	On-going
FIXED COSTS				
Project management and administration	R 250 000	R 267 500	R 286 225	R 306 261
Web hosting and content management	R 50 000	R 26 750	R 28 623	R 30 626
Office overheads	R 24 000	R 25 680	R 27 478	R 29 401
Travel (data collection)	R 80 000	R 92 555	R 99 034	R 105 966
Admin assistance	R 36 000	R 77 040	R 103 041	R 88 816
Sub-total	R 440 000	R 489 525	R 544 400	R 561 070
VARIABLE COSTS				
Web development & upgrades	R 50 000	R 10 700	R 11 449	R 12 250
Advertising (Print and Online)	R 30 000	R 32 100	R 34 347	R 36 751
Membership of the N3 Gateway	R 1 000	R 1 070	R 1 145	R 1 225
Attendance of consumer shows, i.e. Beeld Holiday Show and Gauteng Getaway Show	R 8 000	R 8 560	R 9 159	R 9 800
Google Adwords & Facebook Boosts	R 18 000	R 19 260	R 20 608	R 22 051
Social Media Management	R 18 000	R 18 000	R 18 000	R 18 000
Print Map	R 195 000	R 208 650	R 218 390	R 233 677
Workshops	R 20 000	R 21 400	R 22 898	R 24 501
Launch events (Green Map & Print Maps)	R 70 000	R 56 175	R 60 107	R 64 315
Contingencies	R 0	R 18 725	R 20 036	R 21 438
Sub-total	R 360 000	R 383 940	R 404 690	R 431 758
SELF-GENERATED REVENUE STRE	AMS			
Premium listings	R 60 000	R 155 000	R 282 000	R 301 740
Map advertising	R 3 333	R 2 442	R 190 000	R 203 300
Sustainability consulting services	R 0	R 10 000	R 20 000	R 21 400
CO <sub>2</sub> reductions	R 0	R 10 000	R 20 000	R 21 400
Government funding	R 36 667	R 30 000	R 20 000	R 15 000
Corporate Sponsorship	R 0	R 8 725	R 40 000	R 42 800
Sub-total	R 100 000	R 216 167	R 572 000	R 605 640
TOTAL ESTABLISHMENT AND RUNNING COSTS	R 800 000	R 873 465	R 949 090	R 992 828
ANCHOR FUNDING REQUIREMENTS	R 700 000	R 657 298	R 377 090	R 387 188
AICHOR I GIUDING REQUIREMENTS	87%	75%	40%	39%

# APPENDIX 1: SURVEY TO ESTABLISH THE LEVEL OF SUPPORT FOR THE KZN MIDLANDS GREEN MAP BY POTENTIAL BUSINESS MEMBERS

In order to foster a sustainable future in the KZN Midlands, all those who are part of the complex system that makes up our society have a role to play. By involving individuals, civil society, businesses, and all levels of government in the implementation of an envisioned 'green' KZN Midlands, and by sharing knowledge about sustainable practices, we will have before us a set of infinite possibilities that can chart the path towards a future that embraces sustainability in its broadest sense.

The Sustainability Forum was established to showcase local service providers promoting reliable sustainable products and services which provide opportunities for the KwaZulu-Natal Midlands community to be exposed to ideas of implementing lifestyle changes that could reduce their impact on the planet.

The introduction of a Green Map (<u>www.greenmap.org</u>) into the KZN Midlands would boost the objectives of the Sustainability Forum further by providing a dynamic platform for the establishment of eco-communities where events, routes, demonstrations, guest speakers, academic debates, films, local and healthy food, music and fun can be promoted.

The Sustainability Forum is undertaking a Feasibility Study, in order to find out more about the Green Map System that will enable them to draw up a business model to take to potential funding agencies. Recognising that your organisation is a potential listing on the KZN Midlands Green Map, we would appreciate you taking a few minutes to answer 8 questions which are designed to gauge the level of business support for the proposed map.

If you are not already following our Blog, please do so at <u>http://sustainabilityforum.wordpress.com/</u> and please 'Like' us on Facebook: <u>www.facebook.com/KznMidlandsSustainabilityForum</u>.

Thank you for your participation!

The key to the success of all Green Maps is that all sites can be registered on the map free of charge as long as they conform to the Map's predefined definitions (see <a href="http://www.greenmap.org/greenhouse/en/about/iconintro">http://www.greenmap.org/greenhouse/en/about/iconintro</a>).

We realise that some organisations do not want customers / tourists to visit their premises for various reasons. Remember that the purpose of a Green map is to encourage local action (global impact) - tourism is just an added bonus. So we'd still encourage you to list on the map in order that we profile as many of the local organisations as possible who are doing great work. Your exact location need not be pinpointed on the map – we could give a general point for the closest town, for instance, but in the description, say what you do and are all about, list all the stockists / or where you deliver to. In this way, if you agree of course, we could at least include a local company that's achieving!

1. Would you like to list your organisation on the KZN Midlands Green Ma
--

Yes	26	84%		
No	1	3%		
I'm not sure	4	13%		
If you answered 'no' or 'I'm not sure' to the previous question, please give reasons why				
Comment 1: Not relevant to commercial farmers.				

Answered: 31 Skipped: 5

#### 2. How do you envisage this initiative will benefit your organisation?

Increased exposure of my product / services to an informed audience.	26	84%
Increased traffic to my website	14	45%
Increased sales of my product	10	32%
Connecting with similar sustainability service providers	18	58%
Other (please specify):		

I don't really see how it would benefit my particular business. (please note I had to Comment: 1 tick one of the above in order to move to the next page, but I would rather have left them all blank)

Comment: 2 Not so much as a benefit to the Darge Conservancy, but more a show of support from the DC.

Comment: 3 Awareness.

Comment: 4 Potential critique of my products as a way of improving them.

Answered: 31 Skipped: 5

#### 3. Is your organisation or product currently listed on any eco-directories or online map?

Yes	E	õ	19%
No	25	5	81%
If 'yes' please lis	st which directories / maps and say how this has benefitted your busine	SS:	
Comment: 1	More exposure to people seeking greener pastures		
Comment: 2	Durban Green Map - no perceived benefit yet.		
Comment: 3	Eco Atlas		
Answered: 31 Skipped: 5			

The <u>Open Green Map</u> platform, which the KZN Midlands Green Map will be built on, allows anyone to add comments, ratings, images, videos and notes how each of the sites on the map has changed their lives.

#### 4. Would you commit to keeping information on your listing current?

Yes	24	77%		
No	1	3%		
Maybe	6	19%		
Anguarde 21 Skinnede F				

Answered: 31 Skipped: 5

5	comments, impacts, etc.	nınar witn by	adding
Y	/es	17	55%
Ν	No	1	3%
Ν	Лауbe	13	42%
	Answered: 31 Skipped: 5		

Would you contribute to other lictings on the Man that you are familiar with by adding -

Considering listings are free, and until such time as sponsorship is sourced, the KZN Midlands Green Map would be co-ordinated voluntarily.

6.	Would you be prepared to promote the KZN Midlands Green Map in any of the following
	ways?

Through my so	cial media and other networks.	17	68%	
Contributing articles for the Blog from time to time.		15	60%	
Suggesting site	s for possible inclusion on the KZN Midlands Green Map	15	60%	
Comment: 1	And by example.			
	Answered: 25 Skipped: 11			
7. Would you	be prepared to contribute in any of the following ways?			
Corporate advo	ertorials on the website.	5	21%	
Paying for a ph	oto listing add-on (R1,500) to the Print Map for	_	<b>.</b>	
distribution at	Information sites in the Midlands.	5	21%	
Making a dona	tion to the Sustainability Forum for the maintenance and	<i>c</i>	250/	
upkeep of the	KZN Midlands Green Map.	6	25%	
Making a donation to Open Green Map				
(http://www.g	reenmap.org/greenhouse/en/about/donate) to help build	6	25%	
its organisation	nal, technical and network-wide capacity.			
I am not in a p	osition to contribute in any way.	10	42%	
In kind contributions (please specify):				
Comment 1:	No donations at the moment.			
Comment 2:	Referring clients to services and products on the map.			
Comment 3:	This will not allow me to proceed unless I answer yes. The a	inswer is no		
Comment 4:	This would be an option in the future depending on the exp	osure for my	business	
Comment 5:	My business is a micro-business and neither it nor I am rich	enough to sp	end	
comment 5.	much money beyond that which is already committed to do	onations.		
Comment 6:	Comment 6: Subject to discussion and agreement at committee level.			
Comment 7:	When available: Working with other Env Ed resource provid	lers (e.g. Pand	lora L)	
Comment 8:	Contribution will be in execution, deeds and example.			
	Answered: 24 Skipped: 12			

# 8. In which of the following ways do you see the KZN Midlands Green Map in playing a role in helping people to make planet friendly lifestyle choices?

Awareness raising and education through exposure on the diverse sustainable, natural and social initiatives in the KZN Midlands.	24	96%
Collaborations and partnerships brought about at a global, national and local scale, sharing issues of environmental concern and success stories.		68%
Incentives being put in place to bring about the required behavioural changes.	12	48%
A vehicle through which the green economy can be promoted.		76%
Numerous related job opportunities may be created.		44%
Creating learnerships specifically for youth (18-25 year olds).		48%
Improve the economic environment for tourism spend.		60%
Maximising spend on goods and services bought within the local community.		60%
Comment 1: Education of everyone is lacking yet vital.		

Comment 2: Do not want more tourists in the area

Comment 3: Promoting eco-businesses by providing information sharing workshops (e.g. beneficiation projects using waste such as glass)

Answered: 25 Skipped: 11

#### 9. Additional comments / feedback received:

Contact	Comment	Response
Amanda Lock Esse Organic	This is a great initiative. Will be really interesting to see the outcome.	Thanks for your feedback Amanda.
Skincare		I respect Esse's stance (and had thought of
P.O.Box 426, Richmond, 3780 www.esse.co.za C: +27 (0) 83 626 8892	I have not gone through the survey though as I don't believe it is relevant to us. Although our offices are in KZN (Richmond) we don't need (or really want) anyone to know this. We are	businesses who do not want customers / tourists to visit their premises) but we're proud of the fact that a local organisation is doing so well nationally and internationally, as you say. Esse's exact
T: +27 (0) 33 212 3506 E:	running a countrywide (and now largely export) business where we only deal with distributors and stockists and not	location need not be pinpointed on the map – we could give a general Richmond / PMB central point and in the description,
amanda@esse.co.za	directly with the public. So there is no interest really for us to be visited by customers.	say what you do and are all about and list all the stockists. In this way, if you agree of course, we could at least include a local company that's achieving phenomenally
	I am certain many of our stockists (various health stores and salons) would	well!
	be interested though. Let me know if you would like me to supply you with	Let me know what you think?
	the Maritzburg and midlands stockist list?	Yes, please do send me your PMB and Midlands - Drakensberg stockist list (email addresses please)