STATES OF GUERNSEY

STATES STRATEGIC PLAN

ENVIRONMENTAL POLICY PLAN

Table of Contents

Executive Summary

This is the States of Guernsey Environmental Plan. (Hereafter reference to 'the/this Plan' indicates this Environmental Plan). The Plan is one of three high level strategic documents that support the States Strategic Plan (SSP). This Plan was prepared with a view to setting the direction for environmental policy and actions over a 20 to 25 year time frame. The purpose of the plan is to provide the direction and framework under which an environment that is sustainable, biologically diverse and protective of Guernsey's traditional culture and values can be delivered. The Plan also provides a structure for supporting and embracing the wise use of the resources around us. This Plan sits alongside the Social and Economic Plans. Effective delivery of the Environmental Plan will ensure that Guernsey's environment thrives whilst supporting and contributing to the islands social and economic health.

It is envisaged that this Plan will not require substantial redrafting or reconsideration in the near to mid-term. The delivery of the objectives and commitments set out in this Plan will be achieved through Action Plans. Those Action Plans will be far more detailed in their focus and will include delivery time periods and lead Departments. The Action Plans, as opposed to the Environmental Plan, will be updated and developed on a regular basis.

This Plan is formed of 11 Chapters and supported by 2 appendices, including the First Action Plan. Appendix 1 lists the **outcomes** to be achieved by the Plan whilst Appendix 2 sets out - as an example - typical actions that could be incorporated in the first and subsequent Action Plans. The manner in which these Action Plans will be developed is covered in Chapter 11.

Chapter 1 establishes the background and broad intentions of the Plan, and the context within which it operates.

Chapter 2 addresses the challenges and opportunities that have been identified as being of special relevance during the life of the Plan. Short-termism is not considered to be an option for environmental planning. The environmental processes and the eco systems which make up our environment - and on which we all rely - generally operate and respond over long-term time frames. An environmental plan must therefore embrace longer term planning.

Chapter 3 sets out the States of Guernsey's vision for the environment in 2030.

Chapter 4 outlines how government will go about delivering the commitments and priorities set out in the plan in order to achieve the policy direction, practical changes and Action Plans, and thus deliver the vision.

Chapters 5 to 9 are topic specific chapters focusing on the key environmental themes that are to be addressed by this Plan. They are:

- Climate Change
- Resource and Energy Use
- Biodiversity, Countryside, Marine and Coastal Protection

- Our Built Environment
- Environmental Hazards

These chapters set out the themes behind the opportunities and challenges faced in the respective areas, the outcomes to be delivered and the indicators that will be used to measure the progress of the Plan. How the outcomes will be addressed is also covered in broad terms at the higher strategic policy level. (The supporting Action Plan which is appended to the Plan tiers the policy and outcomes down to specific actions which are amended and developed on a regular basis and produced as updated Action Plans.)

Chapter 10 briefly explains the relationship between the objectives of this Environmental Plan and the population strategy.

Chapter 11 establishes how the plan will be taken forward with time scales showing how the first Action Plan will be developed. It also provides an overview on the resource issues. Again as the plan is drafted at the higher “strategic guiding” level, the details of the resource issues are set out in the Action Plans. Thus, the Plan articulates at the higher level the resource implications in relation to the island resource strategies for population, land use and energy; whilst the Action Plans address the financial resource requirements of the specific actions within a realistic time frame.

Chapter 1 – Guernsey's Environmental Plan

The purpose of this plan is to provide the direction and framework under which an environment for Guernsey which is sustainable, biologically diverse and protective of Guernsey's traditional culture and values can be delivered and which supports and embraces the wise use of the resources around us.

1.1 Guernsey's environment

Whilst we may all, from time to time, take our environment for granted, few, if any of us, fail to appreciate the importance of it. Now, more than ever before, we have a shared understanding of the stresses and strains our environment faces. We understand that we are part of our environment and that the actions we take may well come back to haunt not only us but all the other animal and plant species that we share the planet with. We have come to realise that we must look at the global issues whilst acting at the local level. However, we also appreciate that our planet and our environment must evolve. It cannot be preserved in aspic. This Plan for Guernsey's environment naturally highlights and prioritises issues that are common to developed and developing nations alike. It seeks to address global issues through applying local initiatives and solutions whilst at the same time enabling the people of Guernsey to enjoy the **wise and sustainable use** of their environment.

The Guernsey environment is unique and is central to every aspect of life. Our coastal zone, boasting one of the largest tidal ranges in the world, has a range of sea life to be envied and protected whilst the tides and bathymetry[1] offer the opportunity to harness clean, renewable energy. That same tidal zone along with the coastal fringe, rugged cliffs and natural flora and fauna provide Guernsey with a characteristic landscape worthy of international recognition. It also presents an opportunity and risk in terms of land reclamation and development and is the island's first defence against the encroachment of the sea.

Guernsey's countryside with its narrow lanes, earth banks, douits, vernacular architecture and small hedgerow bordered fields (supported by the dairy farming of a prized breed) presents a mosaic of land parcels where individual species and small constrained habitats are key to the island's biodiversity.

The economy and the environment are closely linked. A healthy clean welcoming environment plays a vital role in attracting and retaining individuals and companies into Guernsey. Ensuring a sustainable environment does not necessitate a freeze on economic growth. An educated and flexible workforce with a high level skills base can deliver a growing, competitive, vibrant and diverse economy whilst still meeting environmental objectives. It is likely that such an economy will be supported by cutting edge technology and systems delivering high added value and minimised demands on the environmental resources. However, not everyone will want to work in these technology- and finance-centred industries. Therefore, there is scope to use our agricultural and horticultural facilities to improve our self-reliance, providing low food mileage products.

[1] The nature of the ocean floor, specifically its depth.

Our environment also has obvious links with - and very real impacts on - our health and social wellbeing. Ground-level ozone is widely recognised as a secondary pollutant arising from vehicle emissions, and high levels have serious impacts on our respiratory health creating particular concerns for Asthmatics. Whilst on the other hand, a clean healthy atmosphere experienced in attractive outdoor places improves our sense of wellbeing and provides opportunities for social networking and health promotion through recreational activities.

The built environment, if planned to include open shared places that are safe to walk through and attractive to visit, contributes to the island's attractiveness as a place to live and do business. The links, therefore, between the Environmental, Economic and Social policies are clear. The environment is not something to be protected at the cost of those other policies but rather the three policy areas will be delivered in unity and mutual recognition. The Plan is therefore part of government strategy for delivering economic, health and social wellbeing.

1.2 Challenges and opportunities

Living as a part of our environment requires us to manage the pressures that result from our activities, and those that nature imposes on us. Many activities are important in their own right and it must be recognised that accommodating these interactions presents pressures on the environment. These activities include:

- Provision of housing
- Transport both within and out of the island
- Enabling industry and commerce to thrive
- Provision of health facilities
- Agriculture, Horticulture and Fisheries
- Technological advancement and telecommunications
- Energy use

These activities introduce challenges and pressures which can be grouped under some key headings. The challenges that will be met by this plan, which will be covered in greater detail in Chapter 2, are:

- Energy demand and reducing the island's carbon footprint
- Population growth and constraints
- Solid waste management
- Land use competition
- Maintaining sustainable practices
- Liquid waste management
- Climate change impacts in particular coastal defence
- Biodiversity and in particular threats to the nature of the island's countryside including the coastal and marine environments

The policies, measures and outcomes that this plan seeks to deliver in order to meet these challenges are set out in Chapters 5 to 10.

It is important to recognise that these challenges do not stand in isolation. Economic and social policies need to demonstrate how they contribute to a sustainable environment whilst environmental policies must support sustainable economic growth and social wellbeing. Often the choices will not be easy and options will overlap or present conflict. Even within the environmental agenda such conflict exists. Low energy light bulbs present a more hazardous waste than their energy wasteful counter parts. Inefficient microgeneration systems may use more resources to build and install than they will ever pay back in energy saved. Such conflicts must be managed. We will seek to be decisive and transparent in our decisions and actions. We will strive for balance, always driven by the principles of sustainability.

Chapter 2 – The Challenges We Will Address up to 2030

The monitoring carried out and the trends presented in the Sustainable Guernsey Report demonstrate that whilst some of our environmental indicators are improving, the majority are at best stable, with many showing a worsening trend.

Some of these trends are influenced by external global factors, whilst others reflect local practices and behaviour. States Members through workshops and subsequent discussion have identified eight key challenges that Guernsey faces during the life of this plan. These challenges are identified in the light of a recent history of growth and development encompassing increased consumption of resources and the resultant additional pollution burdens on the planet.

Guernsey cannot be immune from these global impacts, but neither can we be certain as to the extent of the impacts or when those impacts are likely to pose the greatest burden. This Plan takes as a guiding principle the policy of prudent planning. Whilst taking a precautionary approach, the policies and actions will also seek to be proportionate, seeking to strike a wise balance between **potential** risk and benefits.

2.1 Energy demand and reducing the island's carbon footprint

Natural fossil fuel reserves are by their very nature a limited resource. Establishing when they may no longer be readily available (and the resultant issues surrounding energy security) is not a prerequisite of setting a responsible and relevant environmental policy. It is sufficient to recognise that the **wise use** approach requires that a scarce non recurring resource is not wasted. Such an approach demands that energy efficiency is key to the Plan along with substitution policies (moving away from fossil fuel to other fuel sources).

The Peak Oil Debate and energy security is driving the world's major governments to look at alternative energy sources and to drive technological development. Nuclear, hydro- and macro-scale wind farms are well developed. Solar and ground source are proven energy sources at the smaller scale but are not generally economically viable for Guernsey at present. Tidal and currents present the greatest area of development for macro power generation although jet stream wind and macro solar amongst others are also being examined. Guernsey's geography and bathymetry lends itself to the exploitation of tidal energy as a clean renewable and secure energy resource.

Burning fossil fuel releases pollutants ranging from particulates, to compounds containing sulphur and trace metals, through to the greenhouse gases that contribute to global warming. Once again, the **wise use** approach demands that clean energy options and substitution policies feature in the Plan. However, lead in times for ocean current generated energy and the practicalities of moving historic infrastructure provision away from fossil fuels act as barriers to a rapid and wholesale switch to clean energy. Similarly, air and sea transport are amongst the largest users of fossil fuels and present some of the greatest difficulties in delivering increased fuel efficiency through utilising clean fuels. Addressing Guernsey's

reliance on the motor car also presents challenges and opportunities in respect of managing energy demand and addressing the island's carbon footprint.

The climate change impacts that result from the global use of fossil fuel are widely debated as being the greatest threat facing the world. Catastrophic events that have been postulated include: (i) population movement on a massive scale driven by land loss to sea, inland flooding, drought, disease vector spread and crop failure; (ii) large scale starvation resulting from crop failure, loss of land, contaminated water supplies and increased poverty; and (iii) loss of biodiversity involving the extinction of thousands of species resulting from a breakdown in food chains and eco systems as the result of temperature shifts disrupting breeding patterns.

The confidence levels at which such catastrophic events are postulated are low. Much will depend on how governments react over the next decade or two, and even more so on how natural feedback "control" mechanisms within the environment respond to the changes. At the local level apparent changes in weather events, breeding patterns, and onset of spring - for example – are already being noted and monitored.

Guernsey is presented not only with real challenges but real opportunities through taking practical and responsible steps to manage its energy consumption and reduce its carbon footprint, and hence its contribution to global pollution.

2.2 Population growth and constraints

It is clear that delivering an effective population strategy presents major challenges to Guernsey. This is due to factors such as: a constrained land mass, competing demands for enhanced infrastructure and development; policies that seek to support economic growth; the need to address the demographic issues of an aging population; the desire to diversify our workforce; and calls to increase local production of low value goods in order to reduce food miles.

Guernsey's population density is two and a half times higher than England, and the trend over the last 35 years in the island has been one of population growth. Conversely, over the life of this plan, population projection scenarios predict a fall in population unless migration is at or above +100.

Over the life of this plan migration to and from Guernsey is likely to be driven both by internal and external policies. Controlling the impacts of the latter may well present the greater challenge.

2.3 Solid waste management

Historically Guernsey has exploited the "resource" of redundant quarries as a means of providing landfill facilities for solid waste. However, such use has not been managed in accordance with the **wise use** principle and that largely remains the case to date. An empty quarry, or the prospect of a future empty quarry, has been seen as an opportunity to defer the introduction of alternative waste infrastructure rather than as a resource to be protected. Just like fossil fuel, an empty quarry is a limited non renewable resource. As such it demands a policy of **wise use**. Regardless of the preferences for waste treatment systems, it is essential that

Guernsey, as part of a sustainable strategy, introduces waste treatment technology as soon as possible in order to protect what is left of its landfill resource.

Shipment of waste - or any fraction of waste - off island for treatment or disposal is a resource hungry activity. The land taken for waste storage prior to shipment, the amount of fuel used to transport lorries of waste around the island and subsequently the UK or Europe, and the resource use in terms of containers, pallets, wrappings, processing and handling equipment jointly constitute unsustainable practices. Guernsey, in accordance with the globally recognised principles must, as far as is reasonable, become self sufficient and sustainable in its waste management practices. This requires policies which support waste-minimisation, reuse and recycling and that provide for the safe effective and efficient treatment of residual waste, as is consistent with with best practical environmental techniques.

2.4 Land use competition

The Sustainable Guernsey Report notes that 14.7% of available land in the Island has been used for the built environment. The policies applied by Guernsey over the last few decades have successfully directed the majority of all development into the urban area, thus protecting open spaces and “green lungs” within the rural area.

However, with a drive to diversify the island’s economic sectors; a need to provide for essential infrastructure including care facilities, homes, schools, water storage, energy provision, transport and waste treatment; a requirement to accommodate technological progress demanded by world class finance facilities; and a desire to provide enhanced culture and leisure facilities for locals, tourists and business visitors, the island faces very real land use competition.

This demand for development raises questions about the rural/urban area split and the policies relating to those areas, as well as the scope to reclaim land and exploit the foreshore. This in turn raises questions about the nature of development, the cultural identity of Guernsey and the sustainability of development techniques.

Guernsey must now develop a land use strategy fit for the next 25 years which addresses these issues and challenges.

2.5 Maintaining sustainable practices

It is perhaps easier to appreciate the challenges when one considers the issue of unsustainable practices which generally can be identified as unsustainable resource use. The challenges of energy use and waste production are referred to separately. Historically, use of resources has been examined through the narrow focus of pollution impacts. An increased awareness leads us to look at the energy cycle. By considering all the steps involved in extracting the raw goods, processing them into a useable product, storing, distributing and eventually using that product, followed by safe disposal of the product at the end of its life, one can see the “life cycle impacts” and the “energy intensity” of resource use.

When any activity results in wastage or transfers energy from an available source to a lost or trapped source (for example locked away in landfill) the practice is clearly unsustainable. Many of our day to day activities constitute unsustainable practices.

Use of fossil fuels in transport, heating, power generation and as a raw component of production (especially in the plastic industry) is an example of unsustainable practices depleting a non renewable resource.

Over fishing of our oceans, nitrification of our land through the use of fertilisers, loss of habitats through land raising/reclamation projects, and over abstraction of ground water are all examples of unsustainable practices which deplete, below their natural replenishment ability, renewable resources. As well as depleting reserves such resource use generates pollution which puts additional strain on biodiversity and ecosystems.

The challenge for developed societies is to maintain the expected standards of living whilst reducing, and ultimately eliminating, unsustainable practices.

2.6 Liquid waste management

The disposal of largely untreated liquid waste into the sea is seen by many as unacceptable and avoidable environmental pollution. Certainly such practices can present environmental pollution and resultant ecological damage in contained waters such as the Mediterranean basin or inland rivers and lakes. However, evidence of large scale pollution and ecological damage is less apparent in fast moving waters with very large tidal movement.

Sewage treatment works, with respect to their construction, present their own very real environmental issues including: developing on otherwise undeveloped land; use of resources including cement and aggregate in the large scale concrete constructions; energy use in construction and treatment of the waste; potential environmental hazards and nuisances resulting from the treatment works; and dependent on the technology, ongoing replacement of filter mediums.

Making the right environmental decision requires these factors to be assessed and balanced. Notwithstanding this, Guernsey faces significant pressure from lobby groups, environmentalists, the media and others to progress sewage treatment at the earliest opportunity.

The environmental merits of sewage treatment must also be considered against the competition for finance and resources generated by other projects including other identified environmental infrastructure. Setting a strategy for liquid waste management therefore presents an environmental, political, financial and resource challenge for the island.

2.7 Climate change impacts and coastal defence

Storm severity and sea water rise are amongst the least predictable of the climate change impacts. Yet, whilst the confidence in predicting future trends in these areas is low, storm events and sea water overtopping represent the greatest physical climate change risks to Guernsey.

This uncertainty is exacerbated by the fact that constructing ever higher defences actually creates greater strength in the waves, and hence enhances their destructive and overtopping power. The alternatives - which include beach reprofiling, offshore reefs, managed retreat and localised design solutions - generally carry significant

costs, lack certainty in their effect, and have other impacts in terms of lost biodiversity, landscape, geology etc.

The cost of maintaining and improving Guernsey's coastal defences over the next 30 years has been estimated to be in the order of £15 - 20 million pounds.

2.8 Biodiversity and threats to the nature of the island's countryside

Guernsey is proud of its culture and heritage, and this is demonstrated through our desire to protect the appearance and feel of the countryside. For many years the small hedgerow and earth bank bordered fields have been managed by the dairy farmers. The resultant biodiversity, landscape and character are unique to Guernsey.

Significant areas of agricultural land have been lost to horticulture and then subsequently, with the decline of that industry, to other forms of development and use. Current policies seek to maintain and protect the best of the agricultural and horticultural land but pressure continues to convert farm land to recreational land. Farming support policies seek to ensure practices which protect and enhance the islands biodiversity. However, significant areas of former agricultural land are now under derelict glasshouses. Farms are becoming more mechanised, pressure mounts to convert redundant glass house sites to industrial use, and the dairy industry is threatened by external pressures and by the difficulty in bringing on new farmers. Labour costs and economies of scale are such that local produce struggles to compete with imported goods.

All these factors, if not realised and managed, present real risks with respect to the loss of Guernsey's farming heritage. Concomitantly, the landscape of the countryside could change to the detriment of the island's character, landscape and biodiversity.

Chapter 3 – Our Long Term Vision for Guernsey's Environment

Our natural and built environment will be recognised as:

- Unique and central to every aspect of life
- An equal partner to our economic development
- Essential to our health and social wellbeing
- A fragile resource
- Demanding of sustainable and wise use

> Consideration of our environment will be core to all policy decisions and actions. Environmental Policy will be equal, not subservient, to economic and social policy. The quality of our environment will be protected and enhanced. The Island will respond in an environmentally sustainable way to local issues and existing and emerging global challenges.

We are committed to:

- A government that leads the community by good example
- Living within our environmental means
- Ensuring environmental issues are considered in all policy decisions and that all policy decisions take due account of environmental issues
- Providing factual timely and accurate information in order to enable people to take informed decisions
- Working with partners

Our priorities are (in no particular order):

- To reduce our carbon footprint and adapt to climate change
- To protect our biodiversity and countryside
- To maintain our unique identity and heritage
- To improve the management of our solid and liquid waste
- To conserve energy use and switch to cleaner fuels
- To promote sustainable practices
- To review our land use policies
- To address the issues associated with our changing population

Chapter 4 – How We Will deliver the Environmental Plan

4.1 Leadership

We will provide leadership by setting our objectives within this plan and by our policy decisions and actions being demonstrable of working towards those objectives. As an employer we will, amongst our staff, promote education on environmental issues and require our Non-Governmental Organisations to do likewise. We will require that environmental audit and consideration are given the same prominence as financial audit and corporate governance. We will adopt green procurement policies and environmentally supportive practices and procedures.

OUTCOMES	INDICATORS
1 The States of Guernsey will provide clear leadership through education, information and action on environmental issues and challenges	Adoption and application of accredited Environmental Management Systems Action plans will be regularly reviewed and incrementally progress the objectives set out in this plan
2 The States will demonstrate delivery of its environmental priorities	Sustainable Guernsey reporting Ecological footprint

4.2 Living within our environmental means

We recognise that our society has needs that must be met. We recognise the need for economic growth and the provision of key public infrastructure. We also recognise that people have a right to better themselves and improve their standard of living and we recognise that these needs and actions will impact on the environment. Therefore, we must ensure that all such actions accord with the principles of **wise use** and sustainability.

OUTCOMES	INDICATORS
3 Guernsey's environment in 2030 will be healthier than in 2008	Ecological footprint Sustainable Guernsey Reporting

4.3 Ensuring environmental considerations are deliberated in all policy decisions

Part of the process of educating, informing and engaging is the requirement for environmental considerations to be explicit rather than implicit. This also contributes to transparency and hence healthy debate. Therefore, not only must our policy decisions take environmental considerations into account but these considerations also should be transparent and justifiable when subjected to challenge.

OUTCOMES	INDICATORS
4 Environmental considerations will be integrated into all policies, programmes and service delivery	Inclusion of environmental justification in all States Reports and Department Operational Plans
5 Reputable evidence will be available and used to inform the decisions ultimately taken	Adoption and application of accredited Environmental Management Systems

4.4 Enabling people to make informed choices

Accurate and timely information and education are key to enabling people to make informed decisions and hence contribute to achieving the outcomes set out in this Plan. Providing people with ways in which they can apply that information and knowledge to everyday activities is also key.

OUTCOMES	INDICATORS
6 Education about environmental issues and impacts will have been provided and quality information will be readily available	Island wide census/survey Other relevant surveys
7 Individuals understand and take informed decisions about the way they impact with the environment	Trends in consumer behaviour Trends in waste water and energy use Sustainable Guernsey Reporting

4.5 Working with partners

The environment is everyone's concern; it is not just a thing for "the government to put right". We recognise that many organisations have specific interests and responsibilities, and that only through clarity of roles and co-operative engagement can local and external parties jointly work to address the priorities and deliver the outcomes in this plan.

OUTCOMES	INDICATORS
8 Stakeholders' roles and responsibilities will be understood by the government and public, leading to cooperative delivery of outcomes	Trends in stakeholder engagement

4.6 Communication and progress reporting

Progress will be monitored through the indicators set out in this plan. Those indicators have not been selected solely on the basis of their ability to map progress towards outcomes but also in recognition, where possible, of their prior existence for other purposes (e.g. the Sustainable Guernsey Report). As a consequence many of the indicator trends will, in the first instance, appear in a range of other official reports. Therefore, in order to bring the indicators together into a meaningful resource against which the Plans progress can be monitored, it will be necessary for the regular revisions of the Action Plans to involve collating indicators and reporting on progress.

Chapter 5 – Climate Change

As set out in the opening chapters, climate change may present the greatest environmental challenge we face during the life of this plan. Guernsey needs to reduce its contribution to global warming by reducing the greenhouse gases released. Guernsey also needs to improve its resilience to the climate change impacts it faces by increasing adaptation capacity, especially in respect of coastal defences.

OUTCOMES	INDICATORS
9 There will be enhanced readiness to respond positively to impacts so reducing adverse effects of impacts	Adaptation strategies in place and progressed through updated action plans Performance against adaptation targets
10 The Island's contribution to green house gases will be reduced through leadership and engaging active community participation	Greenhouse gas inventory Climate change mitigation route map Ecological footprint Public awareness and engagement

Annual action plans will address the following specific contributors to achieving these outcomes:

5.1 Sustainable practices

Sustainability underpins all environmental policy. However, reducing greenhouse gas emissions runs at the very core of sustainable resource use. It requires greater energy efficiency, reduced energy wastage, a switch to cleaner fuels, a move away from unsustainable use of fossil fuels. These requirements in turn lead to consideration of self sufficiency and low fuel miles and hence land use policy. They require an examination of production and/or procurement, storage, distribution, maintenance and disposal of goods. We are committed to examining sustainable practices across all government and industry sectors, and to formulating actions to achieve gradual improvement.

5.2 Reduced carbon footprint

Sustainable practices will lead to reduced carbon footprint. The largest gains can be made in terms of environmental improvements to energy production, energy efficiency, sustainable build, and transport. The energy policy will be reviewed and developed and the work streams will be incorporated into the annual Action Plans.

5.3 Adaptability

Even with effective global mitigation policies, some climate change impacts will still be felt. Impacts that Guernsey can expect to experience include: changes in biodiversity; transformations in breeding patterns and thus impacts on the food chain, and in turn disrupted ecosystems; health impacts relating to temperature and humidity changes including vector transmission; property and infrastructure damage from increased storms and wet weather events; rising sea levels; possible transport disruption from storms and precipitation; higher energy demands to cool buildings and drinking water; and changes to our industry as a result of the above impacts.

Many of these impacts cannot be avoided but they can be managed, and so the severity of the impact contained. We will identify adaptation challenges and formulate effective adaptation strategies with specific actions and target dates across all sectors. This work will be carried out in response to developing information, data sets and predictions.

5.4 Coastal defence

Managing coastal defences in a sustainable and cost effective way whilst delivering the required resilience to climate change presents a significant cost challenge. Not only do the coastal defences hold back the sea, but they also accommodate the outlets for and so place restrictions on surface water drainage. The coastal defence report setting out the "health" of coastal defences along with options for maintenance and development will require localised studies and decisions in order to enable appropriate and timely action to be taken. These studies include flood risk assessment as a result of overtopping, but more general flood risk assessment linked to surface water drainage will be required.

In some cases the options available potentially present major impacts on biodiversity, landscape, and coastal fringe land use. We will ensure the actions taken are timely, having fully explored and discussed the options.

5.5 Manage change

As indicated above, not all impacts can be resisted. With a warming climate habitats will change and species will migrate both to and from the island. Sea levels will rise as will temperatures. Trying to withstand these transformations will be fruitless. Past solutions, customs and practices may no longer be sustainable or appropriate in the future. Accepting the change and working with it to smooth the transition, and in turn reducing the adverse impacts whilst taking advantage of the benefits, requires a managed change approach. We will monitor and identify change patterns, consult on the potential impacts and formulate policies and actions to positively respond to change.

5.6 Educate

Government cannot deliver mitigation or adaptation change alone. Indeed in many cases the private sector is far better equipped to address these issues. Government will however lead by example, and acting in an open and consistent way we will ensure that sufficient information is available to enable informed decision making.

Chapter 6 – Resource and Energy Use

Climate change is but one driver for sustainable policies on energy use. Other strong drivers are the non-renewable nature of this key resource, the peak oil debate, and the need for energy security and cost control. Similarly, energy is but one of the key resources that must be managed in a sustainable way. Water, land, stone, materials and waste are all important areas for consideration. States members have identified policies of energy conservation and a switch to renewable energy; water protection and conservation; and self sufficiency as being key areas to address. In this respect waste is considered, (it is also addressed as an environmental hazard in Chapter 9).

OUTCOMES	INDICATORS
11 The amount of waste generated is minimised.	Recycling rates Quantity of waste to landfill Quantity of waste exported Quantity of primary waste processed Number of businesses implementing waste management policies
12 Water resources are effectively managed	Drinking water quality Ground water quality Water consumption per capita Quantity of water lost by leakage Percentage of grey water recycled
13 Guernsey's use of energy will be more sustainable	Energy consumption per capita Percentage of energy coming from clean renewable sources

Annual action plans will address the following specific contributors to achieving these outcomes:

6.1 Waste

Waste is generated at every point of the production chain from extraction of raw materials through to final disposal of the consumer good at the end of its life. At each step a waste audit can prompt a re-examination of practices leading to a reduction of

that element of the waste stream. Businesses and the community will be encouraged, supported and incentivised to adopt a waste minimisation approach.

Waste that is generated will be managed in the most sustainable manner which accords with best practical environmental options.

6.2 Water

Collecting, abstracting, storing, treating and distributing water is resource and energy intensive. Consideration will be given to all stages, ensuring sustainable practices are optimised and resource use minimised. Businesses and the community will be encouraged, supported and incentivised to reduce water consumption and recycle grey water. Prevention of pollution and security of supply are key. Water quality will be monitored as well as ground water, and the water catchment area protected

6.3 Energy

Those energy work streams set out in the Energy Policy approved by the States relate to environmental considerations, as opposed to those of security of supply. These workstreams will be taken forward and developed as part of the Action Plans which support this Environmental Plan. This will include actions on energy efficiency, clean energy, renewable energy, reduced consumption and education, encouragement, support and incentives.

6.4 Self-sufficiency

Total self-sufficiency for Guernsey is not considered to be an achievable or necessarily desirable objective within the life of this Plan. Without a radical change in our use of labour and hence our approach to working and living in Guernsey, it would not be possible to produce food in quantities sufficient to meet our demands. Similarly without radical changes to our lifestyle expectations Guernsey could never be self sufficient in for example iron, steel, paper, plastics, technology, machinery, textiles or fuel.

We will, however, subscribe to a policy of reduced reliance on others and self sufficiency in specified areas. Incentives will be developed to encourage and support on island production and to protect land for agricultural and horticultural purposes. In the key area of energy, the works streams taken from the energy policy will contribute to self-sufficiency in energy production.

Chapter 7 – Biodiversity, Countryside, Marine and Coastal Protection

The natural development of our planet and the evolution of species, and hence habitats dictate that ecosystems will develop and change. Whilst some species will survive and thrive, others will be lost and replaced by genetically "fitter" additions. Man is part of these ecosystems, not ruler of them, and it should not be our function to fight the plans of "mother nature". However, man's intervention in terms of land take and especially in respect of climate change impacts has been so severe that we have a duty to correct the pace of change and to support species and habitats giving them the time needed to adapt and evolve. Global biodiversity is being lost at an alarming pace and this biodiversity loss is reflected in Guernsey. Some of our native species are suffering due to fragmentation of habitats and the loss of salt marshes, soft coastal defences, unimproved land and wetlands. In addition, several species that are threatened are visitors to our shores, taking on food and resting before continuing their annual journey.

Guernsey's natural biodiversity is perhaps more evident and prevalent in the marine environment. This is particularly so within the intertidal zone where, to date, mans intervention has been largely restricted to replacing natural coastal defences with hard boulder, and concrete defences, along with some reclamation. Conversely the countryside that Guernsey cherishes and the biodiversity it supports is, in the main, a managed countryside. It is recognised, therefore, that the policies and actions set out in this chapter are not restricted to solely protecting indigenous species. They are also intended to deliver a rich biodiversity whilst at the same time supporting the appearance, character and traditions that make up our countryside and marine heritage.

OUTCOMES	INDICATORS
15 Our biodiversity will be healthier **16** Specific species and habitats requiring targeted action will have been identified and supported **17** Our farming and countryside heritage will retain its distinctive character	Biodiversity Report to be developed to partner the Sustainable Guernsey Report Public perception survey

Annual action plans will address the following specific contributors to achieving these outcomes:

7.1 Dairy farming and agriculture

This plan seeks to protect and enhance Guernsey's countryside. This countryside results from relatively small scale, dairy and vegetable farming. Biodiversity will be supported, and the traditional appeal of the countryside conserved through active policies covering areas such as, field margins, grassland, hedge row and tree management. Creation of specific habitats to support specific threatened species can be carried out on a relatively small scale and yet deliver significant impacts on the island's biodiversity. The government of Guernsey does not employ qualified field rangers in a "hands on" land management role. We will, therefore, seek to achieve enhanced engagement with land owners and voluntary organisations to deliver targeted objectives.

7.2 Landscape character

Our landscape character is a result of our protected buildings and monuments, treasured trees, protected areas of high landscape quality, geodiversity (ranging from rocky shores, beaches and pebble banks through to hard and soft cliffs, open common, woodland and managed fields), the local vernacular and the work practices of our traditional industries. We will deliver policies and actions to support and protect this heritage.

7.3 Habitats and species

The health of habitats can be monitored by the presence of indicator species whilst the diversity of habitats can be measured by habitat surveys. Full island habitat surveys will be carried out, in conjunction with local voluntary organisations, at least every 10 years, supported by interim surveys of specified or threatened habitats. Action plans will be developed to support and enhance habitats and species, adopting an ecosystem approach.

7.4 Marine and coastal protection

The greatest threats to our seas come from overfishing, chemical pollution and damage to the intertidal zone from development such as reclamation. We will apply wise use ecosystem approaches to managing our territorial waters. In particular, Action Plans will ensure a sustainable intertidal zone rich in biodiversity.

Immediately beyond the sea defences lies an important habitat which requires salt spray and saline intrusion, nutrient poor highly drained soils and minimal footfall. This is the coastal fringe that constitutes Guernsey's "second" countryside. The coastal fringe is also an important buffer between the natural forces of the sea and the economically important hinterland. The coastal area will be managed in such a way that it presents a biologically diverse natural "park" whilst also delivering its protector function.

Chapter 8 - Our Built Environment

Our constrained land mass brings both benefits and disadvantages. Our open spaces are readily available to all. There is no justification in considering that the countryside belongs to a privileged few as no resident of Guernsey is more than a short bus or cycle ride from our open spaces. On the other hand the impacts of development also affect the whole community. Decades of ribbon development, the dilapidation left from the horticultural industry, the necessary close proximity between different land use types, the drive to expand all industry sectors and our own demands for higher quality housing, work accommodation and streetscape all place unprecedented demands on our local environment. The Guernsey Tomorrow work is aimed at establishing how the people of Guernsey want the island to look and feel over the next few decades. This work will inform the policies that will shape our built environment.

OUTCOMES	INDICATORS
18 Our built environment is of high quality, reflects our local distinctiveness and supports our communities	Community well being indicators in the Sustainable Guernsey Report
19 Our buildings embrace high environmental quality standards appropriate to the environment in which we live	House condition surveys Commercial building standards/survey. Percentage of new build meeting quality standards
20 Our heritage retains its distinctive character	Public perception surveys
21 Our unique identity will be protected and recognition given to the importance of our traditional architecture. Extreme care and sympathy will be exercised towards our culture and heritage in the application of modern architecture and developments	Public perception surveys

Annual action plans will address the following specific contributors to achieving these outcomes:

8.1 Land use competition

Land for industry - specifically small scale, low key and starter sites - has dominated recent land use debates. However, the take up of land for industry is not restricted to availability issues. The perceived market worth of land, especially where that land has a perceived greater value for housing or office development acts as a strong incentive to landowners and developers to drive development opportunities away from small scale industrial development towards more profitable ventures. Similarly

neighbours will resist industrial development in favour of perceived better neighbour activities.

The loss of storage facilities and residential accommodation to offices, and the subsequent loss of offices to disaster recovery and data centres place further stresses on a limited land stock. These issues are further complicated due to the natural resistance to optimising available space and site value by building higher (where such development is seen as undermining Guernsey's unique identity and damaging landscapes).

Similar land use competition issues will arise in relation to competing use of the sea bed and territorial waters. To date Guernsey has largely been immune from the marine spatial planning issues that have confronted areas such as the Solent. However, with the potential for major energy construction projects, deep water births, further land reclamation and the associated links to coastal defence it will be necessary to develop legislation and policies to mange land use competition in the marine environment.

These competing issues will be managed through robust planning policy statements developed in the light of hard factual data and debated/challenged by the community through planning inquiries.

8.2 The urban/rural divide

As a direct consequence of the desire to protect our countryside from further ribbon development, to avoid the loss of open spaces and to optimise the use of our existing road and utilities infrastructure, planning policies have directed development towards the urban area. This has led to the urban/rural divide which is, in some quarters, seen as a distinction which now embraces community ownership rather than simply development opportunities. The perception is that rather than the people of Guernsey owning a thriving urban area as well as having the benefit of being able to enjoy the tranquillity of the rural area, ownership is divided between "us and them". This in turn leads to calls for more development in the rural area, relaxing the pressures on the urban area.

If not carefully managed, such calls obviously have the potential, if not carefully managed, to result in lost open spaces, lost biodiversity, lost landscape character and lost heritage. Conversely, development within the urban area increases the stresses on our transport infrastructure and contributes to congestion and the associated pollution. Such development also places additional strain on the utilities infrastructure, depletes urban open spaces, and mitigates against the creation of local sustainable communities. Once again these competing issues will be managed through robust planning policy statements developed in the light of hard factual data and debated/challenged by the community through planning inquiries.

8.3 Heritage preservation

Previous sections of this plan have referred to protection of our heritage traditions. With regard to the built environment, the issue is one of ensuring appropriate protection is afforded to important buildings, structures, monuments and

archaeology. The listing of Guernsey properties has been developed piecemeal and there are currently no support packages available to ensure Guernsey's most important buildings are conserved. The provisions of the new planning law will be used to ensure a comprehensive robust listing supported by conservation areas, effective policies, strategies and incentives to ensure the appropriate conservation and protection of Guernsey's built heritage.

8.4 Architecture and design

This Plan will promote quality architectural design incorporating high environmental quality standards, taking due account of Guernsey's heritage and identity. Government will set a positive example in this area.

Chapter 9 - Environmental Hazards

Environmental hazards, for the purposes of this plan, include environmental nuisances and pollution. Generally the distinction is largely one of magnitude. Whilst Guernsey is not immune to the potential of large scale environmental hazards, including major oil and chemical spills and the risks associated with nuclear contamination, it is in the area of local environmental pollution and nuisance that effective local action can be delivered.

OUTCOMES	INDICATORS
22 A reduction in air pollution	Air quality
23 Improved ground water quality	Ground water quality
24 Solid and Liquid waste disposal will accord with environmentally acceptable methods	Licences granted under the 'Control of Pollution' legislation
25 Emergency plans will be in place to deal with major incidents	Emergency response simulations including external assessment
26 The risks associated with radon and electromagnetic radiation will be disseminated	Public knowledge/perception survey

Annual action plans will address the following specific contributors to achieving these outcomes:

9.1 Waste disposal (solid and liquid)

Whilst waste disposal can be an emotive subject, as for all environmental policy, actions taken should be the result of well reasoned evidence-based research. That research, whilst reflecting local circumstances, must take into account global issues reflecting local circumstances, acknowledging sustainability and self sufficiency concerns. The 'Best Practical Environmental Option' route which is defined in the 'Environmental Pollution (Guernsey) Law, 2004' takes, as a starting point, international 'Environmental Quality Standards' (the standard to be met in the air/water/land subject to the discharges). Those standards allow environmentally safe discharges to be set. The legislation also sets out the principle of 'Best Available Techniques' (which regulates the technology used to process the waste). These two provisions, which exist in Guernsey and European legislation, require consideration to be given to local circumstances and constraints. The premise is that one size does not fit all, but that by setting international standards and applying local constraints, the best environmental solution can be delivered. Decisions will be taken in respect of our waste disposal that do not compromise these legislative provisions,

ensuring that action is taken sooner rather than later to bring waste disposal under effective environmental controls.

9.2 Traffic pollution (ozone)

Ground level ozone is fast becoming one of the most prevalent environmental air pollutants and is linked to seasonal incidents of asthma and other respiratory attacks. Ozone is a secondary pollutant that results from the actions of sunlight on primary chemical and particle pollutants largely generated by the internal combustion engine (traffic). We will monitor ozone levels and follow research into dealing with the ozone problem. We will continue to deliver actions and incentives to reduce traffic pollution both by encouraging cleaner emissions and by supporting reduced use of motor vehicles.

9.3 Nuclear

In terms of carbon footprint, nuclear power is a clean energy. It appears at present that nuclear energy has a major role to play over the next two decades in meeting Europe's clean energy and green house gas emission commitments pending the development of alternative renewable power generators. Guernsey already sources a significant proportion of its power from nuclear sources and will continue to do so for the short to mid-term. Whilst Guernsey has no direct control over the construction and operation of European nuclear plants we will continue our radiation monitoring programmes. Guernsey will liaise closely with our French and UK counterparts to best ensure that the nuclear industry accords with required legislative and industry safety standards, and that emissions do not pose a threat to our environment.

Chapter 10 – Population

The SSP is structured around 3 strategic plans: Environment, Social, and Economic. These plans jointly set out the vision and direction for Guernsey and are then supported by a number of resource plans which set out the resources necessary to deliver that vision and direction. The resource plans will include the Strategic Land Use Plan and, importantly, the population strategy.

It is not within the remit of this Environmental Plan to seek to set the population strategy anymore than it is to set the land use strategy. Notwithstanding this, the population has been identified by government as one of the island's key challenges (as set out in Chapter 2). Therefore it is appropriate to draw together some of the population issues that must be addressed in order for this Plan to be delivered.

10.1 Climate change mitigation and energy use

Globally, both population and energy use per capita has doubled during the second half of the 20th century. Without redress this combination will continue to drive an exponential growth in fossil fuel use. For Guernsey the situation is no less real. Any reduction in energy use per capita can quickly be offset by population growth. However, many of the policies and strategies necessary to deliver this Environmental Plan necessitate either a population growth or a shift in the activities the current population engages in.

10.2 Climate change adaptation and land use

Climate change can lead to water table rise, sea ingress and large areas of flooding. Potentially this can result in the loss of available land for habitation, infrastructure and crops. This in turn leads to increased density of development. Such impacts are aggravated by unconstrained population growth.

10.3 Driving the environmental agenda

Education, leadership, innovation and engagement all require government and industry to divert resources from the standard "industry" activities of: (i) product design and development; (ii) distribution and placement; and (iii) pricing and control. As a simple example, driving the recycling agenda and promoting energy efficiency has required the States to employ dedicated resources. Business houses are similarly employing environment advisors/officers. The "environment industry" is itself growing with more resources being employed in specialist environmental technology and services areas. The environment industry does, of course, present Guernsey with an opportunity to diversify its economic base, but unless that diversification can contribute in real terms to Guernsey's economic strategy the environment industry will be seen as a drain on other industry resources leading to further demands for immigration and hence population growth.

10.4 Sustainable practices

It is necessary to draw a distinction between self-sufficiency and sustainable practices. Self-sufficiency generally takes a local perspective. It requires us to live within our own local means producing our own food and disposing of our own waste. Self sufficiency for Guernsey is not practically achievable without radical changes to our lifestyle and standards of living. Guernsey cannot produce in quantities to meet its own demands coal, iron, steel, paper, wool, fuel or food (to name but a few resources). Sustainable practices, on the other hand, require us to take informed decisions about our global activities and ensure our wise use of the world's resources. The objective is to strive to get ever closer to the equilibrium where our use of resources is matched by the natural replenishment of those resources. This can be achieved by reducing resource use per capita or by reducing the population. For Guernsey to have a vision of a sustainable community it is necessary to continually monitor and manage the relationship between the island's population and the population's use of resources. In that respect, the location of the population and the concept of small sustainable communities is relevant.

10.5 Biodiversity and countryside/coastal protection

The challenges and vision set out in this plan clearly relate to the protection of a managed countryside rather than wild/natural countryside. The environment Guernsey wishes to protect is as much about its traditions, appearance and culture as it is about natural habitats. The managed countryside Guernsey wishes to protect and retain requires an active farming community largely reliant on traditional farming practices. As such, it is necessary for the economic strategy to recognise and support the role of the dairy, agricultural and horticultural industries. This presents a continuing labour demand, and hence a legitimate population consideration.

Chapter 11 – Taking the Plan Forward

This chapter is different to all the other chapters of this plan in that it is transitory, and so time limited. The vision of this Plan is that it is high level strategic and outcome based, and therefore should remain largely unchanged over its life. Detailed actions and progress reporting are being confined to Action Plans that are renewed on a regular basis, and which incrementally build towards delivering the outcomes set out in this Plan. However, until government has formally debated the content of this plan and approved or amended the priorities, outcomes and indicators it is not possible to move forward in delivering first detailed Action Plan. This chapter therefore, briefly sets out how it is envisaged that this Environmental Plan and its associated Action Plans will be developed.

The SSP process requires that the actions approved by the States in delivering the SSP over the 4 year life of the Assembly are approved in the knowledge of the resource issues surrounding those actions. Actions, therefore, require an estimated allocation in terms of capital revenue and human resource. For the purposes of the Environmental Plan it is envisaged that the resource issues are identified and set out in an annex attached to each Action Plan. In this way the successive Action Plans which form the appendices to this Environmental Plan will contain the resource requirements relevant to that Action Plan, leaving this Plan to stand as a high level strategic document unencumbered by detail.

The Policy Council's Environmental Policy Working Group is of the view that States members should be afforded the opportunity through workshop(s) to participate in the development of successive Action Plans. This correlates with the way that all States members were afforded the opportunity to participate in setting the priorities and outcomes of this plan. Through their participation, States members who own the States Strategic Plan will be able to contribute to the priorities, level of detail and resource allocation necessary to deliver the Environmental Plan outcomes.

The Environmental Policy Working Group envisages that after the debate of this Environmental Plan and First Action Plan the working group will then engage with relevant States Departments in order to refine the actions and identify the resource requirements. The Environmental Plan (as amended and adopted by the States) together with the draft first Action Plan (including the resources annex) will form part of the subsequent SSP debates.

Thereafter, the Environmental Policy Working Group will review and monitor progress in implementing the actions. The Group will also co-ordinate the subsequent revision and development of the Action Plans through regular workshops. Each successive Action Plan, along with its associated resources annex will the form part of the SSP debates.

The Action Plans will be instrumental in achieving the outcomes, and as such the level of detail within the Action Plans will increase incrementally. It can be envisaged that in the majority of cases, the actions contained in the early Action Plans will be fairly broad in scope. Furthermore, actions contained in subsequent Action Plans will

build on the information gained from (and impacts of) the earlier actions. This also accords with the premise of the SSP, in that the SSP should set the direction and priorities without micro-managing the delivery of those priorities by the respective departments.

Appendix 1 – Summary of Outcomes

Vision

> Consideration of our environment will be core to all policy decisions and actions. Environmental Policy will be equal, not subservient, to economic and social policy. The quality of our environment will be protected and enhanced. The Island will respond in and environmentally sustainable way to local issues and existing and emerging global challenges

	OUTCOMES	INDICATORS
1	The States of Guernsey will provide clear leadership through education, information and action on environmental issues and challenges	Adoption and application of accredited Environmental Management Systems Action plans will be regularly reviewed and incrementally progress the objectives set out in this plan
2	The States will demonstrate delivery of its environmental priorities	Sustainable Guernsey Report Ecological footprint
3	Guernsey's environment in 2030 will be healthier than in 2008	Ecological footprint Sustainable Guernsey Report
4	Environmental considerations will be integrated into all policies, programmes and service delivery	Inclusion of environmental justification in all States Reports and Department Operational Plans
5	Reputable evidence will be available and used to inform the decisions ultimately taken	Adoption and application of accredited Environmental Management Systems
6	Education about environmental issues and impacts will have been provided and quality information will be readily available	Island wide census/survey Other relevant surveys

7	Individuals will understand, and take informed decisions about, the way they interact with the environment	Trends in consumer behaviour Trends in waste water and energy use Sustainable Guernsey Report
8	Stakeholders' roles and responsibilities will be understood leading to co-operative delivery of outcomes	Trends in stakeholder engagement
9	There will be enhanced readiness in the Island to respond positively to [climate change] impacts, consequently reducing adverse effects of impacts	Adaptation strategies in place and progressed through updated action plans Performance against adaptation targets
10	The Island's contribution to green house gases will be reduced through leadership and engaging active community participation	Greenhouse gas inventory Climate change mitigation route map Ecological footprint Public awareness and engagement
11	The amount of waste generated will be minimised	Recycling rates Quantity of waste to landfill Quantity of waste exported Quantity of primary waste processed Number of businesses implementing waste management policies
12	Water resources will be effectively managed	Drinking water quality Ground water quality Water consumption per capita Quantity of water lost by leakage

		Percentage of grey water recycled
13	Guernsey's use of energy will be more sustainable	Energy consumption per capita Percentage of energy coming from clean renewable sources
14	Guernsey will be more self sufficient	Self-sufficiency indicators to be developed as part of the Sustainable Guernsey Report
15	Our biodiversity will be healthier	Biodiversity report to be developed to partner the Sustainable Guernsey Report
16	Specific species and habitats requiring targeted action will have been identified and supported	Biodiversity action plans
17	Our farming and countryside heritage will have retained its distinctive character	Public perception survey
18	Our built environment will be of high quality, reflecting our local distinctiveness and supporting our communities	Community well being indicators in the Sustainable Guernsey Report
19	Our buildings will embrace high environmental quality standards	House condition surveys Commercial building standards/survey
20	Our heritage will retain its distinctive character	Percentage of new build meeting quality standards Public perception surveys
21	Our unique identity will be protected and recognition given to the importance of our traditional architecture. Extreme care and sympathy will be exercised towards our culture and heritage in the application of modern architecture and developments	Public perception surveys

22	There will be a reduction in air pollution	Air quality
23	There will be improved ground water quality	Ground water quality
24	Solid and liquid waste disposal will accord with environmentally acceptable methods	Licences granted under the Control of Pollution legislation
25	Emergency plans will be in place to deal with major incidents	Emergency response simulations including external assessment
26	The risks associated with radon and electromagnetic radiation will be disseminated	Public knowledge/perception survey

Appendix 2 – First Action Plan

Introduction

This first Action Plan sets out those work streams which have been prioritised for action during 2009 and 2010 and which, along with subsequent work streams identified in future action plans, will deliver the outcomes set out in the Environmental Plan.

The Action Plan sets out the policy objective and the outcome(s) to be achieved, as referenced within the Environmental Plan, and then sets out the specific action(s) and body accountable for delivery. The Plan also provides an indication of additional resource requirements beyond those already available to departments.

The Environmental Plan also sets out indicators against which the success of achieving outcomes will be measured. As these indicators are developed and data collated progress can be monitored. This progress will be reported in future action plans.

One of the overriding objectives of the States Strategic Plan (formerly the Government Business Plan) is to prioritise the allocation of resources. The Environmental Plan and this first Action Plan form part of the States Strategic Plan and as such also prioritise actions according to available resources. As such actions have not been identified for every outcome listed in the environmental plan. Rather, this first Action Plan concentrates, in the main, on establishing the background information, data, issues and costs to allow subsequent action plans to be developed on the basis of accurate factual data. This approach accords with outcome 5 "*Reputable evidence will be available and used to inform the decisions ultimately taken".*

ACTION AREA 1: CLIMATE CHANGE

Policy Statement

Reduce Guernsey's contribution to global warming by reducing greenhouse gas emissions; and improve the Island's resilience to the effects of climate change by increasing adaptation capacity, especially in respect of coastal defences.

Key Outcomes

10 *The Island's contribution to green house gases will be reduced through leadership and engaging active community participation*:

Action

i.) Co-ordinate the implementation and monitoring of the subordinate policies outlined in Headline Policy 1 (Reduce overall energy usage and minimise wastage) of the States' Energy Policy.

Lead: Energy Policy Group [direction already approved by the States]

Resource Requirement: £250,000 per annum as identified in the Energy Policy Summary of the States Strategic Plan.

Key Outcomes

9 *There will be enhanced readiness in the Island to respond positively to [climate change] impacts, consequently reducing adverse effects of impacts*

Action

ii) Investigate the probable effects of sea-level rises and coastal defences – localised flood studies.

Lead: Environmental Policy Group

Resource Requirement: £300,000

Action

iii.) All States Departments to identify the probable impacts of climate change within their mandated areas of responsibility (taking into account latest UK Government climate change projections), and the potential actions to be taken to address these effects

Lead: Environmental Policy Group

Resource Requirement: Within departments existing resources.

Other outcomes supported by actions i) to iii):	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 19, 22, and 24

ACTION AREA 2: RESOURCE AND ENERGY USE

Policy Statement

Guernsey's key resources of waste, water, land, stone and energy should be managed in a sustainable way; and as far as is possible, the Island should reduce its reliance on others and become more self-sufficient in specified areas.

Key Outcomes

4. Environmental considerations will be integrated into all policies, programmes and service delivery

5 Reputable evidence will be available and used to inform the decisions ultimately taken

11 The amount of waste generated will be minimised

24 Solid and liquid waste disposal will accord with environmentally acceptable methods

Action

iv.) Identify and consider the life-cycle issues of waste management in Guernsey

Lead: Environment Department

Resource Requirement: Within departments existing resources

v.) Having due regard to social acceptability identify the best practical environmental options in respect of waste management practices.

Lead: Environment Department

Resource Requirement: Within departments existing resources

Key Outcomes

4. Environmental considerations will be integrated into all policies, programmes and service delivery

5 Reputable evidence will be available and used to inform the decisions ultimately taken

12 Water resources will be effectively managed

Action

vi.) Investigate the practicality and desirability or establishing policies and incentives to promote grey water recycling.

Lead: Public Services Department

Resource Requirement: Within departments existing resources

Key Outcomes

9. There will be enhanced readiness in the Island to respond positively to [climate change] impacts, consequently reducing adverse effects of impacts

10. The Island's contribution to green house gases will be reduced through leadership and engaging active community participation

Action

vii.) Investigate the practicality and desirability off incentivising an increase in local food production on Guernsey.

Lead: Commerce and Employment Department

Resource Requirement: Within departments existing resources

Key Outcomes

10. The Island's contribution to green house gases will be reduced through leadership and engaging active community participation

22 There will be a reduction in air pollution

Action

viii.) Reduce traffic pollution by encouraging cleaner emissions and supporting reduced use of motor vehicles

Lead: Environment Department

Resource Requirement: Within identified Transport Strategy resources

Other outcomes supported by actions iv to viii: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 17, 22, 24,

ACTION AREA 3: BIODIVERSITY, COUNTRYSIDE AND COASTAL PROTECTION

Policy Statement

Manage Guernsey's natural countryside and marine environment so as to ensure that species and habitats are supported, a rich biodiversity is encouraged, and the appearance, character and traditions which make up our heritage are supported.

Key Outcomes

15. Our biodiversity will be healthier

16. Specific species and habitats requiring targeted action will have been identified and supported

Action

ix.) Undertake a full island habitats survey and identify habitat changes since the 1999 survey.

Lead: Environment Department

Resource Requirement: £35,000

x.) Identify requirements in order to progress extending the UKs signatory to the United Nations Convention on Biological Diversity, to Guernsey

Lead: Environment Department

Resource Requirement: Within departments existing resources

xi.) Identify legislative and policy mechanisms for the generation of a Marine Spatial Plan delivering the sustainable eco system approach**.**

Other outcomes supported by actions ix) to xi): 1, 2, 3, 4, 5, 6, 7, 8, 9, 15, 16,

ACTION AREA 4: OUR BUILT ENVIRONMENT

Policy Statement

Manage Guernsey's constrained land mass to ensure the wise use of land; that our built environment embraces high environmental quality standards appropriate to the environment in which we live; and that our heritage retains its distinctive character.

Key Outcomes

18. Our built environment will be of high quality, reflecting our local distinctiveness and supporting our communities

Action

xii.) Review the structure of the islands spatial planning policies and specifically the desirability and practicality of maintaining the UAP/RAP divide.

Lead: SLPG

Resource Requirement: Within departments existing resources

Key Outcomes

19. Our buildings will embrace high environmental quality standards

20. Our heritage will retain its distinctive character

Action

xiii.) Develop positive planning guidance generally and specifically in respect of listed buildings and conservation areas.

Lead: Environment Department

Resource Requirement: Within departments existing resources

xiv.) Review policies for the determination of listed buildings.

Lead: Environment Department

Resource Requirement: Within departments existing resources

xv.) Review planning policies concerning the use of dilapidated sites, principally those left from the agricultural and horticultural industry.

Lead: Environment Department

Resource Requirement: Within departments existing resources

xvi.) Review the practicality and desirability of enhancing policies and support mechanisms to protect Guernsey's rural culture with specific reference to traditional agricultural practices and dairy farming.

Lead: Commerce and Employment Department

Resource Requirement: Within departments existing resources

Other outcomes supported by actions xii to xvi: 1, 2, 3, 4, 5, 6, 7, 8, 18, 19, 20,

Annex A - Summary of Actions

Action		Lead	Resource Requirement
i)	Co-ordinate the implementation of the subordinate policies outlined in Headline Policy 1 (Reduce overall energy usage and minimise wastage) of the States' Energy Policy.	Energy PG	£250,000 as identified in the Energy Policy Summary.
ii)	Investigate the probable effects of sea-level rises on coastal defences –localised flood studies	ED	£300,000
iii)	Departments to identify probable impacts of climate change within their mandated areas of responsibility (taking into account latest UK Government climate change projections), and the potential actions to be taken to address these effects.	Env. PG	Within departments existing resources
iv)	Identify and consider the life-cycle issues of waste management in Guernsey.	ED	Within departments existing resources.
v)	Having due regard to social acceptability identify best practical environmental options in respect of waste management practices.	ED PSD	Within departments existing resources.
vi)	Investigate the practicality and desirability or establishing policies and incentives to promote grey water recycling.	PSD	Within departments existing resources
vii)	Investigate the practicality and desirability of incentivising an increase in local food production on Guernsey.	C&ED	Within departments existing resources
viii)	Reduce traffic pollution by encouraging cleaner emissions and supporting reduced use of motor vehicles	ED	Within identified Transport Strategy resources
ix)	Undertake a full island habitats survey and identify key habitat changes since the 1999 Survey.	ED	£35,000
x)	Identify requirements in order to progress extending the UKs signatory to the United Nations Convention on Biological Diversity, to Guernsey.	ED	Within departments existing resources
xi)	Identify legislative and policy mechanisms for the generation of a Marine Spatial Plan delivering the sustainable eco system approach	ED	Within departments existing resources
xii)	Review the structure of the islands spatial planning policies and specifically the desirability and practicality of maintaining the UAP/RAP divide.	SLPG	Within departments existing resources
xiii)	Develop positive planning guidance generally and specifically in respect of listed buildings and conservation areas.	ED	Within departments existing resources

xiv)	Review policies for the determination of listed buildings.	ED	Within departments existing resources
xv)	Review planning policies concerning the use of dilapidated sites, principally those left from the agricultural and horticultural industry.	SLPG	Within departments existing resources
xvi)	Review the practicality and desirability of enhancing policies and support mechanisms to protect Guernsey's rural culture with specific reference to traditional agricultural practices and dairy farming.	C&ED	Within departments existing resources