Is there a Correct Way of Establishing Sustainability Indicators?; The Case of Sustainability Indicator Development on the Island of Guernsey

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Abstract

The popularity of sustainability indicators is almost inescapable, from the early pioneers such as the 'Sustainable Seattle' project (Atkisson, 1996) to the comprehensive European Union benchmarking launched last year (EC, 2003), it seems that consensus has been reached about the positive impacts that establishing sustainability indicators can bring.

This paper uses the case of developing sustainability indicators on the Island of Guernsey over the last three years to show that Agenda 21's call to activate grass roots action is being realised, but in ways that are neither top-down and modernist in approach, or bottom-up and post-modern as Agenda 21 advocates. Whilst best practice literature often suggests that community involvement must be engaged prior to designing sustainability indicators this paper explores the reasons why this is not always possible. Guernsey's case is used to show how it only became possible to generate interest in the indicator process once they were actually up and running. However it also shows that once interest was secured by a few relevant stakeholders it became possible to further evolve the indicators in a process that has slowly been attracting more and more of the Island's community.

Keywords – Sustainability indicators, social construction, participation, Guernsey.

Introduction

Agenda 21 links sustainability and good governance, suggesting that rather than being the exclusive domain of governments and experts, sustainable development is a process involving ordinary people in their everyday lives, establishing the need to include those people who have been traditionally disenfranchised and excluded from mainstream decision making processes (Allen et al., 2002, p. 1). Furthermore sustainability indicators are enshrined within Agenda 21 as tools to help realise this call for greater grassroots participation both physically through the actual process of developing sustainability indicators, and practically through their use to 'bridge data gaps' and 'improve the availability of information' (Agenda 21, 1992, Ch. 40.4, Information for Decision Making).

How much has the consensus reached in 1992, and reinforced by subsequent international conferences, protocols and conventions, resulted in a more socially just, environmentally sound, economically vibrant and politically accountable world? When measured in terms of tangible outcomes, the answer seems far from satisfactory, leading many to argue that the agendas for a sustainable future have failed to fully mobilise people, governments and the business community in addressing the urgent problems affecting societies today and in the future (Allen, at al., 2002, p. 2). Based upon the development of sustainability indicators in Guernsey, this paper argues that that grassroots participation is being realised and that sustainability is forging a recognisable place within many local communities, just in ways that do not follow the process orientated approaches outlined by many of today's 'best practice' guidelines.

Can We Really Measure Sustainability?

"*Despite the shortcomings in the current formulation of sustainable development, the concept retains integrity and enormous potential. It simply needs to be redefined and made more precise. First, one should avoid a dichotomous, black-and-white view of sustainability. Our purpose should be to move further towards sustainable practices in an evolutionary progression*." (Campbell, 1996, p. 262).

Sustainable development as a concept is notoriously difficult to define, Bell and Morse use the Brundtlandt Commissions definition of sustainable development, "meeting the needs of current generations without compromising the ability of future generations to meet their own needs and aspirations" (WCED, 1987), and suggest that the use of 'needs' and 'aspirations' is purely subjective, and as such open to constant reinterpretation, and even reinvention (Bell and Morse, 2003, p.1). Consequently as people and society change so sustainability changes with it, and so different people, different cultures, different classes all have different needs, tastes and desires and as such different interpretations of what sustainability entails.

Agenda 21 encapsulates sustainable development as a subjective vision and for this reason is far more of a sign-posting document than an actual blueprint for achieving sustainable development. Cornelisson argues that approaching sustainable development subjectively provides a certain logical appeal as the concept becomes circular, rather than linear, with sustainability representing the process itself, rather than the end point of the process (Cornelisson et al, 2001, cited in Bell and Morse, 2003, p.25). Subsequently then societies and/or individuals are able to act sustainably, rather than they actually become sustainable in themselves.

Traditionally indicators have been used as tools that objectively measure progress towards set goals or targets, with sustainability indicators however this approach is somewhat awkward as the goals and targets can be as subjective as they are objective. After all what is it exactly that we are trying to measure with sustainability indicators? Morel contends that there is real risk of wanting sustainable development indicators to give content to a concept that has no clearly defined content (Morel Journel, 2004, p.625). In other words the creation of a set of locally or even globally acknowledged sustainability indicators does little more than establish a dominant view of sustainability for that region. O'Riordan and Voisey further this concern, suggesting that sustainability indicator development has revealed more about the social and political ideologies that shaped them than any presumed progress towards sustainable development (O'Riordan and Viosey, 1998).

Social Construction As a Way of Understanding the Role of Sustainability Indicators.

Many authors have used social construction to argue that it is possible to adequately reflect the subjectivity of sustainable development through sustainability indicators (Morel Journel, et al., 2003; Astleithner & Hamedinger, 2003; PASTILLE, 2002a). Rather than placing emphasis upon the actual indicators themselves, social construction is used to place emphasis upon the actual process of developing the sustainability indicators. Such an approach is outlined by the PASTILLE Consortium who suggest that it is the process of developing and using sustainability indicators and the way that this process subtly changes the relationships between actors that is the important catalyst for sustainable development (PASTILLE, 2002a, p.15). The consortium concludes that the creation of successful sustainability indicators relies far more on how they are integrated into the processes of urban governance and far

less in devising, designing, and tweaking particular indicator sets (PASTILLE, 2002a, p.90).

Social construction provides a critical stance towards taken for granted knowledge (Burr, 1995, p.3). The perspective emerged within the post-modern era, and can be seen as challenging the rationality of modernism and the 'Enlightenment' project (Hayward, T, 1994, p.9). Modernism through its patriarchal roots in the enlightenment can be seen as the search for truth, to understand the true nature of reality, through the application of reason and rationality (Burr, 1995, p.12). Enlightenment allowed man to resist the mediaeval period's claim, that the church was the sole arbiter of truth in which it was not the responsibility of man to discover the truth about life or to make decisions about the nature of morality (Ibidem, p.13).

In essence then the modernist interpretation of 'knowledge' is based upon objective, scientific evidence under the notion of the right way of doing things (Burr, 1995, p.12). Social construction questions this existence of an 'objective, unbiased observation of the world' (Burr, 1995, p.3) and enforces the importance of historical and cultural contexts in constructing knowledge. No single point of view is more valid than another, because all points of view are embedded in a social context that gives them meaning. 'Such a view does not obliterate empirical science; it simply removes its privilege of claiming truth beyond community', (Gergan, 1997, p. 724).

Social construction can then be used to move sociological research into a broader analytical understanding of, in this case, sustainable development and the use of sustainability indicators. While social construction itself is based upon a 'relativist' perspective, it is possible to see two very different outlooks from which the use of sustainability indicators is concerned. Extreme relativism, or 'dark construction', seems inextricably linked to lead to the claim that nothing exists except as it exists in discourse, i.e. the only reality that things have is the reality they are given in the symbolic realm of language. In relation to this paper, this offers a confusing idiom, for it seems imperative that our collective actions are seen as real or else we are confronted with the conjecture of needing a separate set of indicators for each and every individual. As Hannigan points out the object of using social construction is not to discredit but rather to understand how in this case indicators are 'created, legitimated and contested' (Hannigan, 1995, p.5).

By using social construction many authors have built upon the function of sustainability indicators devising a number of different roles carried out by them (Bennett, 2003; PASTILLE Consortium, 2002a, p. 69). These roles create a vision of purpose for sustainability indicators far beyond the traditional view of objective measurement. Joan Bennett (2003) for example in a paper prepared for a meeting of the English Regions Network sets out four closely intertwined roles; 1) Monitoring; 2) Evaluating and informing policy; 3) Raising awareness of the community; 4) Raising awareness of decision makers. Bennett suggests that the roles are often intertwined in that monitoring can often inform policy, raising awareness of the public may influence progress towards sustainability, and raising the awareness of decision-makers may in event help to inform policy (Bennett, 2003). The value then of distinguishing between the roles is that it helps provide a clearer appreciation of how sustainability indicators are constructed and how they contribute to processes of sustainable development.

Social Construction and the importance of Community Participation when Establishing Sustainability Indicators?

The debate surrounding social construction and the post-modern versus the modernist appreciation of knowledge is something that can be seen underlying much of current development thinking. Accepting that sustainable development is subjective has lead to public participation becoming a central component to almost all development planning work, with participation presently guiding a majority of research priorities and forming the basis of a huge amount of literature (Bell & Morse, 2003, p.28; citing Chambers et al, 1989; Chambers, 1991 and 1997; Scoones and Thompson, 1994). Bell and Morse argue that the explicit inclusion of those who have a stake in the project scenario is now a development-project planning orthodoxy. Suggesting that participation has become something of a holy grail in the development literature and is often portrayed as the solution to all ills (Bell and Morse, 2002, p.110). This aside it has become widely recognised and quite rightly so, that people have different needs and aspirations, and unless these are planned for from the start the project will be difficult if not impossible to maintain.

The Bellagio principles reaffirm the importance of broad participation in the creation of sustainability indicator sets. The principles developed by an international group of practitioners are designed to serve as guidelines for establishing sustainability indicators including the choice and design of indicators, their interpretation and their communication. The principles were and still are intended for use in starting and improving the use of sustainability indicators by community groups, non-government organisations, corporations, national governments, and international institutions (Hodge and Hardi, 1997). The principles are based upon ten broadly based instructions, the eighth of which is 'Broad Participation', which suggests that before sustainability indicators are established the lead agency should:

- Obtain broad representation of key grass-roots, professional, technical and social groups, including youth, women, and indigenous people – to ensure recognition of diverse and changing values. (Hodge and Hardi, 1997, p. 117)

Consequently this process of engaging relevant stakeholders from civil society, business and government in the development of sustainability indicators has led to a wealth of best practice examples. A recurring factor in almost all of these is the step-by-step procedure upon which they are based, where indicators are selected only once the relevant stakeholders have been engaged. One such example is the 'Sustainable Seattle' project, which over the last ten years has been promoted as a hallmark citizen led initiative (Atkisson, 1996). Sustainable Seattle created an all-volunteer 'Task Team' of diverse professionals who designed a system of sustainability indicators based upon civic perceptions of sustainability. A more recent example is provided by Bell and Morse who facilitated the development of sustainability indicators on the island of Malta, providing the example of a tool they call 'systemic sustainability analysis' which they used to engage Maltese citizens with in the creation of the Mediterranean Blue Plan (Bell and Morse, 2002).

The Reality of Participation In Developing Sustainability Indicators

Whilst acknowledging the importance of engagement within the development of sustainability indicators, many authors and practitioners have begun questioning the extent to which meaningful participation can be realised. Time constraints, financial constraints and the ability to generate public interest in the process are often cited as reasons affecting public participation. Jeb Brugman openly criticised projects such as

‘Sustainable Seattle’, suggesting that they chose simplicity and participation over complexity and depth of understanding. Brugman argued that in the case of Seattle’s indicators they highlighted key local values and amenities rather than tracking the complex course of the city into the future (Brugman, 1997, p. 398).

Fraser et al., distinguish between top-down and bottom-up methods of developing sustainability indicators, suggesting that the modernist approach which they argue is manifest within government departments around the world is based within a culture of top-down decision making led by so called ‘trained experts’. This top-down approach is blamed for misdirecting resources, and alienating local communities through a lack of sensitivity to local issues (Wynne, 1992, cited in Fraser et al., 2004). On the other side the post-modern or bottom-up school approaches planning via participatory methods to policy development, designed to enable local people with the chance to guide the decisions that affect their everyday lives. Realistically there seems a need for a middle ground, where the practical ‘top-down’ support of the ‘expert’ led approach is complemented by the post modern vision of bottom-up community engagement.

The following case study is based upon the experience of establishing sustainability indicators in Guernsey over the last three years. The case looks at the role of sustainability indicators and the practicalities involved in meaningfully engaging with local communities. Whilst best practice suggests that stakeholders are engaged prior to indicator development Guernsey’s case is used to show that this is not always possible. However through forging ahead with indicator development in a traditionally top-down method Guernsey was able to start a ball rolling that has incrementally attracted the interest of key local stakeholders. This interest has subsequently allowed the indicators to evolve into an accurate and detailed assessment of the Island’s sustainability, reflecting an ever widening degree of stakeholder engagement.

Case Study:
Establishing Sustainability Indicators on the Island of Guernsey

The Requirements and benefits of Sustainability Indicators for Guernsey

The Island of Guernsey is a British Crown Dependency, located 30 miles north west of France in the Bay of St. Malo. It has a land surface area of 63km_ and a population of approximately 60,000. In the last fifty years, Guernsey has undergone a series of socio-economic transitions beginning after the Second World War when its traditional fishing industry began declining and the Island established a successful horticulture and floriculture industry. These industries lost their competitive advantage after the UK joined the European Union in 1972 when cheap imports from countries such as the Netherlands first entered the UK market on a large scale. More recently, Guernsey has emerged as an international finance centre and in a matter of years, its financial services have superseded traditional industries with off-shore insurance and banking now accounting for 45% of the Island’s total annual income (Guernsey Facts and Figures, 2004).

In 2001 the Island’s Government (The States of Guernsey) decided to establish a variety of sustainability indicators to track quality of life, and to form part of a monitoring and evaluation cycle. This cycle uses the indicators to help guide a Policy and Resource Plan that sets out the Island’s annual strategic planning policies.

Responsibility for establishing Guernsey's sustainability indicators lies with the Policy and Research Unit, part of the Policy Council, which is the head of the States government system. The Policy Council is mandated by the States to annually publish a Policy and Resource Plan along with the 'Sustainable Guernsey – Monitoring Social, Environmental and Economic Trends' report. The Sustainable Guernsey report is intrinsically linked with the Policy and Resource Plan, with cross-referencing between sections and emphasis placed upon linking the two documents. The primary objectives outlined in the Policy and Resource Plan are as follows:

- Define a set of common strategic objectives for the States of Guernsey.
- Define a set of common corporate policies for the achievement of those objectives.
- Facilitate the most appropriate allocation and management of the resources available to implement those policies.

Over the last two years the Policy and Resource Plan has outlined a series of broad themes, which have complemented a more recent change in the structure of the Island's government. This change has seen the formation of a more streamlined system of government. Ten new departments have replaced 45 autonomous States Committees, with each department being represented in the Policy Council by its own Minister. The Policy Council itself is chaired by the Chief Minister. The key themes reflected by the Policy and Resource Plan highlight both to the States departments and to the wider public the strategic context for decision making, promoting the creation of a corporate framework. The intention of linking together the 'Sustainable Guernsey' report and the 'Policy and Resource Plan' is that policy outcomes can then be directly monitored.

The Importance of Establishing Community Ownership of Sustainability Indicators

Developing the sustainability indicators began in 2002 when representatives of the States of Guernsey spent a year engaged in public and private consultation both on and off the Island to establish Headline indicators that would reflect quality of life across social, economic and environmental dimensions. The process of engaging public participation was based on Agenda 21's call for widely based consultations with community stakeholders. However public interest and commitment to the sustainability indicators proved difficult to maintain, reflecting a traditional scepticism of many small island communities to policy based issues that are seen to originate from outside their own locality (McAlpine & Birnie, 2003). The reluctance of the local community and business to fully engage in the development of the sustainability indicators meant that most of the initial work was driven by the States of Guernsey's Policy and Research Unit, which eventually managed to reduce the 112 proposed headline indicators down to 17 which were themselves broken into a total of 51 sub-categories or "strategic indicators". Data was then collected for these strategic indicators, and reported in the annual publication titled 'Sustainable Guernsey'.

As a term of reference sustainable development carried very little resonance with the Island's community, and so raising community awareness to sustainability was from an early stage seen as a method of building commitment and securing involvement to the sustainability indicators. Whilst Guernsey has never had an LA21 group, it had traditionally supported a strong network of community-based organisations. However, these groups had never been involved with sustainable development as a working concept. Using the indicators as a framework, community support was at first

harnessed via areas (or indicators) of relevance to particular individuals, groups and organisations on the Island.

An active dissemination process was developed, based upon the premise that to engage and encourage participation the community, Island business' and government must be informed. This dissemination included mailing out hard copies of the Sustainable Guernsey report, creating a separate Facts and Figures booklet to accompany the report, and making both available on the internet. Both the local press and television were also used to promote the report.

The Development, Rationale and Evolution of Guernsey's Headline and Strategic Indicators

'Sustainable Guernsey', established a two-tier system of indicators using headline indicators to provide a strategic vision to the monitoring process outlining key sustainability themes, with strategic indicators used to conduct the actual quantifiable monitoring. Given the top-down way that the initial headline indicators were chosen, the Policy and Research Unit decided not to set the strategic indicators '*in stone'*, but rather to allow degrees of modification as feed back was provided by Island politicians, policy users and relevant stakeholders ensuring that they adequately met the needs of these groups and realistically reflected the Islands sustainability concerns. For example, over the past year, the strategic indicator "changes in percentage of charitable donations," which was initially part of the headline indicator "Social Participation," has been dropped. In its place, the numbers of people voting in local elections and the percentage of residents who are involved in local voluntary groups have been chosen as strategic indicators that better capture social participation. In allowing this flexibility, the Policy and Research Unit hopes that the monitoring process will gain acceptance amongst a widening variety of stakeholders, translating into growing public support for the process. Ultimately it is hoped that the indicators will become platforms through which interested stakeholders will be able to contest data and contribute to on-going refinements of the policy planning process (Bell and Morse, 1999; PASTILLE Consortium, 2002a; McAlpine & Birnie, 2003).

Although this process is still unfolding, preliminary evidence suggests this approach is working and that a wider group of stakeholders is now more engaged than at the beginning of the process. For example, in 2002, the Policy and Research Unit was only able to collect 34 (66%) out of the total 51 proposed strategic indicators due to a lack of available data. In 2003, they established 47 (86%) of the proposed indicators thanks to extra data provided by a wider group of stakeholders who had become engaged over the previous year. By 2004 the third 'Sustainable Guernsey' report introduced 4 new strategic indicators and contained data supporting all of the 55 indicators, in other words 100% of the data required to monitor the Islands sustainability had been actively collected.

(See TABLE 1)

The evolution of the 'land use' indicator (HI 15 in table 1) illustrates this incremental data collection process. Initially, the 'land use' indicator was broken into two separate 'strategic indicators'. The first was 'building on previously developed land', it was anticipated that this strategic indicator would measure the percentage of building completions on previously developed sites. However, data to accurately measure this was not available, and so wider consultation led to 'Digimap Ltd', a GIS based mapping company on the Island who were able to annually measure the land area used by the built environment using digitalised photograhs. The second strategic

'land use' indicator was 'land used for public amenity'. This strategic indicator was designed to measure the amount of land devoted to parks, recreation and other sorts of public amenity uses. This indicator has remained true to its original concept, but has been augmented by a number of key groups who through the provision of extra data dramatically increased its value to the monitoring process. These new data providers included groups such as; La Société Guernesiaise (a non governmental natural history and conservation society), Guernsey National Trust, Guernsey Water Board and the Vale Commons Parish Council. Finally, over the past two years, a new strategic indicator has been added to the 'land use' indicator that is designed to measure the quality of the land on the Island. This strategic indicator maps nitrate quantities using stream catchment data provided by the Guernsey Water Board.

Establishing Links Between Sustainability Indicators and Policy-Making.

In the three years since Guernsey has begun establishing its indicator based monitoring system, it has fast become a mainstream process. However, developing the role of Guernsey's sustainability indicators so that they meaningfully evaluate and inform policy is proving a very real challenge. The potential for the role is promising, as support within the Island's civil service and amongst its politicians is gathering strong momentum. However links between the 'Sustainable Guernsey' report and the Island's 'Policy and Resource Plan' which are outlined within the two reports, remain primarily signposts from one document to another. The difficulty lies in finding ways to actively engage policy formation around the sustainability indicators. Such a challenge requires meaningful links to be forged between the 'Sustainable Guernsey' report and the Island's 'Policy and Resource Plan' that do not instigate a reactionary policy making process, but help nurture a corporate 'sustainability' framework, that encourages feed-back both from the 'bottom-up' and the 'top-down'.

The formation of a corporate framework based upon Guernsey's sustainability indicators is seen as being one way in which the links to evaluating and informing policy could be nurtured. The States of Guernsey has actively promoted corporate working over the last ten years, seeking ways to improve inter-government communication and reduce the 'silo' effect that reduces the ability of government departments to deliver to the community. The potential that sustainability indicators have in creating corporate frameworks is being acknowledged as a strategic way of evaluating and informing policy. Whilst not replacing the need to actively link the sustainability indicators themselves to the policy making process, it is a strength that can be used to help develop the role of evaluating and informing policy.

Key Challenges for the Future

Over the next few years, the intention is to build a corporate monitoring system embedded within the principles of sustainability. An important component of this system will be ensuring consistency and comparability over time, which means time series data is properly maintained and made accessible. Since the Policy and Research Unit is responsible for a small proportion of the information then those committees, departments and organisations, which collect and store data are the 'gatekeepers'. A break in time series will distort any trends particularly over a prolonged period. A shift towards a centralised, corporate information framework comprising data management guidelines is planned to strengthen the data collection process.

The Policy and Research Unit has sought to connect the indicators to core policy objectives, to create a strategic monitoring capacity. This has proved difficult and is

still being fully embedded into the policy development process, which has required a considerable amount of dialogue with the various committees involved. Where possible overarching policy objectives are presented in the 'Sustainable Guernsey' monitoring report. Although as yet they have not all directly been linked to the Policy & Resources Plan or the Strategic & Corporate Plan. For example the link between the Economic Performance indicators and any economic strategy/ policy needs to be developed further. More work is needed to improve this aspect of the monitoring process.

There is a continued need to raise awareness and enhance communications about sustainability both in terms of strategy and at an operational level. Establishing the monitoring system has gone a long way in achieving this. However the ability to convey succinctly a new way of thinking will take time. The sustainability indicators are themselves still developing, the important thing is to continue their development in a way that will continue to attract, secure and utilise the growing community interest. Encouraging media awareness, active dissemination within the community and working with schools and colleges on the Island to introduce sustainability into the curriculum are all a part of this process.

Conclusion

Conceptually sustainability indicators have become widely regarded as important components of any broad based sustainability strategy. Their very nature lends them to stakeholder engagement, as each single indicator requires specialist knowledge, be it social, cultural, environmental or economic. However, if they are to be made relevant that specialist knowledge needs to be tailored according to local characteristics and using local knowledge. The subjectivity of sustainable development underlines this need to engage and involve as many stakeholders as possible, the more views captured within a vision of sustainability the more accurate that vision becomes. Whilst theoretically this concept is relatively straight forward in practice it is very difficult to reconcile.

If local authorities are to adhere to the recommendations of accepted best practice, they are told to select sustainability indicators through the active 'bottom-up' engagement of local stakeholders. This procedural approach is part of a more contentious joust between modernism and post-modernism planning paradigms. Top-down forms of decision-making are accused of mis-directing policy, alienating local communities and exacerbating local problems through 'external' experts not being sensitive to local issues. This however takes a rather perfect world vision of local communities, where all stakeholders are ready and willing to contribute to the development of sustainability indicators. In Guernsey this was not the case, in fact in Guernsey the process needed to be reversed. Interest in the Island's development of sustainability indicators could not be secured from its local community until the indicators were actually up and running.

Guernsey's experience outlines how the overall process of developing sustainability indicators was envisaged to involve local community members, in an open and transparent process designed to monitor and help steer the Island's policy planning process. However, the initial lack of enthusiasm frustrated this process and the States of Guernsey decided to move ahead by tasking experts, including members of its own civil service, to generate the preliminary indicators. From its iteration, this list of indicators has been allowed to evolve incrementally, in the hope of generating community interest in the process, slowly involving an increasing number of

stakeholders. In this way, although the process was instigated in a top-down fashion, developing and collecting these indicators has created platforms through which a widening range of people are able to express their concerns. This continuous redevelopment of the sustainability indicators ensures that they remain relevant to the dynamic needs of a diverse range of stakeholders, helping to realise Local Agenda 21's call for greater grassroots participation whilst 'bridging data gaps' and 'improving the availability of information' (Agenda 21, 1992, Ch. 40.4, Information for Decision Making).

Guernsey's experience highlights the need to bring together experts and community members in order to develop indicators that measure progress towards sustainability. The process of engaging people to select key indicators provides a valuable opportunity for community empowerment and education. It is not necessary that this process be initiated from the bottom-up, but it is important that local stakeholder input be allowed to drive the process. In Guernsey's case, the process was instigated in a top-down fashion, but indicator development has proceeded in a bottom-up fashion. This has created provided forums through which a wide range of people can express their concerns to the planning process.

5100 words

Table 1: Indicators chosen by States of Guernsey to monitor the Island's sustainable development.

Headline Indicators	Strategic Indicators							
	SI 1	SI 2	SI 3	SI 4	SI 5	No. of SIs with data gaps		
						2002	2003	2004
H1 Population	Population trends	Immigration & emigration				**0**	**0**	**0**
H2 Health	Life expectancy	Cost of health care	Death rate by cause	Self Perceived Health status & well-being		**0**	**0**	**0**
H3 Education	Education literacy & innumeracy	Education of young people	School leavers with no qualifications	Post-16 participation rates	Adult education (19yrs+)	**1**	**0**	**0**
H4 Social Participation	No. of people voting in local elections	Community involvement in voluntary groups				**2**	**0**	**0**
H5 Housing	Quality of housing	Use of previously developed land	Subsidised housing	Affordability of housing		**1**	**1**	**0**
H6 Crime	Recorded crime levels	Public fear of crime				**0**	**0**	**0**
H7 Economic Performance	National income	Island Inflation	Economic activity	Average earnings		**1**	**0**	**0**
H8 Energy Consumption	Amount of energy consumed	Per capita electricity consumption	Energy from renewable sources			**2**	**2**	**0**
H9 International Transport	Air transport	Sea transport				**0**	**0**	**0**
H10 Workforce Development	Workforce skills	Organisation commitment				**1**	**0**	**0**
H11 Biodiversity	Natural habitats and key species	Island garden birds				**2**	**2**	**0**
H12 Air Quality	Emissions of Greenhouse gases	Sea level rise	General air quality and roadside air quality	Noise pollution		**2**	**2**	**0**
H13 Water Quality	Water pollution incidents	Raw water storage analysis	Water treatment works compliance	Service Reservoir Water Quality	Bathing Water Quality	**0**	**0**	**0**
H14 Water Resources	Raw water storage	Properties connected to the Island's water supply	Potable water supplied	Annual water consumption	Water distribution losses	**3**	**0**	**0**
H15 Land Use	Land use using GIS mapping techniques	Land used for public amenity	Land quality using nitrate mapping of the Island			**2**	**1**	**0**
H16 Household & Commercial Waste	Household waste	Commercial waste	Materials recycled			**0**	**0**	**0**

H17 Local Transport	Traffic volumes	Access to public transport	Mode of travel			**0**	**0**	**0**

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