

REFERENCE COMPENDIUM
Wales and Sustainable Development

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Sustainable Development Seminar for Senior Leaders, Decision Makers and Influencers: Learning to Think Differently is developed and run by the University of Cambridge Programme for Industry for Cynnal Cymru and Public Service Management Wales. Apart from any fair dealing for the purposes of research or private study or criticism of review as permitted under the Copyright, Designs or Patents Act, 1998, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the University of Cambridge Programme for Industry.

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Foreword

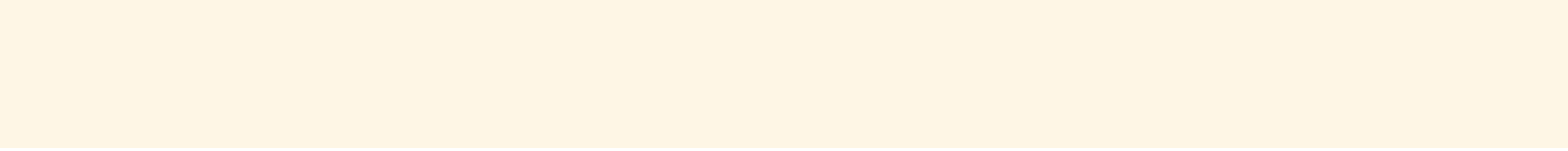
Wales and Sustainable Development: Reference Compendium has been compiled by the Centre for Business Relationships, Accountability, Sustainability and Society at Cardiff University. Parts of this document were compiled by Jonathon Hanks, Senior Associate of the University of Cambridge Programme for Industry and visiting academic at the Graduate School of Business of the University of Cape Town for the HRH The Prince of Wales's Business & the Environment Programme *Reference Compendium on Business and Sustainability* and are reproduced here by kind permission.

It accompanies *Wales and Sustainable Development: An Essay* and pulls together further detailed information for the Sustainable Development Seminar for Senior Leaders, Decision Makers and Influencers: 'Learning to Think Differently'. Supported by the First Minister and the Welsh Assembly Government, this seminar brings together thought leaders from across the public, not-for-profit and private sectors to present and discuss key ideas in sustainability.

Cynnal Cymru, the Sustainable Development Forum for Wales, and Public Service Management Wales have invited the University of Cambridge, Cardiff University and the University of Wales, Bangor to provide this unique seminar which will form part of the ongoing commitment towards a sustainable Wales.

"Good governance is always high on my agenda as it is at the heart of creating a sustainable future for any country. It's more than just about having strong and effective leaders. Achieving real change requires the active participation of all sectors of society."

FIRST MINISTER RHODRI MORGAN AM



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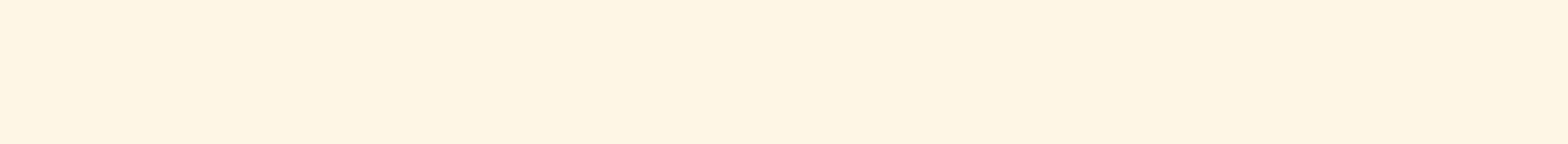
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Wales and Sustainability – Core Definitions and Concepts

Wales and Sustainable Development – A Brief Historical Note

More than two thousand years ago, the Celtic population of what became Wales was engaged in mixed farming, exploiting the land's metal reserves and striving to preserve their cultural uniqueness in the face of political and linguistic pressure, firstly from Rome and later from the Germanic tribes. That pattern characterises much of the history of Wales that was to come.

The industrial revolution proved to be a pivotal point in terms of both Welsh history, and the global balance between the World's people and the natural environment. In pre-industrial times, the economy was largely agricultural and therefore tied into nature's systems and rhythms. Although human activity had shaped the environment for thousands of years, peoples' work and lifestyle reflected their natural environment and natural systems. Production of goods and the provision of services was undertaken on a 'craft' scale, and both production and consumption were largely localised, with some regional and international trade. With a global population estimated at only about 1.2 billion in 1850, the impact that humankind had on the planet in terms of the use of resources and generation of pollution and waste was sustainable.

Industrialisation, and the power of coal and steam, allowed for the production of goods on a much larger scale and as technology developed, it allowed mankind to transcend the boundaries of time, space and scale that had existed for centuries. A world in which people's work, consumption and way of life followed nature was replaced by one in which our economies, consumption and lifestyles will determine the fate of many natural resources and systems.

The industrial revolution placed the green and peaceful valleys of South Wales centrestage in the economic development of Britain. In 1827, the South Wales iron industry accounted for one half of Britain's exports and by the 1880s Cardiff docks were exporting almost nine million tonnes of coal annually, making it the global energy capital of the day. At their peak, the Welsh mines employed more than a quarter of a million men.

The Welsh experience of a century ago showed clearly that the exploitation of both natural resources and people for economic gain

Wales and Sustainable Development – A Brief Historical Note

creates significant social and environmental problems. However, it was not until the 1980s, and the evolution of the concept of Sustainable Development (SD), that we developed a clear understanding of the way in which the environment, society and economic activity are inter-twined and interdependent. Evidence that our economic strategies, production technologies and lifestyles were having significant impacts on the natural environment, human health and our quality of life mounted throughout the 20th century. Scientific evidence demonstrated to us the loss of the tropical rainforests, the accumulation of pollutants in our atmospheres, rivers and seas, and the threat posed by climate change and rising sea levels caused by global warming. It also demonstrated that the constant pursuit of economic growth did not lead to the expected improvement in peoples' levels of happiness or perceived quality of life, and that patterns of inequality in health and living standards were stubbornly persistent both within and between nations.

These issues were addressed when in 1983, the UN General Assembly created the UN World Commission on Environment and Development, chaired by Dr. Gro Harlem Brundtland, the prime minister of Norway. In 1987 it published its landmark report, *Our Common Future*, which provided the first widely used and understood definition of sustainable development as:

“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

At its core, sustainability is all about behaving in a manner in which current efforts to improve lives and conditions (i.e. 'development') can be continued (or 'sustained') indefinitely. In other words, SD focuses on improving the quality of life for all of the Earth's citizens without increasing the use of natural resources beyond the capacity of the environment to supply them indefinitely. It requires an understanding that inaction has consequences, and that we must find innovative ways to change institutional structures and influence individual behaviour. It is about taking action, and changing policy and practice at all levels, from the individual to the international. Sustainable development is not a new idea. Many cultures over the course of human history have recognised the need for harmony between the environment, society and economy. What is new, however, is an articulation of these ideas in the context of a global industrial and information society.

Although SD has now been widely accepted as a goal amongst governments, businesses and a range of other organisations, the real challenge has been finding ways of making substantive progress towards it. Many governments have developed strategies and targets for sustainability and 'quality of life'. Many businesses have followed suit, often integrating the pursuit of SD with the concept of corporate social responsibility, and promoting a business case for SD. What was often lacking, was any sense that the pursuit of SD should be a responsibility of government and business, rather than a strategic option for them to consider.

USEFUL WEB ADDRESS

www.britannia.com/wales/whist.html

Sustainable Development in Wales

The special position of Wales in the story of SD relates back to Section 121 of the 1988 *Government of Wales Act* that established devolved government in Wales. This gave the Welsh Assembly Government (WAG) a duty to promote SD in all aspects of its work, and to develop, review and report on a scheme to integrate the principles of sustainability throughout its policy making agenda. This made Wales amongst the very first places on the planet where the pursuit of SD existed as a statutory responsibility. It has also provided Wales with many opportunities to be one of the pathfinders amongst those countries and regions striving to make progress towards SD.

WAG produced its first Sustainable Development Scheme *Learning to Live Differently* during 2000 and established Cynnal Cymru (The Sustainable Development Forum for Wales) during 2002.

The vision of SD that Wales pursues has evolved over time, with the development of a SD strategy and action plan. In 2004 '*One future – different paths*', the UK's shared framework for SD to 2020, was announced, and it included the following shared vision of SD:

*"The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations...
...for the UK Government and the Devolved Administrations, that goal will be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment; and a just society that promotes social inclusion, sustainable communities and personal wellbeing. This will be done in ways that protect and enhance the physical and natural environment, and use resources and energy as efficiently as possible."*

Understanding Sustainable Development

As an idea sustainable development encompasses all aspects of the environment, society and the economy. This can make it difficult for people to get to grips with and to translate into more specific issues and priorities. A range of models, frameworks, checklists and analogies have been used in an attempt to communicate to people clearly what SD is, and what it encompasses.

The Five Capitals Model

The Five Capitals model provides a useful means for conceptualising sustainable development. In terms of this model, the crisis of sustainability is seen to arise from the fact that we are consuming our stocks of natural, human and social capital faster than they are being produced. Unless this rate of consumption is effectively controlled, then these vital stocks cannot be sustained over the long-term.

With this in mind, society should seek to identify and implement practices that either increase the stocks of these capital assets – with the aim of living off the income rather than depleting the capital – or (to a limited extent only) substitute one form of capital for another.

There are five types of capital from which we derive the goods and services we need to improve the quality of our lives.

- **NATURAL CAPITAL** refers to the natural resources (matter and energy) and processes that are used to produce and deliver goods and services. They include renewable and non-renewable *resources*, *sinks* that absorb, neutralise or recycle waste, and *processes* such as climate regulation that together maintain life.
- **HUMAN CAPITAL** consists of people's health, knowledge, skills, motivation and capacity for relationships. All these things are needed for productive work, and the creation of a better quality of life. Human capital can be fostered through improving opportunities for learning, creativity, stimulation and enhanced health.
- **SOCIAL CAPITAL** concerns the institutions that help us maintain and develop human capital in partnership with others. It includes such institutions as families, communities, businesses, trade unions, schools, and voluntary organisations. A critical component of social capital is the development of trust.

- **MANUFACTURED CAPITAL** comprises man-made goods or fixed assets that contribute to the production process or the provision of services, rather than being part of the output itself. It includes for example tools, machinery, buildings and infrastructure.
- **FINANCIAL CAPITAL** plays a critical role in our economy, enabling the other types of capital to be owned and traded, for example through shares, bonds or banknotes. Unlike the other types of capital, it has no intrinsic value itself but is representative of natural, human, social or manufactured capital. Financial capital is the traditional primary measure – the ‘single bottom line’ – of business performance and success.

The Sustainability Principles of the Natural Step

The Natural Step, a non-profit environmental education organisation, has established four scientifically based ‘systems conditions’ that form a useful set of operating principles for companies and institutions.

The system conditions state that:

In a sustainable society, nature is not subject to systematically increasing:

- Concentrations of substances extracted from the Earth’s crust
- Concentrations of substances produced by society
- Degradation by physical means

and, in a sustainable society, people are not subject to conditions that systematically

- Undermine their capacity to meet their needs

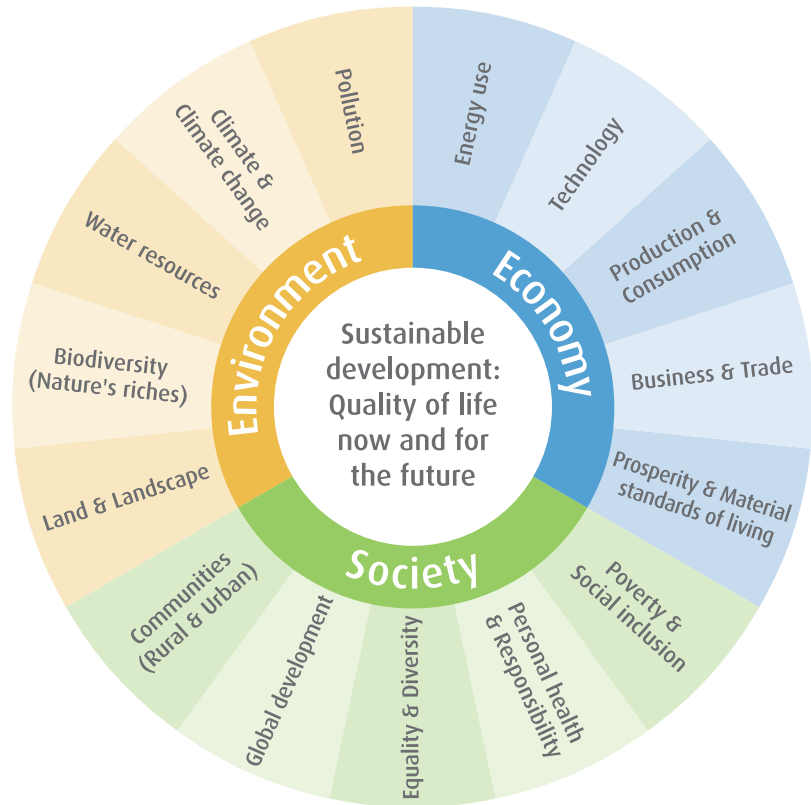
The SD ‘Issue Wheel’

A popular approach to demonstrating the component issues that are encompassed within the SD agenda is to portray them as a ‘wheel’ radiating out from the central concept of SD. One example is given overleaf, and although not exhaustive, it includes the most commonly discussed components of the SD agenda both regionally and globally.

USEFUL WEB ADDRESS

www.naturalstep.org

Understanding Sustainable Development



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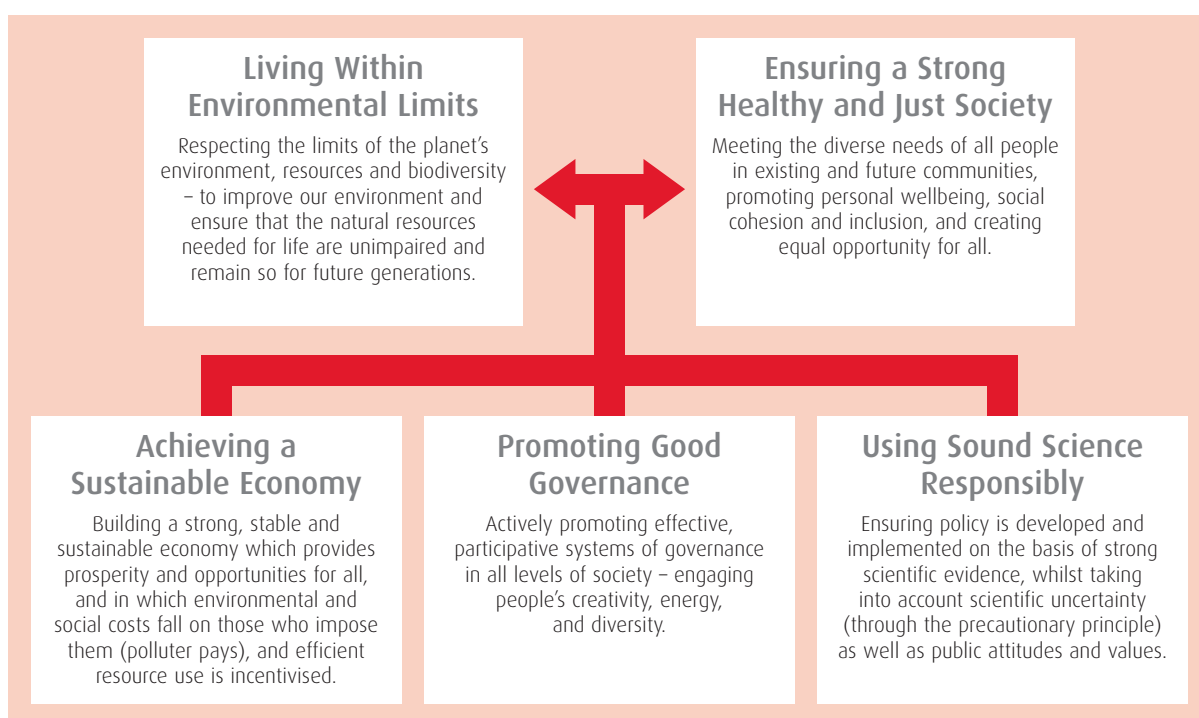
www.srds.ndirect.co.uk/sustaina.htm
www.sd-commission.org.uk/pages/principles/principles.html

Key Principles of SD

The debate about SD that followed the publication of the Brundtland Report had a focus on a handful of key principles including:

- **FUTURITY** the need to consider future generations and the future state of the natural environment when making decisions
- **EQUITY** ensuring a fairer distribution of the world's resources between countries, regions and generations
- **INTERDEPENDENCE** that the future health and security of our societies, economies and environment are all inter-linked and interdependent
- **ENVIRONMENTAL LIMITS** the principle that there are certain limits in terms of the resources the earth can provide us with, and the ability of natural systems to absorb pollution with becoming degraded
- **MEETING NEEDS** that a priority in future decision making should be ensuring that the basic needs of all the planet's population are met.

Since then, there has been a continuing debate about the nature of these principles and how they should be integrated into policy-making and practice. The shared principles of SD adopted by the UK Government and the Devolved Administrations in 2005 are as follows:



WAG's Policy Integration Tool

One of the key challenges for any organisation in dealing with SD is in ensuring that consideration of sustainability issues is integrated into all aspects of decision making. With the aid of Forum for the Future, WAG has developed a '*Policy Integration Tool*' for use in Assembly Government policy formulation and decision making. It helps to ensure that all aspects of policy making are assessed on how well they contribute to WAG's strategic agenda and to WAG's policy priorities. The tool encourages decision makers to ask a range of questions about any policy issues to ensure that risks are considered, along with any potential links to other policy areas and impacts on other policy goals. Environmental issues are a key element in the tool, along with economic development, social justice, health, education and lifelong learning and cultural issues.

Understanding Sustainable Development

True progress towards SD will depend on national, international and regional governments viewing SD, not as an area of policy-making, but as an approach to policy making. Wales, like the rest of the planet, has a long way to go before this important change in thinking is achieved. However, the policy integration tool provides a mechanism to ensure that social, economic and environmental policies are 'joined up' at the initial decision making stage. The tool aims to encourage good and integrated policy decisions, and it has the potential to encourage a more sustainability orientated approach to policy decisions.

Quality of Life

Sustainable development involves a change of emphasis in policy making, goal setting and the measurement of progress away from conventional quantitative economic measures such as Gross Domestic Product (GDP) or Gross Value Added per head (GVA). This is not to say that in the past quality of life was ignored. The point of the economic growth that was pursued was to fund social and environmental improvements that would contribute to a better quality of life. However, in practice the pursuit of ever-increasing economic growth tends to create new social and environmental problems, which rather negates its ability to fund solutions to the old ones. A sustainability perspective allows for a greater emphasis on quality of life as the ends we aspire to, and less on economic growth as the only conceivable route to achieving them. It allows for the consideration of new ways to generate satisfaction and value, and it better recognises the many sources of satisfaction and value that exist outside the formal economy (for example through our families).

Research has demonstrated that people's perceived quality of life, well-being or happiness is not closely coupled to material wealth. Once we move beyond poverty, increasing consumption does not make us increasingly happy. Health, the quality of our working lives, the quality of our relationships and even genetic factors are all stronger influences on our happiness than increasing affluence. In an international comparison of perceived happiness published in *New Scientist* in 2003, Nigeria, a relatively poor country, came top, followed by Mexico, Venezuela, El Salvador and Puerto Rico. Despite their affluence, America came 16th and Britain 24th. Denmark was the only industrialised country that had managed to match decades of economic growth with steady increases in peoples' happiness.

What constitutes 'quality of life' varies between countries and amongst individuals. There are a number of widely shared quality of life values relating to having our basic needs for food and shelter met; enjoying good health and a healthy environment; having access to meaningful work; enjoying good relationships with our family and friends; feeling part of a stable and thriving community; freedom from crime or oppression; and having leisure time and the opportunities to enjoy and express ourselves. Many of these are being incorporated in new forms of SD indicators being used by governments to develop and assess their policies (see Section 5. below). Quality of Life assessment techniques have also been developed to integrate quality of life issues into policy making processes, particularly in land use planning.

Quality of Life

USEFUL WEB ADDRESS

www.foe.co.uk/campaigns/sustainable_development/progress/annex1.html

www.countryside.gov.uk/LAR/Landscape/Quality/overview/index.asp

There have also been attempts to create composite measures to score the quality of life in different countries. The Economist Intelligence Unit produced an index of 111 countries combining data on incomes, jobs, health, unemployment, climate, political stability, with social measures related to gender equality, freedom, family and community. Ireland pipped Switzerland on this index, with the UK rated at 29th.

“Economic growth may well have served post war politicians well as a reasonably accurate proxy for human wellbeing or contentment but now that the environmental, social and psychological externalities entailed in generating decades of economic growth in that way are weighing more heavily on people than ever before, there is a pressing need to reopen the debate about economic growth and wellbeing itself.”

JONATHAN PORRITT, CHAIRMAN OF THE SUSTAINABLE DEVELOPMENT COMMISSION, IN REDEFINING PROSPERITY: RESOURCE PRODUCTIVITY, ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT, 2003)

Equity: Tackling Poverty and Inequality

Absolute poverty is based on subsistence, a minimum standard needed to live. The Copenhagen Declaration defines absolute poverty as 'a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information'. It depends not only on income but also on access to social services.

While Wales as a whole grows more prosperous, there are still many people who do not share in that prosperity. Wales experiences particularly high levels of long standing illness, youth unemployment and concentrations of poverty. The Welsh Assembly Government's policies and programmes are aimed at addressing the underlying problems faced by both individuals and communities in moving out of poverty.

Inter-generational

Research shows that there are clear life-cycle links that mean that poverty is often transmitted through the generations. These life-cycle links help to explain the need for a special emphasis on child poverty and giving every child the best possible start in life.

The Welsh Assembly Government's agenda set out in *Wales: A Better Country*, published in September 2003, sets out the four key areas that the Assembly Government will focus on: helping more people into jobs; improving health; developing strong and safe communities; and creating better jobs and skills.

The Assembly Government is making significant progress in tackling social exclusion and poverty through some of its programmes including:

- The Safer Communities Fund is investing over £7 million in 22 Community Safety Partnerships to tackle youth crime and disorder. £10 million has been made available to fund the *Strategy for Older People*, to engage older people and to tackle age discrimination.
- Sustainable communities is a grant aided scheme funding local projects to secure the long term viability of deprived communities and begin the process of integrating funding towards cohesive packages to tackle and prevent social exclusion.

Equity: Tackling Poverty and Inequality

The Welsh Assembly Government seeks to give a lead in addressing ageism and other forms of discrimination that older people face. It looks for ways of working with other agencies (including the Welsh Local Government Association and the NHS Equality Unit) to raise awareness of age discrimination in all areas of policy development and implementation.

The Welsh Assembly Government is responsible for key policy areas that impact on child poverty, including education, health, housing and the environment and skills and employment. Child poverty is a complex issue and its eradication demands special attention. In view of this the Assembly Government is working towards developing a strategy for combating child poverty in Wales.

- The *Child Poverty Task Group*, established in April 2003, will contribute to a Child Poverty Strategy for Wales.
- *Children First* is a Welsh Assembly Government programme which aims to transform the management and delivery of social services for children in Wales. The programme impacts upon all children in need, including looked-after children, children with disabilities and care leavers.

Between Sexes and Amongst Age Groups

Equality of opportunity requires that the impact of policies for different groups be considered. Groups within society can face particular aspects of social exclusion due to deliberate or unintentional discrimination, and women, children, disabled people and minority ethnic communities are most affected by issues of poverty and lack of opportunity.

The Welsh Assembly Government has a statutory duty, under the Government of Wales Act, to promote equality of opportunity for all people; and the Assembly Government has adopted equality of opportunity as a key cross-cutting theme.

The Welsh Assembly Government's efforts to promote equality of opportunity for all people is further reflected in the Government of Wales Act which requires the Assembly to exercise its functions and carry out its business with due regard to the principle that there should be equality of opportunity for all people. To ensure that this occurs, Standing Orders provide for the Committee on Equality of Opportunity to audit the Assembly's progress towards that goal. This legal obligation, backed by an Assembly standing committee, has further focused the Assembly's attention on the need to promote equality.

The Government of Wales Act places an 'absolute duty' on the Welsh Assembly Government to promote equality of opportunity across all devolved functions, with no 'derogation clauses' (Institute of Welsh Affairs, 2002). The National Assembly for Wales has succeeded in creating the most gender balanced legislature and cabinet anywhere in the world (Welsh Assembly Government, 2002). After the 2003 elections, women now make up 50% of Assembly Members and 56% of the Assembly's Cabinet. This contrasts to the UK Parliament, where women constitute only 18% of MPs and 29% of Cabinet members.

International (including FairTrade)

Not all of the international commitments (e.g. reducing greenhouse gas emissions; halting the loss of biodiversity; making progress towards eradicating extreme poverty and hunger; respecting human rights) through the World Summits on Sustainable Development can be addressed effectively at the Wales level. However, pursuing the Assembly's vision of a sustainable future for Wales involves action that contributes to many of the global and European commitments, as well as to issues specific to Wales.

Wales Fair Trade Forum and other Fair Trade initiatives and supporters launched the Fair Trade Wales campaign that challenges people, businesses, consumers, local authorities, public bodies, religious institutions, voluntary bodies and all National Institutions (including the National Assembly for Wales) from all over the country to become part of an all-Wales campaign for Fair Trade.

Equity: Tackling Poverty and Inequality

Inter-regional

The out-migration of young people, both from rural Wales to urban centres and other parts of the UK (particularly among those with skills or higher education qualifications) has been a source of major concern for some time, as recognised in a number of the Welsh Assembly Government's key policy documents, including *A Plan for Wales 2001*, *A Winning Wales* and *Planning Policy Wales*. In order to set out an Action Plan to increase the opportunities for young people to stay in, or return to rural Wales, The Assembly Government contracted Newidïem, in partnership with Cardiff University and Menter a Busnes in March 2002 to carry out the *Age Balanced Communities* study to establish and quantify the scope of the problem, and provide evidence of the trends over the past twenty years.

Recommendations arising from the Age Balanced Communities (ABC) report were noted by the Assembly Government to be incorporated in the further development of the proposals undertaken by the Rural Partnership for Wales' ABC Working Group.

Diversity

Diversity is about valuing difference and removing discrimination on the basis of who people are. These differences can be along the dimensions of race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies. Valuing diversity would therefore be the exploration of these differences in a safe, positive, and nurturing environment and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diversity.

Biodiversity

The commitments contained in the Biodiversity Convention are reflected in the Welsh Assembly Government's *Sustainable Development Scheme* and in other policies and programmes. The *Countryside and Rights of Way Act* places a duty on the Assembly to have regard, so far as is consistent with the proper exercise of its functions, to the purpose of conserving biodiversity in accordance with the Convention. Under the Act the Assembly also has a duty to take (or to encourage others to take) such steps as appear to the Assembly to be reasonably practicable to further the conservation (including restoration or enhancement) of those species and habitat types identified by the Assembly as priorities for biological conservation. The Welsh Assembly Government also ensures that its policies contribute to the conservation of the abundance and diversity of native wildlife and its habitats and will minimise the adverse effects on wildlife where conflict of interest is unavoidable.

The *Wales Biodiversity Partnership* (WBP), established in 1996, brings together the key players from the public, private and voluntary sectors to promote, monitor and advise the National Assembly for Wales on action to maintain and enhance biodiversity in Wales. Local authorities, in partnership with other organisations and the community, produce *Local Biodiversity Action Plans* (LBAPs). These action plans identify measures necessary to ensure that sites and species of national and local importance are safeguarded and enhanced throughout Wales at Local Authority level.

Diversity

There has been considerable progress on other policies and strategies that contribute specifically to major elements of Sustainable Development, for example the *Tir Gofal* scheme is a Welsh Assembly Government agri-environment scheme run by Countryside Council for Wales. The scheme rewards farmers for caring for the wildlife, historic and cultural features on their land, including the provision of new public access. It is designed to support the farming community in protecting the rich heritage of rural Wales and reflects the Welsh Assembly Government's priorities for sustainable farming, coupled with greater opportunities for public enjoyment of the countryside.

Social

Tackling social disadvantage is one of the three major themes which the Welsh Assembly Government has adopted in its strategic plan, *'Better Wales'*. Tackling social disadvantage aims to develop an inclusive society where everyone in Wales has the chance to fulfil their potential. One of the major ways the Assembly means to do this is through the *'Communities First'* initiative. This initiative has been designed to enable communities to pursue sustainable development and combat social disadvantage. A Consultation Paper published in 2000 which set out the Assembly's vision for the *'Communities First'* initiative received a significant level of response from organisations, agencies, communities and individuals. This level of response ensures that as wide a range of opinion and expertise as possible contributes to the policy-making process.

The Welsh Assembly Government's comprehensive education and lifelong learning programme to 2010 is set out in *'The Learning Country'* document. This, together with the Welsh Assembly Government's *Basic Skills Strategy*, emphasises extending access to learning as a means of furthering prosperity and combating social exclusion in all communities in Wales. Education and Learning Wales (ELWa) and National Council for Education and Training and the Basic Skills Agency have been remitted to help build social inclusion through learning throughout life, focussing particularly upon the most deprived communities, in accordance with the Welsh Assembly Government's *'Communities First'* programme.

The National Assembly's information age strategic framework, '*Cymru Ar-lein*', launched in November 2001, aims to use ICT to help create a more prosperous, culturally richer and less divided society. Other initiatives taken by the Welsh Assembly Government to ensure social and economic prosperity of its citizens through the introduction of ICT includes:

- The pilot e-communities project in Tredegar and Blaenau Gwent under the Corus regeneration scheme encourages the community as a whole to take up ICT.
- The People's Network provides free computer and internet access in public libraries.
- The Sustainable Development Forum for Wales, Wales Council for Voluntary Action (WCVA), Welsh Assembly Government, Cymru Ar-lein and Big Barn Ltd are jointly developing a web based network of sustainable development activities and services in Wales, with an aim of increasing awareness and involving communities in sustainable development for Wales by sharing information.

Economic

One of the Welsh Assembly Government's key aspirations is to raise the standard of living in Wales to match with that of the UK as a whole. To this end the Welsh Assembly Government has decided to increase the incentives for local authorities to work in partnership with businesses and other stakeholders to maximise local economic growth.

The Welsh Assembly Government sets the strategic framework for economic development in Wales and within that the main policy objectives in support of business development. In line with the draft National Economic Development Strategy and the National Assembly's Strategic Plan for Wales, the overall aim is to improve the growth and competitiveness of the vitally important small firms sector in Wales.

Diversity

Some of the key objectives include:

- To encourage more knowledge based companies to locate in Wales and to help existing businesses to exploit ICT and other new technology more effectively.
- To promote innovation and technology transfer through innovation centres and closer links between colleges and business.

The Welsh National Assembly has launched a long-term economic program called the *Entrepreneurship Action Plan* that funds a range of business support services for all sectors of the community. Among other activities, it targets under-represented groups.

A Winning Wales, launched in January 2002, sets out a national economic development strategy that explicitly strives to put development on a more sustainable basis in terms of eco-efficiency and equity and to trade upon the opportunities that sustainable development could offer.

Citizenship, Democracy and SD

Development education helps people to understand the links between their own lives and those of others around the world; increases their knowledge of the economic, social, political, and environmental forces which shape all our lives; helps people to develop the skills, values, and attitudes which enable people to work together to bring about lasting change and creates a fairer world in which power and resources are shared on an equal basis.

The Council for Education in World Citizenship (CEWC) is an educational charity working with young people to promote understanding of the contemporary world. CEWC-Cymru provides support for local, national and global citizenship education in Wales. Among events organised by CEWC-Cymru are the Wales Schools' Debating Championships, Model United Nations meetings, European Youth Parliaments, residential conferences and human rights workshops.

The commitment of the Welsh Assembly Government to promote sustainable development in the exercise of its functions is based upon the Assembly's duty under Section 121 of the Government of Wales Act 1998. The Act requires the Assembly to prepare a Scheme setting out how it proposes to fulfil this duty. The *Sustainable Development Scheme* (set out in the document *Learning to Live Differently*, adopted by the Assembly Government in November 2000) and *Plan for Wales 2001* (the Assembly Government's Strategic Plan) establish sustainable development.

Sustainable Communities and Lifestyles

Consumption in general is on the rise in Wales as it is in other industrialised countries, and while technological innovations have reduced the materials and energy intensity of many consumer goods over recent years, these gains have been largely outweighed by increased demand (OECD 2002). Households are not the main contributors to environmental problems but their impact is significant and is expected to increase (OECD 2002).

Consumption

The ways in which excessive resource consumption can affect the environment in Wales are manifold: deforestation, air pollution, metal and coal mining, depletion of fish stocks, soil degradation, and many other factors all play a part in the gradual deterioration of the environmental and social capital.

The National Assembly published its document on global warming, *Climate Change Wales: Learning to Live Differently*, in August 2001, committing Wales to a plan to reduce carbon emissions to comply with the Kyoto agreement.

The Welsh Assembly Government aims to facilitate sustainable consumption in Wales through its initiatives like:

- Aiming to achieve a Wales recycling target of 40% by 2009/10.
- A £300,000 investment in the Eco-Schools project, which aims to instil enthusiasm in children to learn about sustainability and low impact lifestyles and to perceive them as the norm rather than the exception.
- Aiming to power all Welsh Assembly Government buildings with renewable energy by 2010 as part of the energy saving Wales plan.
- The Welsh Assembly Government has also been pushing for local food to be served in schools and hospitals.

The Assembly Government was the first government to commission research (Ecological Footprint) which measures human consumption of resources against the Earth's carrying capacity. The footprint analysis revealed that each person in Wales requires an earth share of 5.25 hectares (comparative figures for the UK is 5.35 hectares) to maintain current lifestyle patterns when compared to the available global capacity

of 1.8 hectares per person, this means that if everyone in the world lived like consumers in Wales, we would need around three planet Earths to sustain ourselves.

The footprint is being used by the Centre for Alternative Technology to communicate with people about sustainable consumption, and the Welsh Assembly is collaborating with WWF Cymru over the possibility of using the footprint as an educational tool on a wider basis, in schools and supermarkets.

CAT

The Centre for Alternative Technology (CAT) is Europe's leading eco-centre. CAT's key areas of work are renewable energy, environmental building, energy efficiency, organic growing and alternative sewage systems. It is dedicated to the promotion of more sustainable lifestyles, using both traditional and new technologies like water power and solar power. Established in 1975, the Centre's mission is to display a vision of how people can live in harmony with the environment without destroying it.

The Centre has an holistic approach to its work, integrating ideas and practice relating to land use, shelter, energy conservation and use, diet and health, waste management and recycling. Through its resident community and work organisation, CAT is committed to the implementation of co-operative principles and the best achievable environmental practices.

Sustainable Rural Communities

One of the Welsh Assembly Government's main priorities is to develop communities where people want to live, work and where there is access to economic opportunity and reward; a pleasant and safe environment, active and inclusive social community networks. To make this happen, the Welsh Assembly Government has introduced several programmes & strategies to support rural communities. These include:

- **RURAL COMMUNITY ACTION PARTNERSHIPS** which helps communities acquire knowledge and skills needed to take direct responsibility for their own regeneration and to realise their own ideas.

Sustainable Communities and Lifestyles

- **RURAL PARTNERSHIP FOR WALES** was established in November 1998 and is an advisory body that brings together a wide range of organisations to contribute to the future development of rural policies and programmes. Its remit embraces the economic, social, environmental, equal opportunities and cultural issues of concern to rural Wales.
- **RURAL RETAIL SUPPORT SCHEME** set up in September 2003 as part of the Rural Community Action programme, has been designed to offer support measures to rural businesses or community groups through a mix of advice and grant aid. The Scheme is managed by the Welsh Development Agency Rural Unit.
- **WALES RURAL OBSERVATORY** undertakes independent research and analysis on social and economic issues in rural Wales. The Observatory focuses its activities around broad themes that include Rural Economy and Employment; Environment, Sustainability and Land-use Planning; Social Inclusion and Exclusion; Housing and Service Provision; Society and Community.
- **THE WELSH ASSEMBLY GOVERNMENT PARTNERSHIP DOCUMENT** *Putting Wales First* contains a commitment to take measures to protect post offices, shops and other businesses that supply vital services to rural communities and assist ventures aimed at keeping rural retail outlets open.

Sustainable Cities

Sustainable Cities takes an integrated approach, making connections between issues and areas of study in order to bring forward ideas and policies that will best improve people's quality of life and protect the environment. Litter is one of the most common forms of abuse people inflict on the environment. Prevention and control of litter is an important tool for enhancing the quality of life in Wales in many respects.

The Welsh Assembly Government is engaged in promoting an educational and enforcement programme for tackling litter in partnership with local government and *Keep Wales Tidy*.

Other initiatives of the Welsh Assembly Government towards building sustainable cities include the work carried out by CADW, which is the historic environment agency within the Welsh Assembly Government with responsibility for protecting, conserving, and promoting an appreciation of the historic environment of Wales. Created in 1984,

CADW carries out the complete range of responsibilities for the conservation, presentation, and promotion of the built heritage of Wales on behalf of the National Assembly for Wales. CADW's duties include:

- Securing the preservation of ancient monuments and historic buildings;
- Grant aiding the repair of ancient monuments and historic buildings; and
- Managing 127 ancient monuments in Wales which are in direct State care.

Regeneration

Development can help to arrest the decline in community facilities and deliver environmentally-sound modernisation, re-use or replacement of urban infrastructure. An effective way to achieve regeneration is to foster integrated communities within the existing settlement pattern by promoting mixed use development, comprising appropriate combinations of housing (including affordable housing), employment, retailing, education, leisure and recreation uses and open space.

Recognising the strengths of urban communities, which are home to the majority of the population of Wales, the Assembly Government's priorities for urban areas are, through integrated approaches, that include secure environmentally-sound and socially inclusive regeneration in those urban areas which require it, so that they become more desirable places in which to live and work; and foster sustainable change, in particular making it possible to live with less noise, congestion and traffic pollution, and improving the quality of life.

- **THE WALES SPATIAL PLAN** '*People Places, Future,*' was published in November 2004 by the Welsh Assembly Government. It sets out an agenda for the next 20 years, describing what is required to put Wales firmly on the path towards sustainable spatial development.
- **THE REGENERATION IMPROVEMENT STUDY** analyses the regeneration process within Wales, to determine whether it is effective, efficient and sustainable, in order to provide guidance to local authorities and the Welsh Assembly Government and other public bodies on how to manage and monitor the regeneration process at national and local levels.

Polluter Pays Principle

The polluter pays principle seeks to ensure that the individual or organisation responsible for causing any pollution should bear the associated costs. These include any expense associated with pollution prevention and environmental remediation, as well as compensation costs incurred by any victims of damage arising from that pollution. From a government policy perspective, there are a number of options that can be applied to ensure that the polluter pays for the environmental impacts of their activities. These include:

- Regulatory instruments that mandate specific behaviour (for example laws that require companies to install equipment to prevent and/or manage pollutant emissions).
- Market-based instruments that act as economic incentives for particular activities (for example landfill taxes on solid wastes, or carbon taxes that seek to internalise the costs associated with carbon emissions).
- Information-based instruments that change behaviour through the provision of information (for example eco-labels and requirements relating to sustainability reporting).

Precautionary Principle

Application of the precautionary principle demands that precautionary action is undertaken in those instances where there are credible and significant threats of harm to human health or the environment, notwithstanding the existence of any residual scientific uncertainty about the associated cause and effect relationships. The principle places an obligation on the proponents of particular activities to take a risk-averse approach when there is evidence that it may be harmful to human health or the environment, even if the nature of that harm is not fully understood. The precautionary approach is often referred to in companies' environmental policy statements and forms a key element of international commitments such as the UN Global Compact. Application by a company of a precautionary approach essentially encompasses the following broad sets of activities:

- The first step is to assess whether in fact the precautionary principle should be invoked. This requires that the *potentially negative effects are identified*, and that *the scientific data relevant to these risks is evaluated*. The precautionary principle is only invoked when, due to the insufficiency of the data or their inconclusive or imprecise nature, it is impossible to determine the risk in question with sufficient certainty.

Once it has been decided on the basis of this evaluation that the precautionary approach is required, then the following precautionary activities should be implemented:

- Undertake an *assessment of the alternative options*, noting the environmental, health and economic costs and benefits of each approach.
- Adopt a *transparent, inclusive, and open decision-making process* that involves interested parties in the study of the various risk management options.
- Implement an ongoing process of *research and monitoring*, with the decision/s periodically re-examined, based on any new available information.
- Implement the *proportionality principle*, such that the costs of action to prevent hazards are not disproportionate to the likely benefits in both the short and long term.

“When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the Precautionary Principle must be open, informed and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action.”

“THE 1998 WINGSPREAD STATEMENT”
OF PROMINENT SCIENTISTS

Precautionary Principle

Despite the fact that its underlying philosophy of prudence has obvious attractions in the face of new technology, the precautionary principle is a notoriously contentious issue, and one that has bedevilled the negotiation of various multilateral environmental agreements. In particular, there has been considerable debate in relation to the meaning and scope of precaution between negotiators in European and North America. Whereas EU negotiators and some business sectors have supported the notion that it is 'better to be safe than sorry', the precautionary principle has been strongly criticised by US negotiators and many in the business community for acting as a barrier to scientific and technological advance.

Living with a Carbon Ration

The concept of carbon emissions '*contraction and convergence*' was first proposed by the Global Commons Institute (GCI) in 1990, and has since been endorsed by many national and international bodies. It is founded on two principles: firstly, that global CO₂ emissions must progressively reduce; and secondly, that average emissions of people in different parts of the world must converge to the same level. Creating such an equally shared '*carbon ration*' has both a moral and a practical dimension. Since global warming and climate change will impact every country, there is no moral justification for some to generate more CO₂ than others. In practical terms, the process of trying to agree individual carbon quotas for each of the world's countries would be a never-ending task. Using a common carbon ration simplifies the process to agreeing what is the maximum level of CO₂ emissions that the atmosphere can absorb without serious destabilisation of our climate, and then agreeing a timetable for global per capita CO₂ shares to converge to that level.

The existence of globally accepted carbon rations would allow for countries and individuals to trade carbon-emission rights, reflecting the principles already operating in carbon emissions trading amongst businesses today. Such a system would involve each adult having an equal 'right to pollute' in terms of a carbon ration (with a proportion for children), which would reduce over time to try to reach a global emissions level that is sustainable. Elements of consumption such as heating and lighting, the energy embodied in food consumption, and use of personal and public transport would all have to be included within the calculations. Such a system would have to be mandatory and policed by governments. As the carbon ration available to individuals reduced over time, it would provide clear incentives for governments to invest in cleaner forms of energy production and companies to develop more energy efficient ways to meet consumer needs.

USEFUL WEB ADDRESS

www.gci.org.uk/contconv/cc.html

Eco-Efficiency

USEFUL WEB ADDRESS

www.is4ie.org
www.yale.edu/jie

USEFUL WEB ADDRESS

www.cleanerproduction.com
www.uneptie.org/pc/cp
es.epa.gov/cooperative/international

Industrial Ecology

Industrial ecology is an interdisciplinary framework aimed at designing and operating industrial systems that mimic natural ecosystems.

An important objective of industrial ecology is to promote the symbiotic co-location of industries so that waste from one industry can serve as a raw material input into another. It involves tracking energy and material flows through a particular industrial system (e.g. an industrial plant or a public sector operation such as the provision of infrastructure) and identifying opportunities for symbiotic relationships with the aim of minimising the generation of waste.

Cleaner Production

Cleaner Production refers to the continuous application of an integrated preventative strategy applied to processes, products and services with the aim of increasing eco-efficiency and reducing risks for humans and the environment. Cleaner Production therefore includes:

- Production processes: conserving raw materials and energy, eliminating toxic raw materials and reducing the quantity and toxicity of all emissions and wastes.
- Products: reducing negative impacts along the life cycle of a product, from raw materials extraction to its ultimate disposal.
- Services: incorporating environmental concerns into designing and delivering services.

Factor Four and Factor Ten

The concept of Factor Four – promoted by the Wuppertal Institute and the Rocky Mountain Institute – calls for ‘doubling economic growth while halving resource use’ with the aim of creating a 75% reduction in resource consumption per unit of production. The concept was introduced in 1998, in a book of the same name (written by L. Hunter Lovins and Amory Lovins of the Rocky Mountain Institute, and Ernst von Weizsäcker, of the Wuppertal Institute for Climate, Environment & Energy).

The book provides 50 examples of feasible technologies that could be used to deliver the necessary improvement in resource efficiency. The origins of the concept date back to the 1972 Club of Rome report, *Limits to Growth*, which issued a stark warning that economic growth was using up resources at an unsustainable rate.

The related idea of a Factor Ten derives from the 1994 *Carnoules Declaration*, in which prominent scientists have called for a '90% reduction in resource consumption per unit production'. Factor Ten emphasises the need for an absolute, rather than relative, de-linking of economic growth from natural resource use.

Design for Environment

Design for the Environment (DFE) is an umbrella term used to describe the techniques for incorporating environmental considerations into products and services before they enter the production phase. DFE involves examining a product's entire projected lifecycle and identifying measures that can be taken to minimise the environmental impact of the product throughout that lifecycle.

DFE strategies may identify design measures that can be taken to reduce the environmental impact in each of the following key phases of a product lifecycle:

- Raw materials: designing in opportunities for resource conservation and low impact raw material use.
- Manufacturing: providing for measures relating to cleaner production and eco-efficiency during the production phase.
- Product use: ensuring provision in the product-use phase for considerations relating to improved energy and water efficiency, reduced material use, and increased durability.
- End-of-life: key design considerations include design for disassembly, product re-use, and design for recycling.

USEFUL WEB ADDRESS

www.wupperinst.org/FactorFour

USEFUL WEB ADDRESS

dfe-sce.nrc-cnrc.gc.ca/home_e.html
www.cfsd.org.uk

Eco-Efficiency

USEFUL WEB ADDRESS

www.nisp.org.uk

Industrial Symbiosis

Industrial Symbiosis is an attempt to apply the principles of industrial ecology to develop more 'closed loop' production systems, and to mimic the natural process of symbiosis in which one species lives in a balanced and mutually-dependent partnership with another. In an industrial context, symbiosis involves partnering industries in which the waste products of one type of business represent the materials needed for another. This was first put into practice on a large scale in Kalundborg, Denmark where a coal fired power plant, a refinery, a pharmaceuticals and enzymes manufacturer, and a plasterboard manufacturer, in partnership with the municipal government and several smaller companies, formed a network to find opportunities to use each other's wastes as raw material inputs.

Within the UK, the concept of industrial symbiosis is being championed by the National Industrial Symbiosis Programme (NISP) which is a business led initiative aiming to promote links between industries from different sectors to create sustainable commercial opportunities and improve resource efficiency.

Environmental Management

Businesses are all too aware of their responsibility to protect and enhance the environment in which they work and operate. However, managing activities in a responsible way not only helps to reduce the negative impacts on the environment e.g. production of waste, but also helps reduce production costs. The integration of environmental best practice measures into key areas of the business stream and current working practices can help organisations become more environmentally responsible. Best practice measures include development of specific environmental risk registers, control procedures, environmental performance indicators, development of environmental policies and CSR strategies to investigating and solving specific environmental issues.

Corporate Social Responsibility and SD

A simple definition is that CSR is about how companies manage their business processes to produce an overall positive impact on society. In modern business terminology, CSR is about improving the way in which business responds to the needs of its stakeholders, customers, employees, suppliers and the local community.

Best-practice employers in Wales are already embracing CSR as an integral part of their business planning processes and are benefiting from the enhanced community profile and experiential learning opportunities that can result. The Welsh Assembly Government, working through its key agencies and partner organisations, is keen to promote these potential benefits to all Welsh businesses.

Environmental Management Systems

ISO 14000

ISO 14000 standards can be best described as serving the basic elements of an effective Environmental Management System (EMS); for instance, in creating an environmental policy, setting objectives and targets, implementing a program to achieve those objectives, monitoring and measuring its effectiveness, correcting problems, and reviewing the system to improve overall environmental efficiency. The benefits of applying the ISO 14000 standards include environmental pollution control; reducing environmental liability, risk and insurance rates; assisting with legislative and environmental compliance; and improving conditions both for employees and corporations.

Environmental Management

USEFUL WEB ADDRESS

www.iso.ch

The ISO 14000 series can be classified broadly into two categories: Environmental Management Systems (ISO 14001 and ISO 14004) and Environmental Management Tools that encompasses all other ISO 14000 standards.

The Wales Management Council on behalf of the Welsh Assembly Government manages the *Inside Welsh Industry* best practice visit programme which provides opportunities for Welsh businesses to visit others who are exemplars in the use of one or more areas of best practice initiatives that include ISO accreditation, supply chain management and partnering.

BS 8555

Building on BS EN ISO 14001 and the EU Eco-Management and Audit Scheme (EMAS), BS 8555 is a British Standard that provides guidance to all organisations on the phased implementation, maintenance and improvement of a formal Environmental Management System (EMS). BS 8555 makes particular reference to small and medium sized enterprises (SMEs) but is applicable to any organisation, regardless of the nature of the business activity undertaken, location or level of maturity. It outlines an implementation process that can be undertaken in up to six separate phases and allows for phased acknowledgement of progress towards full EMS implementation.

BS 8555 also includes advice on the integration and use of environmental performance evaluation techniques during the implementation process and the co-ordination of an EMS with other management systems. BS 8555 helps organisations improve their environmental performance and their supply chain relationships with the following guidance:

- Describes a six-phase incremental approach to implementing an EMS using environmental performance evaluation.
- Provides information to organisations on environmental performance management and the use of environmental performance indicators.
- Helps organisations satisfy the environmental criteria increasingly being set in contract tenders by new and existing major clients.

For many organisations, the attainment of a formal environmental management system such as ISO 14000 series can be very challenging, and in some cases not relevant to current business needs. The Green Dragon Environmental Standard contributes towards the achievement of International and European environmental standards, like ISO 14001 and EMAS.

Green Dragon

Wales has its own environmental management system standard. This is the Green Dragon standard, that has been developed for businesses located in Wales, who wish to follow a tailored stepped approach to environmental management. The standard follows five steps that include a commitment to environmental responsibility, compliance with environmental legislation, management of environmental impacts, development and application of an environmental management programme and continual environmental improvement. Companies achieving any level of the Green Dragon Standard receive a certificate demonstrating the level of the company's achievements and commitment to environmental management. Companies achieving levels 3, 4 and 5 also receive a plaque and are able to display the Green Dragon logo on their stationery and marketing materials. The standard does not automatically allow companies who have reached Level 5 to be certificated to ISO14001 or EMAS, but the programme identifies that these companies may be successful in obtaining these. In some areas of Wales, funding support is available to small and medium sized businesses to assist in achieving the first two levels of the standard. The Green Dragon programme also provides grant funding to SMEs for up to 30% of environmental remediation equipment costs to a maximum of £10,000. To date, some 492 organisations in Wales have made a commitment to Green Dragon and many of these have reached Level 2 of the standard. 56 organisations have reached Level 3 or above.

Green Dragon was developed by Arena Network and Groundwork Wales and is delivered and supported through partnership between Arena Network, Groundwork, the Welsh Development Agency, the Welsh Assembly Government and Environment Agency Wales, and through funding from the European Regional Development Fund.

USEFUL WEB ADDRESS

www.greendragonems.com

Environmental Management

USEFUL WEB ADDRESS

www.uneptie.org/pc/pc/tools/lca.htm

Life Cycle Assessment

Life cycle assessment (LCA) provides a systematic approach to measuring resource consumption and environmental releases throughout the entire life cycle of a product or service – from resource extraction, raw material transport, manufacture, distribution and use, to final disposal. This is achieved by compiling a detailed ‘inventory’ of energy and resource usage, waste generation, emissions and discharges in each stage of the product life cycle.

Life cycle assessments can be a powerful tool for effective decision-making when comparing the relative environmental merits of two or more product or service categories (for example when comparing the environmental attributes of glass, plastic and paper containers, or evaluating disposable versus washable nappies). LCA activities often form an important component of product eco-labels and design for environment activities, as well as identifying effective cleaner production possibilities.

While an LCA can be a powerful tool for making informed policy decisions, they are frequently both expensive and complex to implement. The environmental (and social) impacts of raw material extraction may vary from country to country, and subjective assessments are often required in assessing the relative weightings that emissions should be given.

USEFUL WEB ADDRESS

www.productstewardship.us

Product Stewardship

Product stewardship is a term used to describe a product-centred approach to environmental management, where manufacturers – either voluntarily or under pressure from government – take responsibility for the entire life-cycle of a product and its packaging. Product stewardship is most effective when introduced at the product design stage, as is increasingly evidenced, for example, in the design of motor vehicles.

Eco-labelling and Social Labelling

An eco-label is a market-driven environmental policy instrument used by policy-makers to promote environmentally preferable goods and services. The label is applied to a product or service, warranting that it complies with certain predetermined environmental and/or social criteria.

Eco-labels provide a guide for consumers to choose products and services that are deemed to be less harmful to the environment than other products within the same category, with the aim of thus encouraging the production of more environmentally appropriate products.

The success of an eco-labelling initiative is dependent on a number of factors including: the level of environmental awareness and purchasing power of consumers; the credibility of the label; and the nature of the market for the eco-labelled products. Although the distribution of eco-labels is largely concentrated in the industrialised countries, there have been a number of recent labelling initiatives within developing countries.

The ISO 14000 series distinguishes between three different types of environmental labels:

- Type I labels are voluntary, multiple-criteria third-party practitioner programmes that award labels demonstrating environmental preference for a product within a particular product category based on life-cycle considerations. Well established eco-labelling schemes falling into this category include the EU Flower, the Nordic Swan, Germany's Blue Angel, the US Green Seal, and Canada's Environmental Choice.
- Type II labels consist of informative self-declaration claims made without independent third-party certification by manufacturers, importers, distributors, and/or retailers. Examples may include 'dolphin friendly' or 'ozone friendly'.
- Type III labels are quantified product information labels based upon independent verification using pre-set indices based on life cycle impacts. Such labels typically list a 'menu' of a product's environmental impacts throughout its life cycle.

USEFUL WEB ADDRESS

www.eco-labels.org/home.cfm

www.epa.gov/opptintr/epp/documents/envlab/report.htm

www.iso.org/iso/en/ISOOnline.frontpage

Environmental Management

USEFUL WEB ADDRESS

www.projectsigma.com/RnDStreams/5_chain.asp

Supply Chain Management

There are two overriding reasons why a company that has committed to sustainable development will look to its supply chain. First, because most of the innovations it may wish to implement within its own operations will depend heavily on the quality (and sustainability) of its supply chain. As has been demonstrated in the global movement to quality management systems, a company's own best efforts can easily be undermined if its suppliers are working to lower standards. Secondly, management for sustainability implies a focus on long-term risk reduction, and in achieving this, an organisation's dependence on other companies' values and performance is critical.

An important supply chain management tool is the supply chain audit, whereby corporate purchasers undertake an assessment of the social and/or environmental performance of their suppliers. Effective supply chain audits can be a valuable means for larger and more visible companies to transmit pressure for change, as well as necessary knowledge, down the supply chain. The automotive sector provides a good example of this, with original equipment manufacturers increasingly imposing environmental and social standards as procurement conditions. There are a number of documented sources that suggest the requirements of some multinationals have been a big factor in improving conditions in certain labour markets. While there has been some progress in promoting responsibility through corporate supply chains, it is recognised this remains an area where current practice remains relatively weak. Benchmarks such as the UK's Business in the Community Corporate Responsibility Index indicate that supply chain management is one of the least developed areas, a finding that has been confirmed in a recent international study by the World Bank and Business for Social Responsibility.

Social Accounting and Auditing

An important means of enhancing the accountability of companies to their different stakeholders is through the use of social accounting and auditing, two tools that assist companies to identify and assess the impacts of their activities on society and to review the nature of their relationship with their stakeholders. *Social accounting* refers to the process whereby an organisation collects, analyses and interprets descriptive, quantitative and qualitative information in order to produce an accurate account of its social performance, with the underlying objective of improving on that performance. *Social auditing* is the process of reviewing and verifying the social accounts at the end of each social audit cycle (the actual audit). The term 'social auditing' is also sometimes used generically for the whole process of accounting and auditing.

USEFUL WEB ADDRESS

www.accountability.org.uk

Sustainability Reporting

Corporate reporting on environmental and social issues has grown dramatically over the last ten years. A recent international survey found that 45% of the Global Fortune Top 250 companies regularly publish a separate social, environmental and/or sustainability report. The most active sectors are utilities, chemicals, forestry, pulp and paper, mining, and oil and gas. Initially focusing on environmental, health and safety, or social issues, corporate reporting on non-financial matters is beginning to shift towards integrated 'sustainability reporting' on the triple-bottom-line of environmental, social and economic performance. An important motivation for this shift to sustainability reporting has been the development of the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI). UK public companies are also being encouraged to publish more information on environmental and social risks and strategies to deal with them through the provisions of the Operating and Financial Review (OFR) which came into force in 2005.

Measuring Sustainable Development – Macro Indicators

As every decision-maker knows, 'you cannot manage what you do not measure.' For companies and policy-makers seeking to promote sustainable development, it is critical that they are able to monitor and track their sustainability performance against an agreed set of indicators.

For environmental issues we have many macro indicators – such as levels of air pollution, bathing water quality or the number of butterfly species. For social issues there are indicators such as life expectancy, crime rates and access to health and education – all measures of quality of life. However, for economic issues, the main indicator of progress at the national level is Gross Domestic Product (GDP), a purely financial measure. Governments' reliance on GDP as the main measure of their economic health (and therefore of enormous importance to policy formulation) has been heavily questioned since GDP has no way of distinguishing between an economic transaction that is socially or environmentally beneficial and one that is destructive.

This section highlights some key initiatives aimed at tracking the performance of countries and/or economic entities in terms of their contribution to social and environmental, as well as economic, development. In addition to these macro-level indicators, there are a number of initiatives aimed at assessing the sustainability performance of individual companies (such as the Sustainability Reporting Guidelines of the Global Reporting Initiative).

USEFUL WEB ADDRESS

www.undp.org/hdr2003

United Nations Human Development Index

The UN Human Development Index (HDI) was developed in 1990 as an alternative to traditional measures of economic development. It is a summary composite index that measures each country's average achievements in three basic aspects of human development:

- Longevity – measured by life expectancy at birth.
- Knowledge – measured by a combination of the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratio.
- Standard of living – measured by GDP per capita.

The HDI was created to re-emphasise that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth. It provides a useful basis for developing and evaluating national policy options and priorities, particularly on such issues as health and education. It is valuable in highlighting differences within and between countries, and across gender, ethnicity, and other socio-economic categories.

Index for Sustainable Economic Welfare

The traditional headline indicator of progress has been Gross Domestic Product (GDP), intended as a measure of economic growth. However this indicator fails to consider some of the side-effects of economic growth, many of which are making us worse off. GDP is merely a gross tally of products and services bought and sold, with no distinctions between transactions that add to well-being, and those that diminish it. For example GDP does not directly account for increasing inequality, pollution or damage to people's health and the environment, and it treats the commercial aspects of crime, divorce and other elements of social breakdown as economic gains.

At an international level, the United Nations Human Development Programme argues that all countries should pay much more attention to the quality rather than the quantity of growth. It identifies five damaging forms of growth that are 'neither sustainable nor worth sustaining':

- Jobless growth – economic growth that does not translate into jobs.
- Voiceless growth – growth that is not matched by the spread of democracy.
- Rootless growth – growth that stifles the development of separate cultural identity.
- Futureless growth – growth that despoils the environment.
- Ruthless growth – growth in which most of the benefits are seized by the rich.

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www.foe.co.uk/progress

Measuring Sustainable Development – Macro Indicators

Responsible Competitiveness Index

The Responsible Competitiveness Index is the result of eighteen months work by AccountAbility and The Copenhagen Centre, including consultations with the World Bank, the World Economic Forum, and the European Commission. It considers corporate responsibility alongside traditional factors affecting a country's economic competitiveness, and provides a basis for understanding the correlation between national competitiveness and corporate responsibility.

The report sets out the first annual results of two newly designed, innovative, country-level performance indexes:

- The National Corporate Responsibility Index describes the comparative performance of 51 countries in providing an enabling environment for responsible business practices in the future.
- The Responsible Competitiveness Index explores the links between corporate responsibility and the national competitiveness of the same group of countries.

This first attempt to connect micro-level corporate responsibility practices with macro-level productivity and competitiveness effects raises as many questions as it answers. Centrally, however, it indicates the imperative and challenge to ensure that:

- Corporate responsibility is amplified through its alignment with a nation's competitiveness.
- National competitiveness strategies are enhanced, both quantitatively and qualitatively, through their alignment with corporate responsibility practices.

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www.ciesin.columbia.edu/indicators/ESI

World Economic Forum's Environment Sustainability Index

The Environmental Sustainability Index (ESI) is based on a project developed by the Environment Task Force of the Global Leaders for Tomorrow of the World Economic Forum, in collaboration with the Yale Centre for Environmental Law and Policy and the Centre for International Earth Science Information Network (CIESIN) at Columbia University.

The ESI is a measure of overall progress towards environmental sustainability, developed for 142 countries. The ESI scores are based upon a set of 20 core 'indicators', each of which combines two to eight variables for a total of 68 underlying variables. The ESI permits cross-national comparisons of environmental progress in a systematic and quantitative fashion and represents a first step towards a more analytically driven approach to national environmental decision-making.

Ecological Footprints

Ecological footprint analysis is a graphic approach for conceptualising the environmental impact of a particular individual (or organisation, product, service or political region), and for understanding how this relates to the overall carrying capacity of the planet. Footprint analysis identifies the area of bio-productive land that is required to provide the ecological services for a particular individual, organisation, product or activity. Footprint calculations are based on two simple ideas: firstly, that we can keep track of most of the resources we consume and wastes we generate; and secondly, that most of these resource and waste flows can be converted to a biologically productive area necessary to provide these functions.

It has been estimated that with a global population of 6 billion, each individual world-wide has access to approximately 2 hectares of biologically productive area. Assuming that one sets aside 12% of this are for bio-diversity protection (as stipulated for example by the World Commission for Environment and Development), this leaves only 1.7 hectares per capita. Assuming no further ecological degradation, and using the same underlying assumptions for the above calculation, this means that the amount of available biologically productive space will drop to 1 hectare per capita once the world population reaches its predicted 10 billion. Amongst other uses, it is interesting and useful to compare the ecological footprint of an average citizen in a highly developed country, where resource-intensive lifestyles are the norm, against that of a citizen in a poorer, more rural part of the world.

Measuring Sustainable Development – Macro Indicators

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www.wales.gov.uk/keypubstatistics/forwalesheadline/content/sustainable/2004/hdw20040323-e.htm

www.sustainable-development.gov.uk/performance/performance.htm

UK Indicators

The UK Government, Welsh Assembly and Scottish Executive all developed different approaches to monitoring progress towards SD in terms of the number and nature of indicators used. With the development of the UK SD Strategy, a set of 20 top level *'Framework Indicators'* and 48 other supporting indicators have been developed across the general themes of:

- Sustainable consumption and production
- Climate change and energy
- Natural resource protection and environmental enhancement
- Sustainable communities.

The Scottish Executive have adopted a set of 24 indicators to support their SD Strategy, and in Wales, the SD indicators set includes 12 headline indicators related to:

- Employment
- Education
- Crime
- Housing
- Climate change
- Air quality
- River water quality
- Wildlife
- Waste
- Welsh language
- Electricity from renewable sources
- Ecological footprint.

Political Landscape: Worldwide

Over-arching Political Commitments

UN Commission on SD

The Commission on Sustainable Development was established in February 1993 as a functional commission of the Economic and Social Council (ECOSOC). A General Assembly Resolution states that the Commission's functions include rationalising the inter-governmental decision-making capacity for the integration of environmental and development issues and the implementation of Agenda 21 at national, regional, and international levels. The Commission is an inter-governmental body, and its members are elected by the ECOSOC from Member States of the UN and other specialised agencies. Its 53 members are elected for a period of three years and meet annually to review progress in the implementation of recommendations and commitments contained in the final documents of the UNCED and to promote a dialogue of sustainable development in the international community.

UN Environment Programme (UNEP)

UNEP aims to encourage global partnership in environmental protection. Established in 1972, it acts as a 'catalyst, advocate, educator and facilitator' to promote sustainable development issues in international organisations, national governments, NGOs and private sector bodies. Its objectives include assessing environmental conditions in global, regional and national spheres; developing instruments to enhance environmental protection; strengthening institutions for the robust management of the environment; and, facilitating the transfer of knowledge and technology to secure sustainable development. UNEP hosts several environment convention secretariats, such as the Ozone Secretariat and the Montreal Protocol's Multilateral Fund, CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora), the Convention on Biological Diversity, the Convention on Migratory Species, and a growing family of chemicals-related agreements, including the Basel Convention on the Transboundary Movement of Hazardous Wastes and the recently negotiated Stockholm Convention on Persistent Organic Pollutants (POPs).

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www.un.org/esa/sustdev/csd/csd.htm

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www.unep.org

Over-arching Political Commitments

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www.ilo.org

International Labour Organisation Core Conventions on Labour Standards

Founded in 1919, the International Labour Organisation (ILO) is the oldest UN agency. It has a unique tri-partite decision making process, with representation from governments, labour organisations and employers' organisations. An important recognised weakness of the ILO conventions is the lack of implementation and enforcement, even by governments that have formally ratified the Core Conventions as part of their national law.

The following eight ILO Conventions have been identified by the ILO's Governing Body as being fundamental to the rights of workers, irrespective of the level of development of individual Member States. These rights are a precondition for all the others in that they are intended to provide workers with the tools that they need to strive freely for the improvement of individual and collective conditions of work. These core conventions also underpin a number of the international business codes of practice relating to sustainability issues.

Freedom of Association

Freedom of Association and Protection of the Right to Organise Convention (1948): This establishes the right of all workers and employers to form and join organisations of their own choosing without prior authorisation, and lays down a series of guarantees for the free functioning of organisations without interference by the public authorities.

Right to Organise and Collective Bargaining Convention (1949): This provides for protection against anti-union discrimination, for protection of workers' and employers' organisations against acts of interference by each other, and for measures to promote and encourage collective bargaining.

The Abolition of Forced Labour

Forced Labour Convention (1930): This requires the suppression of forced or compulsory labour in all forms. The term 'forced labour' excludes obligations such as military service; fulfillment of civic duties; work exacted as a consequence of a legal conviction, under certain conditions; work exacted in cases of natural emergencies; and minor communal services.

Abolition of Forced Labour Convention (1957): This prohibits the use of any form of forced or compulsory labour. This includes forced labour as a means of political coercion or punishment for the expression of political or ideological views, workforce mobilisation for purposes of economic development, or punishment for participation in strikes, or as part of racial, social, national or religious discrimination.

Equality

■ **DISCRIMINATION (EMPLOYMENT AND OCCUPATION) CONVENTION (1958)**

This calls for a national policy to eliminate discrimination in access to employment, training and working conditions, on grounds of race, colour, sex, religion, political opinion, national extraction or social origin, and to promote equality of opportunity and treatment.

Ratifying states are to promote equality of opportunity and treatment by declaring and pursuing a national policy aimed at eliminating all forms of discrimination in respect of employment and occupation.

- **EQUAL REMUNERATION CONVENTION (1951)** This calls for equal pay for men and women for work of equal value.

The Elimination of Child Labour

- **MINIMUM AGE CONVENTION (1973)** States ratifying this Convention undertake to pursue a national policy designed to ensure the effective abolition of child labour and to raise progressively the minimum age for admission to employment or work. The Convention sets a number of minimum ages depending on the type of employment or work.

- **WORST FORMS OF CHILD LABOUR CONVENTION (1999)** This calls for immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour as a matter of urgency. It applies to all persons under the age of 18, and covers such issues as slavery, child soldiers, child prostitution, the use of a child for illicit activities, such as drug trafficking, and work that is likely to harm the health, safety or morals of children.

Universal Declaration of Human Rights

Adopted by the United Nations General Assembly on December 10, 1948, the Universal Declaration of Human Rights is the primary UN document establishing human rights, standards and norms. Although the Declaration was intended to be non-binding, through time its various provisions have become sufficiently respected by states that

Over-arching Political Commitments

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www.unhchr.ch/udhr

the Declaration can now be said to constitute customary international law. The Declaration was developed as ‘a common standard of achievement for all peoples and all nations.’ It calls on every individual and every organ of society to promote respect for these rights and freedoms and to secure their universal recognition and observance through the implementation of progressive measures and through teaching and education. The Convention is specifically referred to in a number of the international business codes of practice. In addition to stating that everyone has the right to life, liberty and security of person, the Declaration also makes specific provision for a number of economic and legal rights. Key provisions of the Declaration include for example:

- Prohibiting slavery, torture, and cruel, inhuman or degrading treatment or punishment.
- Equal recognition and protection before the law, including protection against arbitrary arrest, detention or exile.
- Protection of privacy, family, home and correspondence, and against attacks upon reputation.
- The right to freedom of movement and residence within the borders of each state.
- The right to own property, with protection against being arbitrarily deprived thereof.
- The right to freedom of thought, conscience and religion, freedom of opinion and expression, and the right to peaceful assembly and association.
- The right to social security and to work, to equal pay for equal work, to fair and just remuneration, and to forming and joining trade unions.
- The right to rest and leisure, including periodic holidays with pay.
- The right to a standard of living adequate for health and well being, including the right to freely participate in the cultural activities of the community.
- The right to education, which should be freely available at least in the elementary stages.

Rio Declaration on Environment and Development

The Rio Declaration on Environment and Development was one of the principal legal and political outcomes of the United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992 (the 'Earth Summit'). Although a non-binding declaration, its statement of general principles is widely perceived as being reflective of customary international law. The Declaration is an important statement of principle relating to sustainable development, explicitly stating that 'the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations' (Principle 3). For sustainable development to be achieved, it maintains that 'environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.' (Principle 4).

The Declaration reflects a political bargain between the affluent North concerned with global environmental problems, and the poorer South concerned mainly with economic development. In essence the resulting compromise saw the North committing to taking some of the initial steps in addressing global environmental concerns, and to providing 'new and additional' funding to assist the South in following suit. In return, the South agreed to co-operate in protecting the global environment.

The Millennium Development Goals

The Millennium Development Goals – agreed by world leaders at the Millennium Summit held at the UN General Assembly in September 2000 – are an ambitious agenda for reducing poverty and improving lives. For each goal, one or more targets have been set. Most of these targets are for 2015, with 1990 as the baseline. Many of these targets were developed at international conferences during the 1990s. They were later compiled and became known as the International Development Goals. In September 2000 the United Nations unanimously adopted the Millennium Declaration. After consultations among various international agencies, the General Assembly recognised the following Millennium Development Goals as part of the road map for implementing the Millennium Declaration.

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www.unep.org/dpdl/Law/PDF/Rio_Declaration.pdf

Over-arching Political Commitments

- Eradicate extreme poverty and hunger – Target for 2015: Halve the proportion of people living on less than a dollar a day and those who suffer from hunger.
- Achieve universal primary education – Target for 2015: Ensure that all boys and girls complete primary school.
- Promote gender equality and empower women – Targets: Eliminate gender disparities in primary and secondary education preferably by 2005, and at all levels by 2015.
- Reduce child mortality – Target for 2015: Reduce by two-thirds the mortality rate among children under five.
- Improve maternal health – Target for 2015: Reduce by three-quarters the ratio of women dying in childbirth.
- Combat HIV/Aids, malaria and other diseases – Target for 2015: Halt and begin to reverse the spread of HIV/Aids and the incidence of malaria and other major diseases.

Ensure Environmental Sustainability – Targets:

- Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.
- By 2015, reduce by half the proportion of people without access to safe drinking water.
- By 2020 achieve significant improvement in the lives of at least 100 million slum dwellers.

Develop a Global Partnership for Development – Targets:

- Develop further an open trading and financial system that includes a commitment to good governance, development and poverty reduction – nationally and internationally.
- Address the least developed countries' special needs, and the special needs of landlocked and Small Island Developing States.
- Deal comprehensively with developing countries' debt problems.
- Develop decent and productive work for youth.

- In co-operation with pharmaceutical companies, provide access to affordable essential drugs in developing countries.
- In co-operation with the private sector, make available the benefits of new technologies – especially information and communications technologies.

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www.un.org/millenniumgoals
www.developmentgoals.org

Johannesburg Plan of Implementation (WSSD)

The World Summit on Sustainable Development (WSSD), held in Johannesburg in September 2002, resulted in two key negotiated outcomes: the Johannesburg Declaration (a statement of principles similar to the Rio Declaration), and the Johannesburg Plan of Implementation. The Plan of Implementation is a detailed set of commitments and targets for action aimed at achieving more effective implementation of sustainable development objectives. Together, these politically negotiated texts reaffirmed sustainable development as a central element of the international agenda and gave new impetus to global action to fight poverty and protect the environment. In addition to these two negotiated outcomes, the WSSD also resulted in a number of partnerships between governments, business and civil society (see box on page 57).

The Johannesburg Plan of Implementation is a comprehensive text, containing more than 50 pages of undertakings. Following is a summary of some of the more specific and significant commitments. A number of the targets simply re-affirm the Millennium Declaration Goals (MDG).

- By 2015, halve the proportion of people whose income is less than \$1 a day (MDG).
- By 2020, achieve a significant improvement in the lives of at least 100 million slum dwellers (MDG).
- By 2015, halve the proportion of people without access to safe drinking water (MDG).
- By 2015, halve the proportion of people without access to basic sanitation.
- By 2015 reduce the mortality rates for infants and children under five by two thirds of the prevailing rate in 2000 (MDG).

Over-arching Political Commitments

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www.johannesburgsummit.org

- Diversify energy supply and substantially increase the global share of renewable energy source in order to increase its contribution to total energy supply.
- Aim by 2020 to use and produce chemicals in ways that do not lead to significant adverse effects on human health and the environment.
- By 2005, further develop a strategic approach to international chemicals management, based on the Bahia Declaration and Priorities for Action beyond 2000.
- By 2008, encourage countries to implement the new globally harmonized system for the classification and labeling of chemicals, with a view to having the system fully operational.
- Ensure that, by 2015, every child will be able to complete a full course of primary schooling.
- Achieve by 2010 a significant reduction in the current rate of loss of biological diversity.
- Develop integrated water resources management and water efficiency plans by 2005.
- Where possible by 2015, maintain or restore depleted fish stocks to levels that can produce the maximum sustainable yield.
- Actively promote corporate responsibility and accountability, including through the full development and effective implementation of intergovernmental agreements and measures, international initiatives and public-private partnerships, and appropriate national regulations.
- Enhance health education with the objective of achieving improved health literacy on a global basis by 2010.

WSSD 'TYPE II' PARTNERSHIPS

An important set of outcomes of the WSSD was what is known as 'Type II' partnerships between governments, business and civil society. ('Type I' agreements refer to the negotiated agreements that were concluded between governments alone – namely the Johannesburg Plan of Implementation and the Johannesburg Declaration).

Over 220 partnerships (with \$235 million in resources) were identified in advance of the Summit, with more than 60 partnerships formally announced during the Summit itself. Following is a very brief outline of some of these partnerships, many of which have business sectoral organisations and/or individual companies as key signatories.

Water and Sanitation

- The European Union announced the 'Water for Life' initiative that seeks to engage partners to meet goals for water and sanitation, primarily in Africa and Central Asia.
- The Asia Development Bank provided a \$5 million grant to UN Habitat and \$500 million in fast-track credit for the Water for Asian Cities Programme.
- The United States announced \$970 million in investments over the next three years in water and sanitation projects in a number of countries.

Energy

- Nine major electricity companies signed a range of agreements with the UN to facilitate technical co-operation for sustainable energy projects in developing countries.
- UNEP and the US EPA announced a partnership on Cleaner Fuels and Vehicles with broad support from confirmed partners from the private sector, the NGO community, developed and developing countries.
- The South African energy utility Eskom announced a partnership to extend modern energy services to neighbouring countries.

Health

- The United States announced a commitment to spend \$2.3 billion through 2003 on health, some of which was earmarked earlier for the Global Fund.

Biodiversity and Ecosystem Management

- The UN has received 32 partnership initiatives with \$100 million in resources.

Climate and Atmosphere

USEFUL WEB ADDRESS

www.iisd.ca/process/climate_atm.htm

UN Framework Convention on Climate Change

The UN Framework Convention on Climate Change (UNFCCC) was signed at the 1992 Rio Earth Summit by more than 150 countries. The ultimate objective of the Convention is the 'stabilisation of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic (human-induced) interference with the climate system.' The treaty took effect in March 1994 upon the ratification of more than 50 countries. More than 180 countries have now ratified the Convention.

The UNFCCC establishes a framework of general principles and institutions, and sets up a process through which governments meet regularly to develop a more detailed blueprint for action to tackle climate change. Such an approach allows countries to discuss an issue even before there is full agreement that there is, in fact, a problem. The Convention also sets in place a number of preliminary commitments for ratifying Parties, including for example:

- To 'take climate change into account' in such matters as agriculture, energy, natural resources, and activities involving sea-coasts.
- To develop national programmes to slow climate change.
- To share technology and to co-operate in other ways to reduce Greenhouse Gas (GHG) emissions.
- To develop a greenhouse gas 'inventory' listing their national sources (such as factories and transport) and 'sinks' (forests and other natural ecosystems that absorb GHG).

The UNFCCC does not set any legally binding level of emissions, but states the aim that Annex I countries (see Glossary on pages 59-60) should return their emissions to 1990 levels by the year 2000. The more specific targets for reducing GHG emissions are contained in the Kyoto Protocol, outlined below.

GLOSSARY OF TERMS FOR CLIMATE CHANGE

Climate change negotiations are notoriously complex, and have developed their own detailed vocabulary of terms and phrases. Following is a very brief selection of just some of these numerous terms. These are provided for general background and illustrative purposes only. More detailed glossaries are available for example from www.ipieca.org or www.climatenetwork.org/canglossary.html

Annex I Countries Annex I to the UNFCCC lists all the countries in the OECD in 1990 as well as countries with economies in transition (Central and Eastern Europe). In terms of Article 4.2 of the Conventions, all of these (developed) countries commit themselves to the aim of reducing individually or jointly to their 1990 levels of GHG emissions by the year 2000.

Annex B Countries Annex B of the Kyoto Protocol lists all those developed countries that have agreed to specific commitments to control their GHG emissions in the period 2008-2012. This list of countries is similar to, though not quite the same as, the list of UNFCCC Annex I Countries.

Carbon Sinks Any naturally occurring thing, like forests or specific kinds of agricultural activity, that can be grown or created specifically to help absorb more carbon dioxide.

Clean Development Mechanism (CDM) A project-based Kyoto Mechanism. CDM projects undertaken in developing countries with investments from Annex I (developed) countries are intended to meet two objectives: to address the sustainable development needs of the host country, and to generate emissions credits that can be used by the investing party to satisfy commitments of Annex I Parties. If approved by the CDM Executive Board, projects that limit or reduce GHG emissions can earn the investor (government or industry) credits, known as Certified Emission Reduction Units (CERs).

Climate Change A change in climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability over comparable time periods. A critical causal element of climate change is the increase in greenhouse gases resulting from human activities.

Emissions Intensity Greenhouse gas emissions released as measured against some other factor like the Gross Domestic Product (GDP) of a nation, province or state. Other standards by which emissions intensity can be measured include: per barrel of oil; per million cubic feet of natural gas; per tonne of coal, cement, etc. produced; or per megawatt hour of electricity.

Climate and Atmosphere

Emissions Trading A market-based system that allows companies flexibility to choose the most cost-effective solutions to achieve established environmental goals. Companies that produce fewer emissions than they are allowed could sell their 'excess capacity' to others who do not.

Greenhouse Gases (GHGs) The main greenhouse gases are water vapour, carbon dioxide, ozone, methane, nitrous oxide and the chlorofluorocarbons (CFCs). All but CFCs occur naturally. Collectively, these gases make up less than one per cent of our atmosphere, sustaining what is called the Earth's 'natural greenhouse effect.' Without this, Earth would be 30 degrees cooler – essentially, a frozen planet.

Kyoto Mechanisms The Kyoto Protocol allows for creation and transfer of emissions credits or permits between countries so as to minimise the cost of reducing global greenhouse emissions. These mechanisms include: Joint Implementation (emission-reducing projects between two countries with a Kyoto target); Clean Development Mechanisms (project-based reductions between developed and developing countries), and International Emissions Trading (international trading of international greenhouse gas permits).

Inter-governmental Panel on Climate Change (IPCC) A panel set up by the World Meteorological Organisation and the United Nations Environment Programme in 1988, in recognition of potential global climate change. The panel's role is to assess the scientific, technical and socio-economic information needed to understand the risk of human-induced climate change. IPCC does not carry out research or monitor climate related data, but bases its assessments mainly on peer reviewed and published scientific/technical literature.

Joint Implementation (JI) A Kyoto Mechanism that allows developed countries, or companies from these countries, to cooperate on projects to reduce GHG emissions and to share the resulting Emission Reduction Units (ERUs).

Tradeable Emissions Permits Part of a domestic emissions trading system that allows an emitter a specified number of tonnes of emissions. Once this limit has been reached, the permit expires. Total number of permits in any tradable market equals the level of emissions sought by the regulating authorities.

The Kyoto Protocol

Adopted in 1997 in Kyoto, Japan, the Kyoto Protocol requires developed countries (listed in Annex B to the Convention) to meet differentiated reduction targets for their emissions of a 'basket' of six GHGs by 2008-2012, relative to 1990 levels. The Protocol has developed detailed rules and procedures (the 'Kyoto Mechanisms') that allow the developed

countries to meet their emissions reduction commitments using actions outside their own borders, with the aim of reducing the economic impacts of GHG emission-reduction requirements and increasing the feasibility of achieving initial reductions. Russia ratified the Protocol in November 2004. Russia's entry was critical to the legal bearing of the treaty because it had to be ratified by at least 55 countries, and by nations accounting for at least 55% greenhouse gases before becoming valid. The Kyoto Protocol became a legally binding treaty on 16 February 2005.

Vienna Convention for the Protection of the Ozone Layer

The 1985 Vienna Convention is a framework agreement and does not contain legally binding controls or targets. The Convention encourages inter-governmental co-operation on research, systematic observation of the ozone layer, monitoring of CFC production, and the exchange of information. It commits its Parties to take general measures to protect human health and the environment against human activities that modify the ozone layer. The Convention entered into force in September 1988, and at the time of writing, the Convention had 191 ratifications, acceptances, approvals, or accessions.

The Montreal Protocol

Following the discovery of the Antarctic ozone hole in late 1985, governments recognised the need for stronger measures to reduce the production and consumption of a number of CFCs and several Halons. The Protocol was designed so that the phase-out schedules could be revised on the basis of periodic scientific and technological assessments. Following such assessments, the Protocol was adjusted to accelerate the phase-out schedules in London in 1990, Copenhagen in 1992, Vienna in 1995, Montreal in 1997, and Beijing in 1999. It has also been adjusted to introduce more stringent control measures and to extend the list of controlled substances. The Montreal Protocol entered into force in January 1989, and at the time of writing, 189 countries had ratified, accepted, approved, or acceded to the Protocol.

Following successful implementation of the Convention and its Protocols, the production of the most damaging ozone depleting substances was eliminated by 1996 in developed countries (except for a few critical uses); it is expected that they will be eliminated by 2010 in developing countries. With full adherence to this agreement, it is anticipated the ozone layer will recover over the next 50 years.

USEFUL WEB ADDRESS

www.unep.ch/ozone

Chemicals

USEFUL WEB ADDRESS

www.pic.int

[www.iisd.ca/process/
chemical_management.htm](http://www.iisd.ca/process/chemical_management.htm)

Rotterdam Convention on Prior Informed Consent for Hazardous Chemicals

The Rotterdam Convention on Prior Informed Consent (PIC) is a means for formally obtaining and disseminating information so that importing countries can decide whether or not to receive future shipments of certain chemicals; and for ensuring compliance with these decisions by exporting countries. The Convention promotes shared responsibility between exporting and importing countries in protecting human health and the environment from the harmful effects of such chemicals, and provides for the exchange of information about potentially hazardous chemicals that may be exported and imported. A key goal of the Rotterdam PIC Convention is to provide technical assistance for developing countries and countries with economies in transition to develop the infrastructure and capacity necessary to implement the provisions of the Convention. The Rotterdam PIC Convention currently covers forty-one pesticides, including six severely hazardous pesticide formulations and 11 industrial chemicals (including for example Aldrin, DDT, Dieldrin, heptachlor, mercury compounds, and pentachlorophenol), as well as five industrial chemicals (including polybrominated biphenyls, polychlorinated biphenyls, polychlorinated terphenyls). It is expected that more will be added as the provisions of the Convention are implemented. Governments agreed to continue to implement the voluntary PIC procedure during the interim period using the new procedures contained in the Convention until the Convention formally entered into force. The Convention entered into force on 24 February 2004.

Stockholm Convention on Persistent Organic Pollutants

The Stockholm Convention on Persistent Organic Pollutants (POPS) was adopted and opened for signature on 22 May 2001. Persistent Organic Pollutants are synthetic chemicals that are extremely resistant to natural breakdown processes, highly toxic and that build up (or bio-accumulate) in the fatty tissues of animals and humans. The treaty calls for international action on twelve POPS grouped into three categories: pesticides, industrial chemicals, and unintended by-products (dioxins and furans). The Convention seeks the elimination or restriction of production and use of all intentionally produced POPS, as well as the continuing minimisation and, where feasible, ultimate elimination of the release of unintentionally produced POPS. Stockpiles must be managed and disposed of in a safe, efficient and environmentally sound manner. The Convention imposes certain trade restrictions. The chemicals listed for elimination under the Convention are the pesticides aldrin, chlordane, dieldrin, endrin, heptachlor, hexachlorobenzene (HCB), mirex and toxaphene, as well as polychlorinated biphenyls (PCBS). Continued use of the pesticide DDT is allowed for disease vector control until safe, affordable and effective alternatives are in place. Countries must make determined efforts to identify, label and remove PCB-containing equipment from use by 2025. The Convention also seeks the continuing minimisation and, where feasible, elimination of the releases of unintentionally produced POPS such as the industrial by-products dioxins and furans. As of July 2004, the Convention had 151 signatories and 70 Parties. The Convention entered into force on 17 May 2004.

USEFUL WEB ADDRESS

www.pops.int

Waste

USEFUL WEB ADDRESS

www.basel.int

Basel Convention on Transboundary Hazardous Waste

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in 1989 and entered into force on 5 May 1992. It was created to address increasing concerns over the management, disposal and transboundary movements of hazardous wastes. The main principles of the Convention are that: transboundary movements of hazardous wastes should be reduced to a minimum, consistent with their environmentally sound management; hazardous wastes should be treated and disposed of as close as possible to their source of generation; and hazardous waste generation should be reduced and minimised at source. The Basel Convention covers hazardous wastes that are explosive, flammable, poisonous, infectious, corrosive, toxic, or eco-toxic. The categories of wastes and the hazardous characteristics are set out in Annexes I to III of the Convention. Lists of specific wastes characterised as hazardous or nonhazardous are in Annexes VIII and IX. As of April 2005, 165 states were Parties to the Convention.

Producer Responsibility Regulations (WEEE and ELV)

Waste Electrical and Electronic Equipment (WEEE)

The WEEE Directive 2002/96 EC is designed to reduce the quantity of waste from electrical and electronic equipment and encourage its re-use, recovery, and recycling. It is directed at producers, distributors and recyclers of electrical and electronic equipment, including household appliances, IT and telecoms equipment, audiovisual equipment, lighting, electrical and electronic tools, toys, and leisure and sports equipment. The Directive sets out criteria for the collection, treatment, recovery, and recycling of WEEE, and makes producers responsible for financing most of these activities. Distributors of WEEE are also subject to certain obligations, including the take-back of WEEE, ensuring that the WEEE they collect is delivered to a designated collection facility to allow it to undergo treatment and recovery, and informing private householders of WEEE take-back facilities available to them. Private householders are able to return WEEE at no cost.

In July 2004, the UK Government issued a set of draft Regulations, designed to implement provisions of the WEEE Directive. In a consultation document, the Government asked a number of stakeholders to respond to the draft measures. This can be found on the DEFRA website. The full transposition of the WEEE Directive through the Waste Electrical and Electronic Equipment (Producer Responsibility) Regulations is expected to take place sometime in 2005.

The main provisions of the WEEE Directive require that Member States:

- set up systems to encourage the separate collection of WEEE and the return of WEEE free of charge to the final holder;
- achieve a collection rate of at least 4 kilograms on average per inhabitant per year from private households by 31 December 2006;
- ensure that all WEEE collected from private households is transported to treatment facilities authorised by the Directive; and
- ensure that producers make provision for the financing of future waste.

In conjunction with the WEEE Directive, the Restriction of the Use of Certain Hazardous Substances in electrical and electronic equipment (RoHS) Directive 2002/95 EC aims to limit the environmental impact of electrical and electronic equipment when it reaches the end of its life. Its principal objectives include minimising the use of hazardous substances and ensuring the harmonisation of legislation controlling hazardous substances in electrical and electronic equipment across the EU. The Directive requires that new electrical and electronic equipment placed on the market from 1 July 2006 substitute the use of a number of heavy metals (such as lead, mercury, cadmium, and hexavalent chromium) and brominated flame retardants (including polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE)). There are, however, a number of exempted applications of these substances. Manufacturers will need to ensure that their products comply with the agreed levels of hazardous substances. In August 2005, the Commission issued a Decision amending the RoHS Directive, and establishing the maximum concentration values for specific hazardous substances in electrical and electronic equipment.

USEFUL WEB ADDRESS

www.defra.gov.uk/environment/waste/topics/electrical/
www.dti.gov.uk/sustainability/weee/

Waste

USEFUL WEB ADDRESS

www.sepa.org.uk/producer/elvs.htm
www.defra.gov.uk/environment/waste/topics/elvehicledir.htm

End of Life Vehicles (ELV)

The End of Life Directive 2000/53 EC, which came into effect on 21 October 2000, contains provisions that aim to prevent the production of waste from vehicles, and encourage the recovery, reuse and recycling of end-of-life vehicles and their components in an attempt to improve the environmental performance of the economic operators involved in the life cycle of vehicles. In particular, the Directive:

- restricts the use of certain heavy metals in the manufacture of new vehicles;
- introduces a Certificate of Destruction, which triggers the removal of a vehicle from the national vehicle register;
- requires that certain components are marked to aid recovery and recycling, and that information is provided to facilitate dismantling;
- requires the establishment of adequate systems for the collection of ELVs, and specifies the site, storage and operating standards that must be met by businesses permitted to treat ELVs; and
- requires that ELVs can only be treated by authorised facilities, which must meet specified environmental standards.

These requirements were transposed into UK law by the End-of-Life Vehicles Regulations 2003 (SI 2003/2635) which came into effect on 3 November 2003. The remaining Directive provisions, which relate to producer responsibility, have been transposed through the ELV (Producer Responsibility) Regulations 2005 (SI 2005/263) which came into force on 3 March 2005. It covers:

- the 'free take-back' of ELVs from 1 January 2007;
- producer obligations to provide for the take-back of ELVs through accessible networks of authorised treatment facilities and collection points; and
- producer and authorised treatment facility obligations in relation to meeting recovery and recycling targets from 2006 onwards.

Biodiversity

Ramsar Convention on Wetlands of International Importance

The Convention on Wetlands, signed in Ramsar, Iran, in 1971, provides the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources. The Convention entered into force in 1975 and there are presently 146 Contracting Parties to the Convention, with 1458 wetland sites, totalling 125.4 million hectares as of September 2003, designated for inclusion in the Ramsar List of Wetlands of International Importance. The secretariat, known as the 'Ramsar Bureau' is housed in the headquarters of the World Conservation Union (IUCN) in Gland, Switzerland. The treaty includes four main commitments for contracting parties:

- To designate at least one wetland for inclusion on the 'Ramsar List' and to promote its conservation, including, where appropriate, its wise use.
- To include wetland conservation considerations in national land-use planning.
- To establish nature reserves in wetlands, whether or not they are included in the Ramsar List, and to promote training in the fields of wetland research and management.
- To consult with other Contracting Parties about implementation of the Convention.

Convention in International Trade in Endangered Wild Flora and Fauna Species

The CITES Convention was adopted on 2 March 1973, and entered into force on 1 July 1975. There are currently 169 Parties to the Convention. The Convention's conservation goals are to: monitor and stop commercial international trade in endangered species; maintain species under international commercial exploitation; and assist countries toward sustainable use of species through international trade CITES Parties

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www.ramsar.org

Biodiversity

USEFUL WEB ADDRESS

www.cites.org
www.iisd.ca/process/biodiv_wildlife.htm

regulate wildlife trade through controls and regulations on species listed in three Appendices:

- **APPENDIX I** species are those that are endangered due to international trade; their exchange is permitted only in exceptional circumstances.
- **APPENDIX II** species are subject to strictly regulated trade based on quotas and/or permits to prevent their unsustainable use, and controls to maintain ecosystems and prevent species from becoming eligible for Appendix I.
- **APPENDIX III** species are subject to regulation by a Party who requires the co-operation of other Parties to control international trade.

The operational bodies of CITES include its Standing Committee, as well as several scientific advisory committees: the Animals Committee; the Plants Committee; and their subcommittees, the Nomenclature Committee and the Identification Manual Committee. Located in Geneva, the CITES Secretariat Convention provisions and assists CITES Parties and Committees.

UN Convention on Biological Diversity

The UN Convention on Biological Diversity, negotiated under the auspices of the United Nations Environment Programme (UNEP), was opened for signature at the 1992 Rio Earth Summit, and entered into force in December 1993. To date, more than 180 countries have ratified the Convention. The three objectives of the CBD are to promote 'the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilisation of genetic resources.' The Convention recognises that the conservation of biological diversity is 'a common concern of humankind' and an integral part of the development process. The agreement covers all ecosystems, species, and genetic resources. It links traditional conservation efforts to the economic goal of using biological resources sustainably, and it sets principles for the fair and equitable sharing of the benefits arising from the use of genetic resources, notably those destined for commercial use. It also covers the rapidly expanding field of biotechnology, addressing technology development and transfer, benefit sharing and bio-safety.

The Cartagena Protocol on Biosafety

Following five years of negotiations, the Cartagena Protocol on Biosafety was agreed in January 2000. This Protocol seeks to ensure the safe transfer, handling and use of living modified organisms (LMOs) that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements. The Protocol establishes an advance informed agreement procedure for imports of LMOs for intentional introduction into the environment, and also incorporates the precautionary principle and mechanisms for risk assessment and risk management. The Protocol entered into force on 11 September 2003, 90 days from the submission of the 50th instrument of ratification.

UN Convention to Combat Desertification

The UN Convention to Combat Desertification aims to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/ or desertification, particularly in Africa, through effective action at all levels, supported by international co-operation and partnership arrangements. The Convention was adopted in Paris on 17 June 1994 and entered into force in December 1996. It has been ratified by more than 190 countries, making it truly global in reach. The Convention recognises the physical, biological and socio-economic aspects of desertification, the importance of redirecting technology transfer so that it is demand driven, and the involvement of local populations. The core of the CCD is the development of national and sub-regional and regional action programmes by national governments in co-operation with donors, local populations and nongovernmental organisations.

USEFUL WEB ADDRESS

www.unccd.int

Wales and the World: Wales' Role in The Sustainable European Regions Networks and the Network of Regional Governments for Sustainable Development (NRG4SD)

USEFUL WEB ADDRESS

www.sustainable-euregions.net

www.nrg4sd.net

The National Assembly for Wales has a legal duty to pursue sustainable development in exercising its functions which is built into its constitution by section 121 of the Government of Wales Act 1998. The NRG4SD has been established to encourage a dialogue at regional government level in order to promote sustainable development in international policy. The Sustainable European Regions Network is funded by the EC Commission, and aims to produce cutting edge policy recommendations for sustainable regional development in Member States. The Assembly Government Sustainable Development Action Plan 2004-2007 observes its commitment to promoting best practice through the outputs of both the Sustainable European Regions Network and NRG4SD. Furthermore, in a 2004 publication titled *Starting to Live Differently – the Sustainable Development Scheme* the Assembly recognises its role as feeding into the UN's Commission for Sustainable Development through NRG4SD.

In March 2004, Cardiff hosted the fourth international NRG4SD conference. Over three hundred delegates attended, including official representatives from 32 regional governments or associations of regional governments. This level of commitment from the Assembly Government is reflective of its position as a global player on the sustainable development agenda.

Jonathon Porritt CBE, Chair of the UK Sustainable Development Commission has observed that:

“The Welsh Assembly Government is unique in the clarity of its vision and commitment to embed SD at the heart of everything it does. The range of Action Plan commitments reflect the need for Wales to act both internally and to play its part in influencing UK and World issues. It represents an exciting opportunity to build on the progress already made in Wales, and to focus on making real and lasting changes.”

Political Landscape: Wales

The Constitution

Wales a Better Country

In setting out the Welsh Assembly Government's strategic agenda, 'Wales: A Better Country' provides a framing vision for the individual policies and programmes of the Assembly, as well as those of all other partners and agencies. The strategic nature of the document is reflected in its explicit integration of all sectors of government and society towards the collective goal of 'a fairer, more prosperous, healthier and better educated country'. In placing such emphasis on the importance of social and human capital, the Assembly acknowledges the value that can be added through investing in people. Whilst the aims of the policy are seen to be challenging, they are challenges which Wales is perceived as being more than capable of living up to, if an integrated approach is adopted.

In setting out the vision which Wales should be working towards, reference is made to the roles of the Welsh economy; health and education; political accountability; community and identity; bilingualism and a sense of place; environmental sustainability; and international collaboration. Building on the strengths of these individual components will provide the collective ingredients for a sustainable future in Wales. In doing so priority is given not only to reinforcing the strength of healthy communities, but also stimulating and facilitating the engagement of those individuals and spaces most in-need of support. This is to be achieved through application of a finer spatial scale of awareness in Assembly policy, thereby making it capable of reflecting upon the diverse make-up of communities and landscapes in Wales.

In bringing together all the different facets of Assembly policy, the document outlines a series of 'commitments, aims and implementation plans' which will allow the Assembly to deliver on its tangible over-arching objectives of: helping more people into jobs; improving health; delivering strong and safe communities; and creating better jobs and skills. Central to the Assembly's strategic agenda, therefore, is ensuring that 'social, economic and environmental improvement work together to create positive change'. Achievement of the vision relies not only on effective leadership, but also the enhancement of a culture of self-help and engagement amongst the people and institutions of Wales in a manner which, true to the classic principle of sustainability, 'ensures that future generations enjoy better prospects in life, and are not landed with a legacy of problems bequeathed by us'.

The Constitution

Learning to Live Differently

In meeting their statutory duty (under section 121 of the Government of Wales Act) to promote sustainable development, 'A Sustainable Wales – Learning to Live Differently' (2000) represents the first stage of the Assembly's strategic attempt at implementing a new approach to policy and decision making. As is acknowledged within the document, meeting the requirements of sustainable development is not something that can be achieved overnight, but rather 'Learning to live differently is the start of a long and evolving process'. Indeed, the document is more orientated towards encouraging and facilitating a different approach to socio-economic and environmental development within Wales, than it is towards actual hard target setting. At this point in time, the priority was seen to be the establishment of a clearer vision of 'what we are trying to achieve in the long term'. In doing so, emphasis was placed on raising awareness as to the need for sustainable development principles to cut across all areas of Assembly work, as well as that of all other partners and actors in Wales.

Starting to Live Differently

The policy document 'Starting to Live Differently' (2004) looks to both consolidate the progress that has been made since the launch of 'Learning to Live Differently' (2000), and work towards the development of a specific 'action plan' for the future delivery of sustainable development practice in Wales. The document does not change any of the underlying principles of the original strategy. Rather, it updates them as appropriate and in doing so, establishes the framework for a plan of action for operationalising them in a way that can deliver tangible goals, as well as facilitating transparent monitoring and evaluation. 'Starting to Live Differently' reconfirms the position of the sustainable development scheme as 'the over-arching framework for all the work of the Assembly'. It also reaffirms the importance of sustainable development as a concept that all actors in Wales need to be committed to. It is a goal which the Assembly has a lead role in delivering, but not something which it can achieve on its own.

Sustainable Development Action Plan 2004-2007

The Sustainable Development Action Plan sets out the priority areas which have been identified, through a process of consultation, as requiring 'fresh action'. It highlights those areas where action will need

to be taken by the Assembly to deliver change, as well as the action that it will be asking others to take. The document will be under regular review, and is intended to be an evolving plan, in order that it remains effective in its choice of priorities and means of delivering change. The Action Plan answers recent calls for the Assembly to produce specific timescales and targets in its pursuit of sustainable development. The targets are split between four main categories of work: 'Living Differently'; 'Leadership and Delivery'; 'Making our Money Talk', and; 'Measuring our Progress'.

Measuring the achievement of targets will be aided by the use a set of predefined sustainability indicators (with one such example being the Ecological Footprint). However, the Action Plan also acknowledges the imminent need for a wider set of indicators to be produced which are capable of reflecting more fully, the key sustainability pressures facing Wales. The Action Plan is itself evidence of the good progress that has been made since the first sustainable development scheme 'Learning to Live Differently' was published in 2000; but it also highlights the full extent of what has to be achieved in facing up to 'the challenge of genuinely integrating sustainable development into everything that is done at all levels of government and civil society'.

Making the Connections

The self-proclaimed priority of the Assembly Government for their second term, is to improve the delivery and sustainability of public services in Wales. This aim, and the objectives for achieving it, are set out in the 2004 consultation document 'Making the Connections: Delivering Better Services for Wales'. The over-arching goal of the Assembly is to achieve a far greater level of integration and joined-up thinking in public service provision. Such a framework for the delivery of excellent public services is seen as an essential component of 'a prosperous, sustainable, bilingual, healthier and better-educated Wales'.

The merger of a number of Assembly Sponsored Public Bodies is seen as a significant step towards the achievement of more sustainable service delivery. In parallel to this, by consulting on ways to reduce bureaucracy, increase responsiveness and accountability, and improve front line services, the Assembly, in collaboration with its public service delivery partners, is seeking to put the citizen in centre stage.

Environment

Environment Agency Wales

Environment Agency Wales is both an Assembly Sponsored Public Body and also part of the corporate Environment Agency for England and Wales. What this means in practice, is that whilst it obtains direction from, and reports back to the Assembly; it also draws upon the expertise of its larger body and thus addresses Welsh environmental issues within the context of the wider environment of England and beyond.

Through its remit Environment Agency Wales works towards achieving sustainable development by monitoring and managing a diverse range of environmental activities across land, sea and air. In doing so it looks to protect and enhance the environment in a way which simultaneously 'takes account of economic and social considerations'. Embracing the strategy of leading by example, it strives to 'influence others to achieve positive outcomes through changes in attitude and behaviour'. An important factor in its ability to do so, is its role as 'an independent advisor on environmental matters affecting policy-making within the Assembly and more widely'.

Agenda 21

The Agenda 21 initiative was launched through the Rio Earth Summit of 1992. In looking not only to address the problems of today, but in doing so, to create a better and more sustainable future, it places significant emphasis on the role of government as both actor and facilitator in the process of change. At the local level, this role is being realised through the development and implementation of Local Agenda 21 plans.

The incorporation of all five capital resources through the Local Agenda 21 plans, is reflected in the fact that, although facilitated by government, the goal of sustainable development is regarded as very much a community issue involving all sections of society, including community groups, businesses and individuals. Within Wales, the Local Agenda 21 plans are integrated within Community Strategies. Put simply, very often the Community Strategy will detail 'what' is needed locally, whilst the Local Agenda 21 plan will suggest 'how' such aspirations can be delivered. In doing so the Local Agenda 21 plan is able to make the concept of sustainable development 'meaningful' for local government as well as communities.

Through engaging with community actors the Local Agenda 21 plans seek to educate society as to the countless opportunities for operationalising sustainable development practices within all their daily activities. For example, as the Welsh Local Government Association itself acknowledges: 'Local Authorities have a key role in delivering sustainable development through a wide range of essential local services such as education, local transport, social services, land use planning, environmental protection and countryside management, economic development and waste management.'

Spatial Plan

The Wales Spatial Plan acts as a direct compliment to the Assembly's strategic vision document 'Wales: A Better Country'. It sets out the spatial framework for the management of Welsh resources and territory and in doing so it provides a mechanism for both celebrating, and making allowance for, the rich diversity of conditions which exist throughout Wales. Driven by five guiding themes of building sustainable communities; promoting a sustainable economy; valuing our environment; achieving sustainable accessibility; and, respecting distinctiveness; the spatial plan seeks to optimise the management of natural, human and manufactured capital in a way which, in turn, will promote the growth of social and financial capital.

Setting a strategic integrating agenda for the next 20 years, the spatial plan aims to ensure that the Assembly's policies and programmes come together effectively with the workings of local government, business and other partners across Wales to enable a sustainable future for all. By definition delivery of the spatial plan requires joined up thinking, not only within organisations and institutions, but also between them. Similarly, its success depends as much on co-operation and co-ordination within defined geographical areas, as it does across such spatial boundaries. Thus, in giving recognition to the fact that 'different solutions will be required according to different local circumstances', the real value of the spatial plan is in the way in which it builds spatial flexibility into the implementation of an over-arching national vision: it provides 'a bridge between local aspirations and strategic visions'. Reflective of this, is the fact that implementation of the Plan takes places jointly at national and area levels, with ongoing monitoring, evaluation and learning from the process, being a similarly collective experience.

Environment

USEFUL WEB ADDRESS

www.walesfootprint.org

Footprint

An Ecological Footprint is an indicator of how much of the world's resources are being used. It measures the productive land and sea area that is required in order to support the way that people live. The Footprint is calculated in global hectares of 'earth portions'. Recent footprint measurements for the people of Wales have shown that, on average, they are using 5.25 hectares per person. Although this is below the UK and European average, and significantly below the footprint of North America, it is substantially above the sustainable 'fair earth share' of approximately 1.92 hectares per person. Effectively, what this means is that 'if everyone in the world lived like the average Welsh person, we would need nearly three planets to support our lifestyles'.

In a bid to shrink Wales' footprint a range of policy recommendations have recently been identified for the Welsh Assembly Government through the 'Reducing Wales' Ecological Footprint' report (prepared by the Stockholm Environment Institute (SEI)). The conclusion reached in this report is that 'whilst some good work has already been done in Wales', 'a more radical agenda is required to help Wales prepare for a new sustainable future'. However, whilst the report places an emphasis on the importance of stringent government policy to help bring about change, it also acknowledges the fact that 'everyone has to contribute': 'the government needs to set the legal framework, introduce fiscal changes and support environmentally-sound solutions; businesses need to take responsibility not only for sustainable production processes but also for their products after they have been sold; and every one of us has to try and adopt a sustainable lifestyle' (SEI 2005). Thus, although the Welsh Assembly is clearly moving in the right direction with its legal commitment to build sustainable development into everything it does, in order to add real value to this goal, it is a vision which needs to be embraced as much by the people of Wales, as by the politicians.

Emerging Environment Strategy

Although concentrated around the development of an environment strategy for Wales, the Assembly's recent consultation document 'Our Environment Our Future' clearly makes the connection between all three elements of sustainable development – the social, the economic and, of course, the environment. As it acknowledges right from the outset: 'by making the wrong choices and damaging our environment we can adversely affect our health and well being, blight our living space and hamper our economic performance'. Designed to act as a strategic framework, the environment strategy will establish a vision for the Welsh environment of 2025, which everybody can sign up to.

The key environmental issues facing Wales and what is currently being done to address them, are set out in the consultation document under six main headings: Climate change; managing the land and sea; sustainable use of resources and ecosystem services; biodiversity; quality of life; making the connections. Drawing on other framework documents like 'Wales: A Better Country', and 'A Winning Wales: The National Economic Development Strategy'; using monitoring techniques such as the Ecological Footprint; and (through reference to the 'Spatial Plan') making allowance for both the diverse nature of the Welsh environment, and the pressures placed upon it; the environment strategy aims to help facilitate the mainstreaming of sustainable development in both policy and practice. In doing so, it will provide clarity as to how different agencies and actions contribute to environmental outcomes, and thus, how everyone can play a role in improving their environment.

Community and Society

Communities First

The Communities First programme seeks to address deprivation through spatial targeting of resources to those communities most in need of additional support. Although based on an essentially top-down selection of areas (made by the Assembly in accordance with evidence of deprivation), the programme is managed in a way which encourages self-help and engagement amongst community members, thereby 'building confidence' and the development of a 'can do' culture. By design, its role is to facilitate communities achieving their own perceived needs, as opposed to simply enforcing solutions upon them. Key to this approach is the fact that resources have been committed to the Communities First programme for at least 10 years – reflecting the fact that the development of 'capital' (be it socio-economic or environmental), requires more than a short-term solution.

Although obviously heavily orientated around building human and social capital, Communities First, by design, recognises the relationship between these goals and the importance of simultaneously enhancing natural and manufactured capital within the deprived areas. Thus, in meeting the overriding principles of social inclusion, sustainable development and equal opportunities, its aims range from improving the natural and physical environment, to lowering crime rates and creating more confident, better skilled and more empowered local people. Clearly though, the very fact that Communities First applies a facilitative, as opposed to directive approach, means once again, that it is not a programme which the Assembly can be expected to deliver on its own. Its success is instead dependent on the creation of a self-sustainable collaboration between a multi-level and multi-sectoral partnership of actors. This ethos is reflected in the procedure for monitoring and recording of outcomes, which also operates at both the national and community level.

Local Community Strategies

Local Authorities in Wales have a duty under the Local Government Act 2000 to prepare a community strategy. Essentially the collective purpose of the community strategies is to achieve an enhanced quality of life for the people of Wales through individually targeted community led action, to improve social, economic and environmental well-being at the local level. Carrying forward an over-arching Assembly goal of joined-up thinking and resource planning, the community strategies provide a focus for 'joint working between local authorities, the voluntary and business sectors and other agencies, to ensure that they effectively meet community needs and aspirations'. Parallel to this, by identifying how the Assembly's priorities relate to local priorities, the Strategies facilitate a two-way process of learning and development between these different levels. They complement the all-Wales strategic framework 'Wales: A Better Country', by providing a locally tailored strategic framework for all other plans and strategies for the unitary authority area.

Each community strategy is based on a sustainability appraisal – namely, that 'the analysis of needs and the proposed outcomes should integrate economic, social and environmental considerations'. They are designed to balance both long term visions (for 10-15 years) with 'hard edged outcome targets' for both the short and medium term. Covering the whole of a local authority area, their role as a strategic framework document allows local actors to avoid 'gaps, overlaps and/or contradictions'.

Although an essential element of each strategy is to encourage active citizenship and with this, widespread local ownership amongst all community groups, their delivery is also linked to wider changes in public services provision. These changes aim to ensure that 'the activities of the various bodies which provide services to the public are better co-ordinated; are responsive to the concerns of local communities; are delivered in ways that suit the people who depend on them; are environmentally sustainable and take account of the needs of future generations'.

Community and Society

USEFUL WEB ADDRESS

www.accac.org.uk/uploads/documents/212.pdf
www.esd-wales.org.uk

Education for Sustainable Development (ESD)

Education plays a vitally important part in the pursuit of SD. Unless people understand what SD is and how it relates to their lives, they are unlikely to be willing or able to play a part in the process as citizens, voters, consumers, investors or workers. ESD helps people from a young age to develop a greater sense of the importance of individual responsibility. They can also become more aware of how their own actions and choices can affect the lives of others now and in the future, both within their own families and local communities and also throughout the world.

In Wales an Advisory Panel was established in 2001 to promote ESD effectively in schools and beyond. It later merged with the Global Citizenship Working Group to form the Education for Sustainable Development and Global Citizenship Advisory Panel. It includes representatives from the Assembly, education bodies ACCAC, ESTYN and ELWa, The Environment Agency, Countryside Council for Wales, the Welsh Local Government Association and a several leading NGOs. The work of the Panel, and the organisations that contribute to it, has done a great deal to promote the incorporation of the principles of SD and global citizenship throughout the curriculum and teacher training within Wales.

ESD in Wales is also supported by SCAN, an environmental education network run by the National Museums and Galleries of Wales and supported by the Countryside Council for Wales. It provides resources for teachers who wanted to give their pupils the opportunity to have their say on environmental matters in the spirit of Agenda 21. SCAN sets up projects that teach pupils about current environmental and sustainable development issues and shows them how they can play an important role in the decisions that affect our futures.

Where/What is 'Rural' Wales?

While Wales is perceived as predominantly 'rural', industry, especially mining and quarrying, has influenced life and culture in virtually every corner. Consequently the boundaries between rural and urban Wales are even historically indistinct. Areas classified as 'rural' are also highly heterogeneous c.f. Amlwch, Aberystwyth and Aberhosan. Recently the distinction has further eroded as typically, 'urban' problems e.g. law and order, social deprivation, poor housing, have become rural issues.

Geographic boundaries are at best vague, as even within the urbanised belt of the North East, South and South East, there are areas that could be regarded as 'rural' with tracts of open, farmed countryside e.g. Gower, Maelor, Dyffryn Ceiriog and much of Monmouthshire. Broadband and the web have also brought urban jobs to the countryside. So not only alternative lifestyles but alternative work and pluri-activity characterise 'rural areas'. There is and always has been an interdependence between town and country, with communities, families and individuals moving regularly for employment from one to the other that confounds attempts to separate the two (Gareth Wyn Jones and Eimir Young 2003).

The Rural Development Plan for Wales 2000-2006 acknowledges that '... the conceptual difficulty in defining rural Wales is mirrored in practical terms, so that even rural Wales is not an unambiguous identifiable economic region. As a result, statistical and economic information is not available on a predefined or commonly agreed basis'.

This lack of an agreed definition of rurality is not confined to Wales and in 2002 the Office of the Deputy Prime Minister (ODPM), as a follow-up to the Urban and Rural White Papers, conducted a review of Urban and Rural definitions. It was concluded that existing definitions are inadequate in the long-term and a new 'Rural Urban Definitions project' funded by the Office for National Statistics (ONS), Department for Environment, Food and Rural Affairs (Defra), ODPM, the Countryside Agency (CA) and National Assembly for Wales (NAW) was set up to produce a harmonised classification of both urban and rural areas for England and Wales.

Despite this concerted effort to fine tune the definitions there are compelling arguments for rejecting development that reinforces a 'rural/urban' divide. The rapid changes in the global and agricultural economy, in individual social aspirations and community structure must be recognised and a strategy developed around areas of potential economic growth and social vitality throughout Wales emphasising the social, environmental and economic value of the Welsh countryside, one of Wales' enduring assets, and the potential of all citizens (Gareth Wyn Jones and Eimir Young 2003). The Wales Spatial Plan (2005) in its emphasis on the need to co-operate across traditional geographic and sectoral boundaries and to move away from compartmentalised thinking, points the way.

USEFUL WEB ADDRESS

www.wefo.wales.gov.uk/resource/ruraldevplan_e.pdf
www.odpm.gov.uk/
www.defra.gov.uk/rural/ruralwp/default.htm
www.statistics.gov.uk/geography/nrudp.asp

Diversity

Equality Agenda – Plan for Wales

The Assembly government, through the Government of Wales Act (section 120), has a legal duty to act in a manner which shows ‘due regard to the principle that there should be equality of opportunity for all people’. Although still lacking an overall equality strategy, the Assembly is nevertheless currently working towards mainstreaming the seven strands of equality (race, gender, disability, age, sexual orientation, religion and belief, and Welsh language) across all of its practices and areas of work. In parallel to this, at the local level, the Welsh Local Government Association’s Equalities Unit provides advice and assistance on how the Wales equality agenda can also be operationalised within each local authority organisation, through the ‘Equality Standard’.

This commitment to achieving equality of opportunity in Wales underpins the Assembly’s other cross-cutting objective of sustainable development. The act of ‘mainstreaming’ equality is itself just the beginning of a far longer process of developing a fuller understanding of the diverse needs of the people of Wales. In doing so, though, the Assembly is also bringing itself much closer to achieving ‘the development of policies and services that are responsive to those needs’. Both implicitly and explicitly, therefore, commitment to the equality agenda remains central to the sustainable growth of all five capital resources in Wales.

Welsh Language Board Strategic Plans

For a detailed analysis of Welsh in Wales see Williams (2005).

The Welsh language and culture is a major element distinguishing Wales from the rest of the United Kingdom. It is one of the oldest surviving languages in Europe with 575,640 speakers recorded in the 2001 census, and a further 222,077 claiming other language skills.

Wales has been politically and legally incorporated into England since the Acts of Union 1536 and 1542. This had a significant impact on the status of Welsh: *The people of Wales... do daily use a speech nothing like the natural mother tongue used in England... From henceforth no persons that use the Welsh speech or language shall enjoy any... office or fees within this realm of England and Wales.* As a result of these Acts, Welsh, which had previously been patronised by princes, aristocrats and noblemen was now firmly in the domain of the peasantry.

Ironically, the same Tudor state in its efforts to discourage Catholicism also contributed to not only the survival of the language, but maintaining its elegance, by sanctioning the translation of the New Testament and Prayer Book by William Salesbury in 1567 and the complete Bible by William Morgan in 1588.

Following the Rebecca Riots, which took place from 1839 until the middle of the 1840s and for which the Times blamed poor education, a report was commissioned and published in 1847. This report was considered offensive in Wales because of the arrogant remarks of the three non-Welsh speaking Anglican commissioners regarding the Welsh language, Nonconformity and the morals of the Welsh people in general. As a result, the Report came to be known as 'Brad y Llyfrau Gleision', or 'Treachery of the Blue Books' and has been referred to as *'the Glencoe and the Amritsar of Welsh history'*. To this day, the inferiority complex which it generated permeates the national psyche.

At the turn of the 20th century pioneers such as O.M. Edwards worked to redress the lack of knowledge of Welsh history and culture, and campaigned for education in Welsh. His son Ifan ap O.M. Edwards continued the work with the foundation of Urdd Gobaith Cymru. However, the turning point came in February 1962 when Saunders Lewis in his historic BBC Annual Lecture Tynged yr Iaith ('The Fate of the Welsh language') claimed that "Restoring the Welsh language in Wales is nothing less than a revolution. It is only through revolutionary means that we can succeed." This exhortation led to the formation of the Welsh Language Society, (Cymdeithas yr Iaith Gymraeg), and to a period of campaigning for the rights of the Welsh language.

Following devolution the Welsh Assembly Government (WAG) to its credit has committed itself to creating a bilingual Wales and in February 2003 *Iaith Pawb*, the National Action Plan was published. Its intention is clear 'We are committed to making bilingualism a reality in Wales....' To be 'bilingual' means different things to different people and it remains to be seen whether the policy is sufficiently robust to ensure that eventually all the citizens of Wales will be able speak Welsh to a sufficient level to ensure that Welsh speakers can also use 'the language of their choice'. 'The Story of Welsh Timeline' can be found at the BBC's website and a timeline of a selection of key twentieth century events can be found at the National Library of Wales' web-site.

USEFUL WEB ADDRESS

www.statistics.gov.uk/downloads/census2001/Report_on_the_Welsh_language.pdf

www.llgc.org.uk/drych/drych_s088.htm

www.bbc.co.uk/wales/storyofwelsh/content/thetudors

www.urdd.org/indexS.html

www.llgc.org.uk/ymsgyrchu/iaith/TyngedIaith

www.bwrdd-yr-iaith.org.uk/

www.naldic.org.uk/ITTSEAL2/teaching/B1.cfm

www.bbc.co.uk/wales/storyofwelsh/timeline/index.shtml

www.llgc.org.uk/ymsgyrchu/map-e.htm

Diversity

Iaith Pawb – National Action Plan for a Bilingual Wales

For a detailed analysis of Welsh in Wales see Williams (2005).

Three Acts of Parliament passed between 1988-1998 provide a statutory infrastructure and institutional context to the Welsh language:

In 1988, the *Education Reform Act* gave Welsh the status of a core subject of the National Curriculum in Wales in predominantly Welsh speaking and bilingual schools, and the status of a foundation subject in the rest of the schools in Wales. In 1990 Welsh became a compulsory subject for all students in mainstream state schools Wales. Pupils now study Welsh either as a first or second language depending on location. However, the statutory requirement is notoriously ambiguous with variations at key stages 3 and 4 in particular, arguably dependent on the head teacher's vision and commitment. It should be noted that no legislation exists to promote and protect Welsh medium education at Higher and Further Education. Official data from the Higher Education Funding Council for Wales (HEFCW) which reveals that fewer than 3% of all students study some part of their courses through the medium of Welsh are well known. Welsh medium numbers and provision has remained static over the last decade but as a result of increasing numbers, the percentage of those studying through the medium of Welsh has plummeted (Wyn Jones 2004). Every year 40% of students leave Wales to receive their higher education elsewhere in England and beyond. This exodus has been described as a 'brain haemorrhage' (Glyn Jones 2003). A small country can ill afford to lose the cream of its youth (Welsh speaking or otherwise), especially if they do not return, and action is required to reverse the situation. In *Reaching Higher* WAG states that 'We want an HE sector which is responsive to individuals, including those who wish to pursue elements of their degrees through the medium of Welsh. Over time it should be viewed as part of the mainstream provision covering a selection of courses' (Welsh Assembly Government 2002). Funding to realise this aspiration is vanishingly small (Young 2005).

The Welsh Language Act (1993) provides a statutory framework for treating English and Welsh on a basis of equality. The Welsh Language Board is a statutory organisation, funded by public money established in December 1993 under the terms of the Welsh Language Act. Its main function is to promote and facilitate the use of the Welsh language. It is funded by grant in aid from the National Assembly for Wales, which in 2003/04 amounted to £12 million (albeit only around 0.1% of the Welsh Assembly's budget of £10.3bn in 2003/4)³. Currently the Act is restricted to the obligations of Public bodies in Wales and there are calls for a new Act to include the Private Sector.

The next step in the normalisation of the Welsh language occurred with the *Government of Wales Act 1998*. From the outset, and in accordance with contemporary world politics the Assembly chamber operates bi-lingually. This follows the norm in within European regional legislatures (e.g. Catalonia, Euskadi) or within other supra-national organisations such as the Council of Europe, NATO and the United Nations.

What comes next? In July 2004 WAG announced that the Welsh Language Board would be abolished by 2007, with its duties being absorbed by WAG. This could lead to a statutory vacuum. In the National Eisteddfod 2005 Professor Colin Williams a specialist in linguistic planning outlined the changes needed if the WAG goal of creating a bilingual Wales is to be realised and if Welsh is to achieve real equality with English. In his view legislative powers should reside in Cardiff not Whitehall. WAG should not only be given additional powers but those powers should be used to introduce a series of Acts to protect the language, linguistic rights should be incorporated in a Language Charter and an independent Welsh Language Commissioner appointed to scrutinise and promote the Language policy.

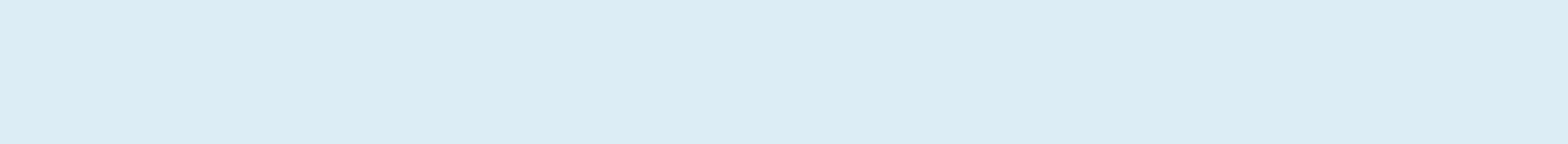
USEFUL WEB ADDRESS

www.bbc.co.uk/wales/schoolgate/aboutschool/content/inwelsh.shtml

www.elwa.co.uk

www.bwrdd-yr-iaith.org.uk

www.walesoffice.gov.uk/2005/better_governance_for_wales_report.pdf



Business and Sustainability Initiatives

There is a plethora of sustainability-related management standards, codes of conduct and sectoral business initiatives. Most of these have been developed over the last decade, with a number of the initial standards being developed around the time of the 1992 Rio Earth Summit.

While these are primarily business initiatives, they have almost all been developed through some form of multi-stakeholder approach, with input into their development being provided – to varying degrees – by business, government, labour bodies and NGOs.

There are various ways of distinguishing between each of these initiatives. One option is to distinguish between *broad principles* that provide general guidance, and *specific standards* that detail a set of benchmark requirements that should be implemented:

- Principles – these provide a set of over-arching values to guide and underpin behaviour.
- Process standards – these define the procedures that a company should put in place (relating for example to the design of management systems or stakeholder engagement practices).
- Performance standards – these define a minimum set of activities which a company should comply with (for example as regards core labour standards) or a level of performance within a field of activity.
- Foundation standards – these provide a basic foundation for a new field, outlining what may be seen as constituting best practice in an emerging area of activities; they may include principles, processes and performance standards.
- Certification standards – these define a set of conditions for which, if complied with, a certificate may be awarded by an independent third party; they may include principles, processes and performance standards.

Another way to distinguish between initiatives is in terms of their scope and objective. This is the approach that has been adopted in this document, where the various different initiatives have been divided as follows:

- **GLOBAL PRINCIPLES AND CODES OF PRACTICE** – the OECD Guidelines for Multinational Enterprises; the ICC Charter for Sustainable Development; and the UN Global Compact.
- **MANAGEMENT SYSTEM SPECIFICATIONS** – ISO 14001, EMAS, SA 8000, OHSAS 18001 and SIGMA.
- **GUIDELINES ON REPORTING AND STAKEHOLDER ENGAGEMENT** – GRI and AA1000.
- **SECTOR-SPECIFIC INITIATIVES** – Forest Stewardship Council, Marine Stewardship Council, Responsible Care.
- **FINANCIAL INITIATIVES** – Dow Jones Sustainability Index, FTSE4GOOD, Equator Principles.
- **THEME-SPECIFIC INITIATIVES** – Ethical Trade Initiative, Extractive Industries Transparency Initiative, Greenhouse Gas Protocol Initiative.

This section focuses on some of the most widely recognised, globally applied, voluntary initiatives. While this list is certainly not exhaustive, it is intended to provide a basic introduction to some of the most prominent initiatives.

Global Principles and Codes of Practice

OECD Guidelines for Multinational Enterprises

The Organisation for Economic Co-operation and Development is a group of 30 member countries – all of them having ‘developed nation’ status – in which the participating governments ‘discuss, develop and perfect economic and social policy.’ The OECD Guidelines for Multinational Enterprises are non-legally binding recommendations that have been designed to ensure that multi-national organisations conduct their business in accordance with the policies of the countries within which they operate. The Guidelines are recommendations addressed by governments to multinational enterprises operating in or from adhering countries. The Guidelines provide voluntary principles for responsible business conduct on issues such as employment and industrial relations, the environment, bribery and corruption, human rights, consumer interests, information disclosure, competition and taxation. The Guidelines were first published in 1976 and were substantially revised in 2000 to focus on sustainable development issues. Since their revision they now include all of the core labour conventions of the International Labour Organisation (ILO). An important feature of these standards is that the guidelines use local practice, rather than internationally-agreed standards as a norm.

A unique feature of the OECD Guidelines is that each signatory government has established a National Contact Point that is responsible for promoting the Guidelines and for investigating and helping to mediate complaints brought against companies by stakeholders at home or abroad. Since 2000, approximately thirty cases have been brought internationally, covering issues such as health and safety at work, freedom of association, the use of forced labour, and company operations in Burma. While a few of the cases have been resolved amicably and others have ceased to be relevant, many have not been resolved.

While these Guidelines differ from most of the others considered below – in that they are for governments, rather than companies, to commit to – they nevertheless make a significant contribution to CSR activities. If effectively implemented they have the potential to demonstrate the efficacy of self-regulation and to contribute to moving company-stakeholder relationships from an adversarial position towards more solutions-focused approaches.

USEFUL WEB ADDRESS

www.oecd.org

Global Principles and Codes of Practice

THE NINE PRINCIPLES OF THE GLOBAL COMPACT

HUMAN RIGHTS

- 1 Support and respect the protection of international human rights within signatory companies' sphere of influence
- 2 Make sure their companies are not complicit in human rights abuses

LABOUR

- 3 Freedom of association and the effective recognition of the right to collective bargaining
- 4 The elimination of all forms of forced and compulsory labour
- 5 The effective abolition of child labour
- 6 The elimination of discrimination in respect of employment and occupation

ENVIRONMENT

- 7 Support a precautionary approach to environmental challenges
- 8 Undertake initiatives to promote greater environmental responsibility
- 9 Encourage the development and diffusion of environmentally friendly technologies

The Global Compact

The Global Compact, proposed at the 1999 World Economic Forum by UN Secretary General Kofi Annan, challenges business leaders 'to make globalisation work for all the world's people.' The Compact is designed to be a platform for dialogue and learning aimed at achieving a shift in attitudes. The Compact incorporates nine basic principles on labour, human rights and the environment. These principles are drawn from the Universal Declaration of Human Rights, the ILO's Fundamental Principles on Rights at Work, and the Rio Principles on Environment and Development.

The Compact has been seen as a significant milestone since it is the first time that the global body politic (in the form of the United Nations) has articulated a position on corporate social responsibility. It is seen to have the potential to develop into a global governance structure on CSR issues. To participate in the Compact, a letter must be submitted from the chief executive officer committing the company to the Compact and its nine principles, and expressing a willingness to participate in its activities. The commitment includes: publicly advocating the Compact and its principles in its mission statement and reports; submitting an annual posting on the Global Compact Website detailing concrete steps that have been taken in acting on these principles, and any lessons learned; and joining with the UN in partnership projects of benefit to developing countries.

USEFUL WEB ADDRESS

www.unglobalcompact.org

Management System Specifications

Underlying any company initiative aimed at promoting sustainable development is the implementation of a structured management system. In the last decade a number of voluntary management standards have been developed, many of which are off-shoots of the certifiable management systems for quality (e.g. ISO 9000) that were developed as part of the Total Quality Management movement. These provide a systematic means of addressing environmental, social, and health and safety concerns, while also enabling companies to obtain internationally recognised certification that may have valuable marketing benefits.

Effectively designed and implemented management systems have a number of important benefits:

- They help companies to identify and prioritise their key environmental and/or social impacts in a structured and systematic manner.
- They provide a framework for setting clear objectives and targets for managing these impacts.
- They ensure that structured processes and procedures are in place for measuring and monitoring performance.

However, management systems are not without their critics:

- At a general level there is the concern that they focus efforts on incremental improvements rather than on the redesign and rethinking that is seen to be necessary for sustainability.
- 'Doing what you do, right' rather than 'doing the right thing'.
- They can be rigid and bureaucratic.
- Related to this, they are often unduly complex procedurally, absorbing large amounts of staff time on document control and administrative procedures.
- Most of the management system specifications make very limited provision for soliciting and integrating stakeholder comments into the management system.
- Their effectiveness can be dependent on the quality and thoroughness of the accrediting body.
- There is a danger that some of the information generated by the management system is not sufficiently integrated within key decision-making processes at a strategic level.

Management System Specifications

USEFUL WEB ADDRESS

www.iso.ch

ISO 14001

In 1993, the International Organisation for Standardisation (ISO) commenced work on the ISO 14000 series. This series addresses various aspects of environmental management, including environmental management systems (EMS), auditing, performance evaluation, eco-labelling, and life cycle assessment. The cornerstone of the series – and the benchmark standard for environmental management systems – is the ISO 14001 EMS Specification. Released in 1996, this is the most widely accepted EMS standard internationally. ISO reports that at the end of 2002 more than 49,400 ISO 14001 certificates had been issued in 118 countries, representing a 35% increase on levels in 2001.

The standard focuses on broad organisational processes, describing how a company should manage its organisational system so that it effectively monitors, measures and continually improves on its environmental performance. Key requirements for obtaining ISO 14001 certification include: Assessing the company's environmental impacts, developing an environmental policy, setting objectives and targets, establishing and maintaining an environmental management programme, implementing procedures for training, communication, monitoring and measurement, and undertaking environmental audits and management reviews.

Eco-Management and Audit Scheme

Similar in concept to ISO 14001, the EMAS standard – developed in 1993 by the European Commission – also serves as a non-regulatory, voluntary standard for environmental management systems and auditing. The scheme has been available for participation by companies since 1995. Originally restricted to companies in industrial sectors, since 2001 the scheme has been open to all economic sectors including public and private services. Participation is voluntary and extends to public or private organisations operating in the European Union and the European Economic Area (EEA) – Iceland, Liechtenstein, and Norway. An increasing number of candidate countries are also implementing the scheme in preparation for their accession to the EU.

To obtain EMAS registration an organisation must conduct an environmental review, establish an effective environmental management system, carry out environmental audits, and provide an external statement of its environmental performance. The environmental review, EMS, audit procedure and the environmental statement must be approved by an accredited EMAS verifier and the validated statement needs to be sent to the EMAS Competent Body for registration and made publicly available before an organisation can use the EMAS logo.

USEFUL WEB ADDRESS

europa.eu.int/comm/environment/emas/index_en.htm

Social Accountability 8000

SA 8000 is the first auditable global standard for ethical sourcing. Developed by the New York based Council for Economic Priorities Accreditation Agency (now known as Social Accountability International), with the support of NGOs, trade unions and companies, it is based predominantly on the conventions of the International Labour Organisation, the Universal Declaration of Human Rights and the UN Convention on the Rights of the Child. SA 8000 is intended to allow companies – in any country and in any sector – to audit and independently verify that their products are sourced from suppliers that meet international labour standards and human rights obligations, including issues of child labour, occupational health and safety, freedom of association, discrimination, disciplinary practices, compensation and management. The majority of companies using SA 8000 are in the retail sector or involved in the manufacture of clothing, toys and shoes, with interest greatest in those companies with high-profile brands.

USEFUL WEB ADDRESS

www.sa-intl.org
www.cepaa.org/SA8000/SA8000.htm

While SA 8000 is very similar to ISO 14001 – in that it specifies an auditable management system aimed at continuous improvement – it differs significantly in that it includes specific performance provisions, and places a greater emphasis on conducting interviews with workers. Despite these differences, a number of companies are beginning to combine their SA 8000 audits with ISO 14001 and ISO 9000 audits as part of a more streamlined management process.

Management System Specifications

USEFUL WEB ADDRESS

www.osha-bs8800-ohsas-18001-health-and-safety.com

Occupational Health and Safety Assessment Series

The OHSAS 18000 series, developed by the British Standards Institute, is an international occupational health and safety management system standard, comparable with ISO 9000 (quality management) and ISO 14001 (EMS). The standard outlines management practices aimed at improving a company's health and safety performance. The OHSAS 18000 series does not provide specific performance criteria, nor does it include detailed specifications for the design of the management system.

Guidelines on Stakeholder Engagement, Reporting and Accountability

An important development in the last ten years has been the rapid increase in corporate reporting on non-financial performance. There are two significant best practice guidelines in this field: the first provides guidance on the substantive issues to be included within a sustainability report, while the second provides a framework to guide the establishment of an inclusive stakeholder engagement process.

Global Reporting Initiative

The Global Reporting Initiative (GRI) was established in 1997 by the Boston-based Coalition for Environmentally Responsible Economies (CERES) and the Tellus Institute, with the goal of elevating sustainability reporting to a level equivalent to financial reporting in terms of credibility, rigour, timeliness and verifiability. The GRI is now an independent organisation, based in the Netherlands, and recognised as a United Nations Environment Programme (UNEP) Collaborating Centre. In 1999 the GRI published the first draft *Sustainability Reporting Guidelines*. These were revised in 2002, following a period of extensive pilot testing. The Guidelines were developed through a collaborative partnership involving industry, trade union, NGO and accountancy bodies, with UN support. The Guidelines have been used by over 100 of the world's leading blue chip companies.

The Guidelines provide guidance on the format and content of the reports, as well as assistance on how to normalise and verify data. They contain a comprehensive set of organisational, management system and performance parameters, relating to a company's economic, social and environmental performance.

The Guidelines encourage companies to set targets and commitments, and then to report on the extent to which these are being met, providing reasons for any gaps or failures.

The GRI strongly encourages the adoption of a stakeholder engagement process, with the aim of reporting on those issues of greatest relevance to stakeholders. In addition to the core set of Guidelines, a number of sectoral and theme-specific reporting protocols are being developed. A multi-stakeholder group has been convened to look into report verification issues.

USEFUL WEB ADDRESS

www.globalreporting.org

Guidelines on Stakeholder Engagement, Reporting and Accountability

USEFUL WEB ADDRESS

www.accountability.org.uk

AccountAbility 1000

AA1000, launched in 1999, is a best practice standard for a stakeholder-based approach to social and ethical accounting, auditing and reporting. It was developed by the UK-based Institute of Social and Ethical AccountAbility (AccountAbility), a non-profit professional membership organisation consisting of a coalition of business, NGOs, universities and service providers.

AA1000 provides a framework to guide the establishment of an inclusive stakeholder engagement process aimed at identifying key issues and priorities, defining performance metrics and targets, and contributing to the development of accounting, auditing and reporting systems. The framework contains the principles of a quality standard as well as a set of process standards that cover five stages: planning, accounting, auditing and reporting, embedding and stakeholder engagement. It makes reference to and builds on previous management system initiatives such as ISO 9001 and ISO 14001.

In 2002 AccountAbility commenced the AA1000 Series with the launch of the AA1000 Assurance Standard. This is designed to complement the GRI Reporting Guidelines and other standardised approaches to disclosure. It addresses the qualitative and quantitative data that makes up sustainability performance as well as the systems that underpin the data and performance.

Sector-Specific Initiatives

Forest Stewardship Council

The Forest Stewardship Council (FSC) is an international, non-profit NGO that was founded in 1993 in response to growing international concerns regarding deforestation as well as increasing consumer demand for a credible wood-labelling scheme. The FSC seeks to promote responsible management of the world's forests through a system of forest certification and product labelling that allows consumers to identify wood and wood-based products from well-managed forests. The FSC comprises national working groups in 28 countries, and is supported by a number of NGOs including WWF, Greenpeace, and Friends of the Earth, as well as by some of the organisations in the timber and paper industry. In total, 16 million hectares (0.5% of the world's forests) have been certified under FSC in 30 countries.

The certification scheme covers all types of forest (tropical, temperate and boreal). In terms of the scheme, the FSC evaluates, accredits and monitors independent certification organisations, which then certify individual forest management practices, as well as operating a 'Chain of Custody' – a monitoring and tracking system that is in place through every stage in the supply chain, from forest to shops. Forests are inspected and certified against strict standards based on the FSC's 10 Principles of Forest Stewardship that have been developed by professionals in forestry, ecology, rural and social development, as well as by forest users, traders, retailers, manufacturers and representatives from environmental and human rights group.

To acquire FSC certification, a forest must be managed in an environmentally appropriate, socially beneficial and economically viable manner. The inspections are undertaken by independent organisations that have been accredited by the FSC. Forests that meet these strict standards are given FSC certification and the timber is allowed to carry the FSC label.

The FSC label is currently found on over 10,000 product lines including household and garden furniture, kitchen, bathroom and general houseware, wall paper and flooring, and paper and pencils. Concerns have been expressed by some NGOs regarding the credibility of the scheme, in particular the monitoring and enforcement mechanisms relating to its certification and 'Chain of Custody' systems.

USEFUL WEB ADDRESS

www.fscoax.org

Sector-Specific Initiatives

USEFUL WEB ADDRESS

www.msc.org

Marine Stewardship Council

The MSC is an independent, global, non-profit organisation that was set up to promote sustainable fisheries and responsible fishing practices. The MSC was established in 1997 as a joint initiative between WWF and Unilever, the world's largest buyer of seafood. In 1999 the MSC became fully independent from both organisations, and is currently funded by a range of organisations, including charitable foundations and private companies.

In terms of the scheme, fisheries that have adopted environmentally responsible management practices may use a distinctive blue label for their products. The certification, which is undertaken by independent, accredited certification bodies, is intended to be equally valid for all types of fisheries, irrespective of size and location. The principles and criteria cover marine fish and invertebrates, but exclude harvest of other marine species, aqua-culture and freshwater fisheries.

The criteria are intended to ensure that fish products come from well-managed sources. While they include some social and economic specifications, the emphasis is on ecosystem viability and ecological aspects. The MSC is guided by three key principles for sustainable fishing: avoiding over-fishing or depletion of exploited populations; maintaining the structure, productivity, function and diversity of the relevant habitats; and respecting local, national and international laws and standards.

The standard was developed over a period of two years, following an international consultative process with scientists, fisheries experts, environmental organisations and other interested parties. Thus far, following the recent completion of the testing phase, six processors and distributors globally have been certified for the MSC Chain of Custody label.

Responsible Care

The international chemical industry's Responsible Care programme was first developed in Canada in 1995 to address public concerns about the manufacture, distribution and use of chemicals. It is an internationally recognised framework for voluntary environmental, health and safety improvement that is currently implemented in 46 countries. The initiative attempts to foster the adoption of corporate values that emphasise a long-term commitment to community and occupational health and safety and to environmental protection.

Responsible Care incorporates eight fundamental features including a formal commitment on behalf of each signatory company to a set of Guiding Principles signed by the CEO. This commitment involves progressive development of indicators against which improvements in performance can be measured. A core feature of the initiative are the six Codes of Management.

Practices dealing with the following issues:

- Community awareness and emergency response
- Pollution prevention
- Process safety
- Distribution
- Employee health and safety
- Product stewardship.

Companies that adopt Responsible Care are encouraged to implement effective measures for engaging with their neighbouring communities, including for example through the establishment of Community Awareness and Emergency Response (CAER) committees. At an international level, efforts are currently underway to promote the adoption of Responsible Care in new countries with significant chemicals production, as well as to improve the existing implementation assurance process.

USEFUL WEB ADDRESS

www.icca-chem.org

Sector-Specific Initiatives

OTHER BUSINESS SECTORAL INITIATIVES

The three business sectoral initiatives identified in this document represent a small sample of the diverse range of sectoral initiatives. Other examples include:

- Clean Computer Campaign (www.svtc.org).
- Mining Minerals and Sustainable Development (www.iied.mmsd).
- WBCSD Cement Sustainability Initiative (www.wbcscement.org).

Financial Initiatives

Equator Principles

The Equator Principles are a voluntary set of guidelines for managing the social and environmental issues related to the financing of development projects. The principles were first adopted on 4 June 2003 by ten leading international banks from seven countries. The banks will apply the principles globally to project financing in all industry sectors, including mining, oil and gas, and forestry. The banks that first adopted the Equator Principles underwrote approximately \$14.5 billion of project loans in 2002, representing approximately 30% of the project loan syndication market globally. The initial signatories were ABN AMRO Bank, N.V., Barclays plc, Citigroup, Inc., Credit Lyonnais, Credit Suisse Group, HVB Group, Rabobank, Royal Bank of Scotland, WestLB AG, and Westpac Banking Corporation.

The Equator Principles are based on the policies and guidelines of the World Bank and International Finance Corporation (IFC), and will be applied by the Banks to all loans for projects with a capital cost of \$50 million or more. In adopting the Principles, a bank undertakes to provide loans only to those projects whose sponsors can demonstrate their ability and willingness to comply with comprehensive processes aimed at ensuring that projects are developed in a socially responsible manner and according to sound environmental management practices.

The Principles use a screening process for projects that is based on the IFC's environmental and social screening methodology. Projects are categorised by the banks as A, B or C (high, medium or low environmental or social risk). For A and B projects (high and medium risk), the borrower is required to complete an Environmental Assessment addressing the environmental and social issues identified in the categorisation process. After appropriate consultation with affected local stakeholders, category A projects, and category B projects where appropriate, will prepare Environmental Management Plans which address the mitigation and monitoring of environmental and social risks.

The Equator Principles were created in response to criticism from environmental and social pressure groups that bank loans have often contributed to the contamination and impoverishment of the developing world. While some activists have cautiously welcomed the initiative, others have remained sceptical regarding its implementation. A number of other banks have expressed interest in signing up to the Equator Principles and it is envisaged that the guidelines will become the industry standard.

USEFUL WEB ADDRESS

www.equator-principles.com

Financial Initiatives

The London Principles of Sustainable Finance

The *London Principles of Sustainable Finance* is a voluntary code of seven Principles that propose conditions under which financial market mechanisms can best promote the financing of sustainable development. The Principles, developed as a joint voluntary initiative between the Corporation of London and the UK Government, are intended as a framework to allow financing institutions and policy-makers to identify where future innovation is needed, in order to improve the way the financial system as a whole finances sustainable development. The Principles apply to all aspects of finance and not just values-based investment and specific financing and banking niches. However, not all of the Principles will be relevant to each financial institution.

The Principles were developed by the Centre for Sustainable Investment, an initiative of the Forum for the Future that works in partnership with mainstream financial institutions to support the financing of projects and businesses that promote, or do not harm, economic prosperity, environmental protection and social justice. In developing the Principles, almost 50 financial institutions were interviewed in detail; this was supplemented by a workshop for a further 80 participants and by written submissions.

THE LONDON PRINCIPLES

Signatories to the London Principles agree, where relevant to the product and geographical scope of their business to:

ECONOMIC PROSPERITY

- Principle 1: Provide access to finance and risk management products for investment, innovation and the most efficient use of existing assets.
- Principle 2: Promote transparency and high standards of corporate governance in themselves and in the activities being financed.

ENVIRONMENTAL PROTECTION

- Principle 3: Reflect the cost of environmental and social risks in the pricing of financial and risk management products.
- Principle 4: Exercise equity ownership to promote efficient and sustainable asset use.
- Principle 5: Provide access to finance for the development of environmentally beneficial technologies.

SOCIAL DEVELOPMENT

- Principle 6: Exercise equity ownership to promote high standards of corporate social responsibility by the activities being financed.
- Principle 7: Provide access to market finance and risk management products to businesses in disadvantaged communities and developing economies.

The London Principles are aspirational and seek to encourage continuous improvement. To make this process transparent, signatories of the London Principles will report annually on progress towards their implementation.

Dow Jones Sustainability Index

Launched in 1999, the Dow Jones Sustainability Indexes (DJSI) were the first global indexes to track the financial performance of the leading sustainability-driven companies world-wide. Based on the co-operation of Dow Jones Indexes, STOXX Limited and Sustainability Asset Management (SAM) the DJSI seeks to provide asset managers with reliable and objective benchmarks to manage sustainability portfolios.

The DJSI family follows a best-in-class approach comprising the sustainability leaders in the investable universe from each industry. Categorized into 60 industry groups, companies are assessed in line with general and industry-specific criteria. They are then compared against their peers and ranked accordingly, with the leading companies being included in the DJSI. The investable stocks universe of the DJSI World consists of the 2,500 largest capitalised companies in the Dow Jones Global Index. The DJSI family is reviewed on an annual basis. Once the components are selected, they are continuously monitored throughout the year to verify the involvement in and management of critical areas.

The DJSI family is based on a thorough sustainability assessment process, undertaken by SAM and covering economic, environmental and social criteria. The research starts by defining sustainability trends that SAM sees as having a growing impact on the long-term success of companies. Based on this understanding of future economic, environmental and social developments, the analysts develop a set of general and industry-specific criteria to assess companies.

Financial Initiatives

USEFUL WEB ADDRESS

www.sustainability-index.com

The analysed companies are then assigned a sustainability score and are ranked accordingly within their industry group. The criteria cover economic, environmental and social issues with a clear focus on long-term shareholder value creation. (A full list of all the general criteria including their weightings is available on the DJSI homepage).

USEFUL WEB ADDRESS

www.ftse.com/ftse4good

FTSE4GOOD

The FTSE4GOOD Index Series was launched in July 2001 as a tool for investors interested in socially responsible investment. Since its launch, over 250 companies have entered the index, in many cases having to adapt their practices to do so.

The selection criteria and methodology for FTSE4GOOD are based on common themes from ten sets of declared principles. Both the FTSE4GOOD philosophy and its inclusion criteria are regularly revised and updated through a widespread market consultation process. To be eligible for inclusion, companies in the starting universe need to meet prescribed standards in three areas: environmental sustainability, universal human rights, and developing positive relations with stakeholders. The index excludes companies involved in tobacco, weapons and nuclear power industries.

Miscellaneous Theme-Specific Initiatives

Ethical Trade Initiative

The Ethical Trade Initiative (ETI) is an alliance of companies, NGOs and trade union organisations committed to working together to identify and promote ethical trade. The focus of their activities is on stimulating good practice through the implementation of a code of conduct relating to the promotion of worker rights and human rights in general. Specific focus areas include child labour, forced labour, sweatshops, health and safety, and labour rights. The ETI exists primarily to share experience and to promote learning about implementing international labour standards in international supply chains. It is not an accreditation agency and it does not perform external audits.

All ETI member companies commit to adopting the standards contained in the ETI Base Code, either by adopting the Code verbatim, or by incorporating the relevant standards into their own codes. The Base Code, which was developed by the founding companies, trade unions and NGOs, contains international standards derived from the core conventions of the International Labour Organisation.

Extractive Industries Transparency Initiative

The Extractive Industries Transparency Initiative (EITI) was announced by UK Prime Minister Tony Blair at the World Summit on Sustainable Development in Johannesburg, September 2002, with the aim of increasing transparency over payments by companies in the extractive industries to governments and government-linked bodies, as well as transparency regarding revenues by those host country governments. This initiative has been driven by concern that the lack of accountability and transparency in revenues from oil, gas and mining companies can exacerbate poor governance and lead to corruption, conflict and poverty. It is hoped that an increase in transparency and knowledge of revenues will empower citizens and institutions to hold governments to account, making it more difficult to divert funds away from sustainable development purposes.

USEFUL WEB ADDRESS

www.ethicaltrade.org

Miscellaneous Theme-Specific Initiatives

USEFUL WEB ADDRESS

www.dfid.gov.uk

The initiative, led by the UK Department for International Development (DFID), is being developed through a multi-stakeholder partnership involving publicly traded, private and state-owned companies, governments, NGOs, and international agencies including the UN, OECD and World Bank. In June 2003, DFID hosted an EITI Conference in London, aimed at agreeing a Statement of Principles and Agreed Actions to increase transparency through regular disclosure of company payments and government revenues. Discussions on the initiative are continuing with the aim of refining the proposed reporting guidelines and designing arrangements for technical assistance.

USEFUL WEB ADDRESS

www.ghgprotocol.org

The Greenhouse Gas Protocol Initiative

The Greenhouse Gas Protocol Initiative (GHG Protocol) was established in 1998 as a partnership between the World Business Council for Sustainable Development and the World Resources Institute to develop internationally-accepted accounting and reporting standards for greenhouse gas emissions from companies. The GHG Protocol brings together leading experts on greenhouse gas emissions to develop these standards.

The GHG Protocol has split the development of the standards into two components:

- Corporate GHG Accounting and Reporting: Corporate Inventory Module – This component is developing a step-by-step guide for companies to account for and report their GHG emissions.
- Project GHG Accounting and Reporting – This component is developing a guide for accounting and reporting emissions from projects that are developed to offset GHG emissions.

Institutions for Sustainable Development

Business Organisations

World Business Council for Sustainable Development

The World Business Council for Sustainable Development (WBCSD) was established in 1991 to promote and co-ordinate business involvement in the Rio Earth Summit. It has since grown to become a coalition of more than 170 companies from over 35 countries and 20 major industrial sectors that aim to foster business leadership as a catalyst for change toward sustainable development. With its Secretariat based in Geneva, the WBCSD has a global network of 45 national and regional business councils and partner organisations located in 40 countries, involving more than 1,000 business leaders globally. Its members include some of the world's largest companies, such as AOL Time Warner, AT&T, Bayer, BP, Coca-Cola, Dow Chemical and Shell.

The WBCSD seeks to be the leading business advocate on issues connected with sustainable development. It participates in policy development with the aim of 'creating a framework that allows business to contribute effectively to sustainable development', and it seeks to demonstrate business progress in corporate social responsibility by sharing leading-edge practices among its members.

The WBCSD runs a series of sector-specific projects that use independent research and a stakeholder consultation process, with the aim of identifying how the sector can better align its practices and policies with the requirements of sustainable development. Current projects focus on the cement industry, electricity utilities, the forest products industry, mining and minerals, and the transport sector. The WBCSD also administers a number of theme specific projects. These focus on accountability and reporting, advocacy and communication, capacity building, energy and climate, the financial sector, sustainable livelihoods and water. More recently the WBCSD has also introduced a series of cross-cutting themes, tracking progress on previous initiatives and responding to emerging issues. These include issues relating to eco-efficiency, innovation and technology, corporate social responsibility, ecosystems, sustainability and markets, and risk. The WBCSD has a comprehensive website containing updated news, case studies and technical publications and reports on a range of issues relating to business and sustainable development.

USEFUL WEB ADDRESS

www.wbcsd.ch

Business Organisations

Regional Business Councils for Sustainable Development

The WBCSD's Regional Network is an informal confederation of more than 40 independent organisations. The regional BCSDs (Business Council for Sustainable Development) and partner organisations, extending from Europe, Africa and the Americas to Asia and Oceania, are united by their shared commitment to provide business leadership for sustainable development in their respective country or region.

In addition to actively participating in WBCSD programmes and initiatives, members of the Regional Network benefit from cooperation with each other, and from being associated with a leading international body. Affiliation enables them to keep in touch with the latest thinking and best practice on economic, environmental and social management in industry, and offers access to key international players and sustainable development platforms.

At the same time, the Regional Network is a conduit through which the WBCSD can reach out to numerous Small and Medium Enterprises (SMEs) world-wide. It also provides a platform for implementing sustainable development policies and concepts, especially in the developing world, and brings into the WBCSD valuable local and regional perspectives on the concerns of emerging economies.

USEFUL WEB ADDRESS

www.arenanetwork.org/index.asp

In Wales: ARENA Network

ARENA Network has been one of the major environmental business support organisations working in Wales for more than a decade. It is an independent, pan-Wales organisation focusing mainly on issues of environmental management and training, environmental awareness raising, promotion of best practice and the support of sustainable development in business. It operates on a not-for-profit basis, and also offers membership to businesses throughout Wales, currently supporting some 800 members. ARENA works in partnership with Groundwork Wales and the Welsh Development Agency to support a Wales-wide team of Business Environmental Co-ordinators who are responsible for acting as points of contact throughout Wales between businesses and environmental business support providers.

Its work is managed from offices in Newtown, Swansea, Treforest and Wrexham. Its role is to enable businesses (and other organisations) to respond effectively to the pressures for change imposed by key stakeholders such as customers, government, regulators and the wider community. It does this by recognising that environmental management is a continual improvement process, and has sought to build long-term relationships with businesses. Most of their work assists businesses in Wales to manage environmental issues. However the 'Confidence in Learning' project completed in 2005 reflected the importance of people development as a key business issue in the 21st Century. As the broader theme of 'sustainability' grows in importance it is expected that ARENA's portfolio will diversify further.

ARENA Network also manage the prestigious Wales Environment Award. This is one of the key business and environmental opportunities in Wales, and was recognised as such at the 2001 World Summit in Johannesburg.

In Wales: Cylch

Cylch is the Wales Community Recycling Network. It is an umbrella organisation, formed in 1997 to promote sustainable resource management through education and practical action in Wales. It is core funded by The Welsh Assembly Government and supported by additional earned income, formerly through the Cleanstream® Fund (now closed) and currently via the Strategic Recycling Scheme. Its objectives are to develop the national network of community recycling organisations, to provide quality support services for its members, to position the community recycling sector as an essential partner in the future of resource management in Wales and to establish itself as an exemplary Social Enterprise.

It promotes and supports partnership-led, community-based, sustainable resource management initiatives as the practical and effective solutions to Welsh waste problems. It views waste materials as valuable resources, which, if managed effectively, create environmental, social and economic benefits for individuals and the communities in which they live. It offers a range of services to its members providing information, resources, representation, advocacy, training, events, support and advice (general and funding), project involvement and PR/marketing expertise.

USEFUL WEB ADDRESS

www.cylch.org/index2.html

Business Organisations

It works with a number of key partners in Wales to deliver its programmes including the Welsh Local Government Association, Wales Council For Voluntary Action, Welsh Assembly Government, Environment Agency Wales, Environment Wales, Wales Environment Link and the Coalfields Regeneration Trust.

Some of its large scale key environmental programmes are working very successfully towards sustainable waste and resource management in Wales, and of these the Cleanstream projects and the High Diversion Exemplar projects are heralded as particularly effective.

USEFUL WEB ADDRESS

www.bsr.org

Business for Social Responsibility

Business for Social Responsibility (BSR) is a US-based global non-profit organisation that helps companies to achieve commercial success in a manner that respects ethical values, communities and the environment. It provides information, tools, training and advisory services to make corporate social responsibility an integral part of business operations and strategies. In 2001, BSR incorporated Net Impact, a network of MBAs and professionals committed to using the power of business to create a better world. Through the central organisation and over 75 student and professional chapters world-wide, Net Impact offers a portfolio of programs to help members broaden their business education, refine their leadership skills, and pursue their professional goals, while building their network.

USEFUL WEB ADDRESS

www.iblf.org

International Business Leaders Forum

The International Business Leaders Forum is an international educational charity set up in 1990 to promote responsible business practices, with the aim of achieving social, economic and environmentally sustainable development, particularly amongst new and emerging market economies. The Forum has developed various geographic and issue-based partnerships to take action on social, economic and environmental issues, and strives to create an enabling environment for these partnerships to flourish. The Forum has developed an 'A-B-C-D' focus: Advocacy of the case for business social responsibility and partnership; Brokerage of partners; Capacity-building in training managers and partners for leadership and action; and Dissemination of ideas and good practices.

The Forum's membership consists of more than 65 of the world's leading multinational companies, representing a broad range of business sectors and geographic regions, with the common thread that all have strong

interests in developing or transition economies. The companies are seen to be leaders in their respective sectors, as well as often in the fields of corporate social responsibility, corporate social investment, stakeholder consultation and partnerships. Companies join on an initial three-year basis, at either Principal or Council level, and make a commitment to 'continuous improvement' in their business practices and dialogue with stakeholders. Most have undertaken to make corporate social responsibility a strategic part of company operations in different areas of the world.

CSR Europe

CSR Europe is a non-profit organisation whose mission is to 'help companies to achieve profitability, sustainable growth and human progress by placing corporate social responsibility in the mainstream of business practice.' The organisation, which was initially known as the European Business Network for Social Cohesion, was founded in January 1996, as a voluntary initiative by the corporate sector. CSR Europe strives to convince managers of the benefits of socially responsible business practice, by providing more than 500,000 business people and partners with print and online publications, best practices and tools, and by offering learning, benchmarking, and capacity building opportunities. With 65 company members and 18 national partner organisations, they have become a significant European reference point on corporate social responsibility strategies and practices for companies.

USEFUL WEB ADDRESS

www.csreurope.org

Greening of Industry Network

The Greening of Industry Network was set up in 1991 and is an international association of researchers, business leaders, activists, and policy makers dedicated to building a sustainable future. With coordinating offices in the Netherlands, Thailand, and the United States, it engages participants from more than 50 countries to respond to the challenge of sustainable development. Through linked conferences, publications and communications, the Network creates new relationships, visions, and practices for sustainability. The aim of the network is to develop knowledge and transfers practice to accelerate progress toward a sustainable society. It does this through the mobilisation of a community of researchers to stimulate the emergence of a new strategic research area on the greening of industry; the creation of a dialogue between this new research community and leaders in business, labour, civil society organisations, government; and through provision of an opportunity

Business Organisations

for all stakeholders, with equal voice, to develop research and action agendas on issues of industry, environment, and society.

The Greening of Industry Network stimulates, coordinates and connects high quality research to policies, strategies and actions in ways that contribute to a more sustainable society. Through a variety of arenas, it provides an open forum for creative debate to engage researchers, business, workers, government, consumers and other actors in developing a shared understanding of the changes required for creating a more sustainable future. One of the key arenas is the annual international Greening of Industry Conference. This will be held for the first time in the UK in July 2006, and will be hosted by Cardiff University through the ESRC BRASS Centre.

NGOs and Civil Society Bodies

Sustainability Debate

Sustainable development is a dynamic process which enables all people to realise their potential and to improve their quality of life in ways which simultaneously protect and enhance Earth's life-support systems. These, however, are the main poles of tension. Social inequity, the material disparity that accompanies it, as well as the question of why consideration for nature should come before the welfare of humans, are at the centre of the sustainable development debate.

Ecological sustainability is the simple part of the sustainable development concept. While there is considerable debate over where exactly the limits are, there is general consensus that we must learn to live together within the means of nature.

Business Focus

Corporate Watch

Corporate Watch is an independent non-profit research and publishing group which undertakes research on the social and environmental impact of large corporations, particularly multinationals. Corporate Watch aims to expose the mechanisms by which corporations function and the detrimental effects they have on society and the environment as an inevitable result of their current legal structure.

Corporate Watch strives for a society that is ecologically sustainable, democratic, equitable and non-exploitative. Progress towards such a society may, in part, be achieved through dismantling the vast economic and political power of corporations and developing ecologically and socially just alternatives to the present economic system.

International Confederation of Free Trade Unions

The International Confederation of Free Trade Unions (ICFTU) was set up in 1949 and has 233 affiliated organisations in 154 countries. The ICFTU organises and directs campaigns on issues such as:

- the respect and defense of trade union and workers' rights
- the eradication of forced and child labour
- the promotion of equal rights for working women
- the environment

USEFUL WEB ADDRESS

www.corporatewatch.org

USEFUL WEB ADDRESS

www.icftu.org

NGOs and Civil Society Bodies

- education programs for trade unionists all over the world
- encouraging the organisation of young workers
- sends missions to investigate the trade union situation in many countries.

The ICFTU has three major regional organisations, ICFTU Asia and Pacific Regional Organisation (APRO) for Asia and the Pacific, ICFTU African Regional Organisation (AFRO) for Africa, and ICFTU Inter American Regional Organisation of Workers (ORIT) for the Americas. It also maintains close links with the European Trade Union Confederation (ETUC) (which includes all ICFTU European affiliates) and Global Union Federations, which link together national unions from a particular trade or industry at international level.

USEFUL WEB ADDRESS

www.envirowise.gov.uk

Envirowise

Envirowise was launched in 1994. The programme was designed specifically to encourage the sharing of best practice across UK industry, helping businesses boost competitiveness through improved environmental performance and more efficient use of resources. Envirowise helps businesses adopt an environmental approach in compliance with the legislation. Free guidance and information from Envirowise equips businesses with a starting point for treating and eliminating the cause of environmental impact. Envirowise also provides free information via web-based resources, including a web tool designed to help businesses to identify key environmental legislation affecting them. It also helps businesses to understand the options for compliance.

Envirowise in Wales is funded by the Welsh Assembly Government. Envirowise offers Welsh businesses free, independent, confidential advice and support on practical ways to increase profits, minimise waste and reduce environmental impact.

USEFUL WEB ADDRESS

www.bitc.org.uk

Business in the Community (BITC)

Business in the Community is a movement in the UK of 700 member companies. The purpose of BITC is to inspire, challenge, engage and support business in continually improving its positive impact on society. BITC Cymru operates in partnership with over 300 companies to advance and support social and economic regeneration initiatives in disadvantaged communities throughout Wales. BITC Cymru provide advice, networking and leadership opportunities to business so that they

commit to responsible business practice (corporate social responsibility) and increase the impact and contribution they make on society in Wales. BITC Cymru's Advisory Service provides businesses with professional support in shaping corporate responsibility policies, practices and impact. BITC Cymru also runs several key initiatives across the broad spectrum of the agenda for corporate social responsibility.

Others

Various other NGOs and civil society bodies offer help to businesses, some examples include:

Responding to Climate Change (RTCC)

RTCC is a non-governmental organisation, and an official observer to the UN Climate Change negotiations, that develops information products and channels through which business, government and NGOs can learn more about the threat of climate change/global warming of the environment and formulate the most appropriate response. One of RTCC's principal roles is to help prove the private sector business case for being involved with climate change responses and to support the partnership initiatives between the private, government and NGO sectors.

USEFUL WEB ADDRESS

www.rtcc.org

Environmental Focus

Friends of the Earth International

Friends of the Earth International is a federation of autonomous environmental organisations from all over the world. Their members, in 70 countries, campaign on the most urgent environmental and social issues of our day, while simultaneously catalyzing a shift toward sustainable societies. FoEI was founded in 1971 by four organisations from France, Sweden, England and the USA.

USEFUL WEB ADDRESS

www.foei.org

FoEI attempts to achieve this by working from a local to a global level; looking for credible alternative solutions based on research. Friends of the Earth Cymru was set up in 1984, to campaign in Wales specifically on environmental issues. They are dedicated to protecting the environment and promoting a sustainable future for Wales. Friends of the Earth Cymru has five main campaign areas:

- Fighting climate change and global warming; promoting green energy and opposing nuclear power.

NGOs and Civil Society Bodies

- Promoting a fair, sustainable and inclusive transport system; fighting road building and climate change.
- Promoting waste minimisation, reuse, recycling and composting; fighting a wasteful society, landfill and incineration.
- Campaigning for real food and farming and a GM free Welsh environment.
- Campaigning for an improved, fair and transparent planning system.

USEFUL WEB ADDRESS

www.greenpeace.org/international

Greenpeace International

Greenpeace is an independent non-profit global campaigning organisation that uses creative confrontation to expose global environmental problems and their causes. Greenpeace has been campaigning against environmental degradation since 1971.

Greenpeace organises public campaigns for:

- the protection of oceans and ancient forest
- the phasing-out of fossil fuels and the promotion of renewable energies in order to stop climate change
- the elimination of toxic chemicals
- against the release of genetically modified organisms into nature
- nuclear disarmament and an end to nuclear contamination.

Greenpeace campaigns around South Wales area operate networks around Cardiff, Swansea and Camarthen. The network is currently involved in the Greenpeace GM campaign, and has encouraged members of the public to take action against GM in milk and dairy products. They are active in Cardiff against supermarkets selling GM milk.

USEFUL WEB ADDRESS

www.rspb.org.uk

RSPB

The RSPB is the UK charity working to secure a healthy environment for birds and wildlife. It was founded in 1889 and since then has grown into Europe's largest wildlife conservation charity with more than a million members. The RSPB is committed to championing the cause of biodiversity conservation within the wider debate on sustainable development. The RSPB also works towards international conservation issues through the Birdlife International Partnership, which is a global coalition of conservation organisations.

The RSPB Cymru has been actively involved in various conservation activities in Wales which include for example:

- Black grouse has been fighting its way back from the brink of extinction for around fifteen years in Wales. RSPB Cymru, Forest Enterprise Wales, the Countryside Council for Wales and other landowners have been working closely on a Black Grouse Recovery Project since 1998.
- On the Lake Vyrnwy farm at the southern end of the Berwyn hills in Mid-Wales, RSPB Cymru and Severn Trent Water are demonstrating that modern farming can go hand in hand with good environmental practices to create a healthy environment for people, birds and other wildlife.
- Wetland for Wales is a project funded by the Heritage Lottery Fund to restore the lost heritage of wetlands in Wales. It is a partnership between RSPB Cymru, Environment Agency Wales, Countryside Council for Wales and the Wildlife Trusts for the benefit of biodiversity in Wales.

BTCV

The BTCV is a charity supporting practical conservation work by volunteers throughout Britain. It supports many local groups across the country, runs training courses, and organises working holidays. BTCV is UK's largest practical conservation charity. Founded in 1959, the organisation helps over 130,000 volunteers take hands-on action to improve the rural and urban environment. BTCV's local project work also makes contribution to the implementation of Local Habitat Action Plans for ancient and/or species rich hedgerows, ponds, peatland, heathland and limebeds.

BTCV Cymru through its various community development projects aims to support and empower individuals and groups, to identify environmental concerns within their neighbourhoods and devise and implement strategies to deal with them. Their mission is to support sustainable development by ensuring that increased skills and knowledge benefit employability and help communities understand and integrate environmental issues with economic and social outcomes.

USEFUL WEB ADDRESS

www.btcv.org

NGOs and Civil Society Bodies

Some community development projects carried out by BTCV Cymru across Wales includes:

- **COMMUNITY ORCHARD AND MEADOW PROJECT** which involves planting a community orchard, and the creation of the community meadow in North east Wales.
- **TRANSFORMING UNUSED GRASSLANDS** A large area of unused grass at Y Waun in Llwynhendy is being transformed by BTCV Cymru with the help from local residents. The local community has got together to collect ideas for the area which included improved access, wildflowers, shrubs and trees, a cobble maze, sculptures and seating.
- **COMBATING ANTI-SOCIAL BEHAVIOUR** This project helps community in the Waunheulog estate of Blaenau Gwent to assess what measures can be taken to combat anti-social behaviour.

Others

Other voluntary organisations focussing on the sustainable environmental issues are:

USEFUL WEB ADDRESS

www.cardiffconservation.org.uk

Cardiff Conservation Volunteers

Cardiff Conservation Volunteers are a group of 140 volunteers who aim to promote the conservation, protection and improvement of the physical and natural environment in Wales. The group carries out work that includes clearance of overgrown vegetation, application of many drainage techniques, resurfacing work, construction of boardwalks and step building to retain slopes and topsoil. They are also actively involved in land management and conservation techniques which include fencing, dry stone walling, hedge laying, and revival of aquatic habitats by clearing ponds and canals of the debris.

USEFUL WEB ADDRESS

www.farm.org.uk

FARM – The Independent Voice of Farmers

FARM was set up in the wake of the foot and mouth epidemic of 2001 by a group of farmers and campaigners who shared a common analysis of the causes of and solutions to the crisis in farming. It is a campaign group bringing together farmers, consumers and environmentalists to fight for a sustainable future for farming in the UK. FARM is committed towards stopping the demise of the farming industry and to bring true sustainability to farming policy and practice, such that agriculture is able to deliver its full potential of economic, social and environmental benefits to society. FARM runs innovative and effective campaigns that:

- challenge government and industry policy and practice which is damaging to farmers, consumers and the environment
- engage the general public with farming issues, building understanding and common purpose towards sustainability in agriculture
- promote the wider values that farming provides for society, ignored by conventional economic assessment but vital to our landscape, wildlife, communities and culture, as well as other industries.

Social Focus

Oxfam

Oxfam is an independent British organisation, registered as a charity and affiliated to Oxfam International. It works both nationally and internationally to overcome poverty and suffering and acts as a 'major campaigning voice' on behalf of the world's poor. Oxfam's UK Poverty Programme in Wales focuses on five major themes:

- Giving people a voice and strengthening grass roots organisations
- Developing gender awareness and gender fair development
- Bringing an international perspective to anti-poverty work in Wales
- Addressing links between race, poverty and exclusion
- Challenging negative attitudes towards people living in poverty.

The work of 'Oxfam Cymru' is targeted towards the goal of making 'a distinctive contribution to the creation of a Wales with a strong sense of civic nationhood that is inclusive, participatory and externally focused'. A good example of this in practice is the 'Oxfam Cymru Development Education team' which works in partnership with many organisations across Wales (including the Assembly) and the Department for International Development (DIFD) to 'promote global citizenship and sustainable development in the Wales National Curriculum'.

Amnesty International

Amnesty International is a worldwide movement that campaigns for the protection of internationally recognised human rights. It works towards 'preventing and ending grave abuses of the rights to physical and mental integrity, freedom of conscience and expression, and freedom from discrimination', and to promote all human rights.

NGOs and Civil Society Bodies

The Welsh office of Amnesty International provides a focus for campaigning and events in Wales. Activities supported include:

- Raising Amnesty's concerns with Welsh politicians
- Getting their campaigns into the media
- Hosting visiting international speakers on Human Rights
- Providing campaign resources for activists in Wales
- Helping young people learn about Human Rights.

Amnesty International, in partnership with 'The Powys Environment and Development Education Centre (PEDEC) and other actors in Wales, has also recently set up a Corporate Social Responsibility (CSR) network, to explore ways of strengthening the ethical sector of business in Wales.

UNICEF

Working to achieve the goal 'For every child Health, Education, Equality, Protection, Advance Humanity', UNICEF is the United Nations children's fund. In the UK, UNICEF 'works to change attitudes and win support for children's rights by campaigning on UK and international children's issues, working with partners in local organisations, schools, hospitals and business, and raising money to support UNICEF's programmes internationally'. It raises funds for UNICEF's programmes around the world, advocates for change and increased public awareness of issues facing children and campaigns to change government policy. The campaigning of UNICEF is reflected in the appointment, in 2001 by the Assembly of Wales' first Children's Commissioner.

Save the Children

Save the Children works both locally in Wales and the rest of the UK, as well as globally 'to ensure that children and young people get the future they deserve'. Rather than seeing children and young people as 'the problem', Save the Children believes that 'they hold the answer and are our best and most energetic resource'. It strives to find lifelong solutions for those children who suffer from the problems of poverty, disease, injustice and violence. In setting out to achieve this goal it encourages participation from children and young people in its work, wherever possible.

A key objective of the Save the Children in Wales is to support the Welsh Assembly Government to develop and implement ‘a cross-cutting child poverty strategy that addresses key areas such as access to health, transport, leisure, family support and also seeks to address the negative effects of poverty such as low self-esteem and bullying’.

Others

Other social organisations which actively work to increase human and social capital in Wales include:

- **THE PRINCE’S TRUST** is a UK wide charity that helps young people to ‘overcome barriers and get their lives working’. It operates a broad programme of training, mentoring and financial assistance tailored to the specific needs of 14-30year olds who require additional support in order to realise their own potential. The charity focuses on young adults who have ‘struggled at school, been in care, been in trouble with the law, or are long-term unemployed’.
- **CHRISTIAN AID** operates throughout the UK, working with a range of organisations and individuals as part of a world wide organisation that ‘strives for justice’. In Wales Christian Aid works in the mediums of both Welsh and English. As well as educating the general public about the causes and effects of poverty and injustice and the things that can be done to make a difference, it also works with schools in a bid to introduce ‘global citizenship’ into the curriculum.
- **BARNARDO’S** provides support for children throughout England, Northern Ireland, Scotland and Wales. It is the UK’s leading children’s charity and strives to help ‘the most vulnerable children and young people transform their lives and fulfil their potential’. With the belief that everyone should be free from ‘poverty, abuse and discrimination’, it concentrates on helping children, young people and their families overcome long term problems of disadvantage.

In Wales

Cynnal Cymru

‘Cynnal’ is an immensely powerful word in Welsh, meaning to sustain, support, nurture and lead. Cynnal Cymru is the Sustainable Development Forum for Wales. It is an independent not-for-profit company that has a membership that is open to all. It is funded by the Countryside Council for Wales Environment Agency Wales, Wales Council for Voluntary Action, Wales Tourist Board, Welsh Assembly Government.

USEFUL WEB ADDRESS

www.cynnalcymru.org
www.sustainwales.com

NGOs and Civil Society Bodies

Cynnal Cymru owes its formation to the duty placed upon the National Assembly for Wales to promote sustainable development. The Assembly produced its first Sustainable Development Scheme '*Learning to Live Differently*' in November 2000. One of the actions of the first scheme was the establishment of a body to work alongside government but independent of it to assist the progress towards sustainable development in Wales. Thus in December 2002, Cynnal Cymru – The Sustainable Development Forum for Wales – came into existence.

Cynnal Cymru acts to promote sustainable development, be a catalyst for change towards sustainable development in all sectors of Welsh society, and as a forum within Wales for the development, canvassing, exchange and dissemination of views, information and policies on sustainable development. It aims to add value not only in promoting action but also in defining, redefining and refining the process by which that action is determined. Through its activities it enables civil society to raise its level of awareness of sustainable development, improve the level of public debate about sustainable development, and to develop its own policies and initiatives as a counterpoint to the work of the Assembly and the Welsh Assembly Government. It has a number of specific programmes including the *Executive Leadership Programme – 'Learning to Think Differently'* based on the prestigious Cambridge Programme for Industry's (CPI) Business and Environment Programme and delivered with Cardiff University and University of Wales, Bangor as a component of the Public Sector Management Wales (PSMW) – the National Assembly's Senior Staff Training Programme). In a counterpoint it acts in a bottom up way as a Convener for bringing emerging and best practice in all aspects of sustainable development, inside and outside Wales to key individuals and organisations. Through this proves it annually formulates an 'opinion' on a selected theme through a fully participative process involving the total membership and others, which is considered at a following Convention and then the 'opinion is published – the resulting programme is called a '*Call to Action*'. It also runs outreach events, and is developing a comprehensive web portal called **Sustainwales.com** of SD activity in Wales, connecting people, projects, products, and innovations across the economic, social, and environmental domains.

Groundwork Wales

In the UK, Groundwork is a federation of 47 charitable Trusts working in many of the most disadvantaged areas in the country to bring together people, places and resources from all parts of the community in effective long-term partnerships. The purpose is to achieve sustainable communities through joint environmental action. Groundwork Wales is a part of the Groundwork network, working with local communities in areas of need.

It has been active in Wales for more than ten years, delivering environmental, social and economic programmes in a holistic approach to regeneration. There are four Trusts in Wales, in Merthyr and Rhondda Cynon Taff, Bridgend, Caerphilly and Wrexham. All have been in operation for over 12 years and have a substantial track record of excellent projects on the ground. Between them they employ over 100 staff. Groundwork carry out a wide variety of projects and programmes including turning under-used land into community resources, involving local people in regeneration, using sound environmental principles to shape and manage change, and delivering practical environmental improvements and landscape schemes. It also works to involve local communities through helping to build community capabilities in decision making and action, promoting and raising awareness of the environment, providing opportunities for training and participation in environmental action and working with schools. In addition, it works with businesses to improve environmental management and performance, provide better environments for existing and new investment, assist the process of economic diversification and change, and to improve business links with the community and schools. In its Environment Business Services work it offers a range of practical programmes for businesses, and is a partner in delivering the Green Dragon environmental management standard throughout Wales, and in providing Business Environment Coordinators in a number of Welsh Local Authority areas.

Funky Dragon

Funky Dragon – the Children and Young People’s Assembly for Wales – is a peer-led organisation. Its aim is to give 0 – 25 year olds the opportunity to get their voices heard on issues that affect them. The opportunity to participate and be listened to is a fundamental right under the United Nations Convention Rights of the Child. Funky Dragon’s main tasks are to make sure that the views of children and young people are heard, particularly by the Welsh Assembly Government, and to support

USEFUL WEB ADDRESS

www.groundworkwales.org.uk

USEFUL WEB ADDRESS

www.funkydragon.org/

NGOs and Civil Society Bodies

participation in decision-making at national level. In this way, the Welsh Assembly is ensuring access to decision making for younger people in society who often do not have a strong voice in determining the focus and direction of policy. It addresses issues of intergenerational equity by enabling such access, and also issues of civil engagement in the democratic process. For example, WAG provides access to consultation documents for all young people in Wales such as the 2005 Environment Strategy for Wales.

Funky Dragon is led by a Grand Council that currently has 77 members from across Wales for the 2005-2006 session. These members are young people or young people's representatives, and as such work to deliver the views and opinions of young people in Wales to the Welsh Assembly on a wide variety of issues including delivery of broadband in Wales, the Assembly budget, new children's initiatives, child poverty and many others. Funky Dragon links directly to Youth Forums in each of the Welsh Local Authorities.

USEFUL WEB ADDRESS

www.wyfsd.org

Wales Youth Forum on SD

In early 2002, the 'New Future for Wales' (NFFW) project was established by the Centre for Alternative Technology and Techniquet, Cardiff, with funding from the Welsh Assembly. The aim was to get Welsh young people interested and involved with the issue of sustainable development, and to allow them to participate in Johannesburg Earth Summit process. A first 'NFFW' conference was held in July 2002. Young people from all across Wales came to discuss sustainable development, and to formulate a declaration from the youth of Wales; their demands about what should be done about sustainable development. Through this meeting and consequent discussions, the young people identified the following:

- There was no consistent way for young people in Wales to express their views on Sustainable Development – although the NFFW project had provided a platform for young people to express their opinions, this was a project that only ran for a year.
- There was a lack of mandatory education on sustainable development in Wales. Many young people have limited knowledge of the issues, and do not connect what they do in their everyday lives with their impact on the environment.
- Education regarding sustainable development provided in schools was lacking.

Out of these concerns grew the idea for a 'Welsh Youth Forum on Sustainable Development'. This would be a youth organisation, run by young people for young people, and would be a bottom up, grass roots organisation. The declaration and the idea of a Welsh Youth Forum on Sustainable Development were presented at the Swansea Conference on Sustainable Development in December 2003. Since August 2003 the WYFSD has 'officially existed' – members have shown considerable enthusiasm and commitment in the variety of events they have participated in.

The Forum's aim is to create a sustainable world, and works on the principles of education, empowerment and action. It works to educate people both young and old, about sustainability issues. It believes that peer education – young people informing other young people is an important tool in achieving this.

It also believes that young people's views and opinions are important, and should be respected and listened to by those in power, and that to create a more sustainable world it is essential that everyone takes action in their everyday lives. WYFSD gives young people the opportunity to take positive action.

The Forum regularly hold events open to all young people. Sometimes these events are on one topic, or are more general. Events are usually a mixture of workshops providing information on a topic, and sessions to allow members to discuss things. The Forum website provides information and news on sustainability issues. WYFSD campaigns on issues that are important to its members. The Forum is run by a group of young people known as the Co-ordinating group and is supported by Environment Agency Wales, Welsh Assembly Government, the Co-operative Group, the Woodcraft Folk in Wales, Cronfa Arbrofol Eryri and a number of other organisations.

Environment Wales

Environment Wales is a partnership of organisations in the voluntary sector, funded by the Welsh Assembly Government. Its partners include Cylch, the National Trust, Groundwork Wales, BTCV Cymru, Keep Wales Tidy, The Prince's Trust, RSPB, Wildlife Trust Wales, and Cymad. The Prince's Trust is responsible for the administration of the partnership. The aim of Environment Wales is to contribute to sustainable development by supporting and encouraging voluntary action to protect and improve

USEFUL WEB ADDRESS

www.environment-wales.org

NGOs and Civil Society Bodies

the environment of Wales. Its objectives are to achieve sustainable improvements to the Welsh environment through practical projects, to increase understanding of sustainable development and the environment through information, education and advisory services, and to help create new environmental initiatives which also allow communities and voluntary organisations to contribute to their social and economic needs.

Environment Wales provides five different streams of grant funding for community and not-for-profit groups for work and projects that demonstrate practical environmental improvement and sustainable development. Funding supports the establishment of new voluntary or community groups, pre-project development costs such as feasibility studies and business plans, project materials and equipment requirements, non-core new posts and funding for the support of training. It aims to support projects that are innovative, or collaborative, especially those that exemplify sustainable development and that could be used as models elsewhere. It encourages and supports projects that assist the participation of communities in Local Agenda 21, and helps those projects that will achieve greater benefits for the environment with further funding. It supports community groups carrying out environmental work on a long term basis, and one of its aims is to ensure that community groups themselves grow and develop in a sustainable manner.

One of the key initiatives in which Environment Wales is involved is Enfys. The Green Spaces and Sustainable Communities programme in Wales is called Enfys, which is the Welsh word for 'rainbow'. The Enfys scheme aims to help urban and rural communities understand, improve and care for their natural and living environment and offers funding for this purpose. It has three priorities for its funding programme; green spaces for communities, making green spaces more accessible for communities and community involvement in sustainable development. It provides money for process development for example supporting exchange visits, feasibility studies and the like. It also supports community led initiatives and those seeking large scale funding, and those projects that demonstrate true partnerships between organisations from across the public, private and voluntary sectors. Enfys aims to nurture and support ideas for green spaces and sustainable community development from the bottom up, and targets local people to ensure that sustainable development becomes a tangible reality in local communities. It provides a local focus for achieving practical outcomes

and complements a range of key policy initiatives in Wales including Local Agenda 21, community planning, the Children and Young People's Strategy, the Sustainable Development Strategy and others.

Gwynedd Gynladwy

Sustainable Gwynedd Gynladwy is a voluntary organisation committed to raising awareness of sustainable development in Gwynedd. Aware that there was little awareness of Agenda 21 in Gwynedd, Mantell Gwynedd (the voluntary sector's umbrella body in the county) started a group that would encourage understanding of the principles amongst the area's residents. With support from the Council for the Protection of Rural Wales *Sustainable Gwynedd Gynladwy* was established from this group and succeeded in securing aid from Cist Gwynedd (Gwynedd Council), CAE (National Assembly for Wales, administered by Snowdonia National Park Authority), and Mantell Gwynedd. The organisation was formed in 1998, and in October 2001 was awarded grant funding to employ a Development Officer to co-ordinate the organisations work.

The organisation serves as a comprehensive network of information about good practice and sustainable issues in Gwynedd and further afield. It aims to develop the skills and confidence of community groups and individuals to take action towards initiating community projects and sustainable lifestyles. It further aims to increase awareness of the principles of sustainable development in Gwynedd, and to encourage the establishment of initiatives which contribute to sustainable development in the county. In January 2004 it had 66 organisational members and 65 individual members. The work programme for 2004 included the issues of energy, sustainable organisations, healthy/local food, waste, raising consciousness, and partnerships. In addition, SGG has recently produced a directory describing existing examples of sustainable development in Gwynedd.

Mid-Wales Energy Agency

The mission of the Mid-Wales Energy Agency (MWEA) is to reduce carbon dioxide emissions through the promotion and facilitation of sustainable energy in Mid Wales. It was established in 2000 as the Powys Energy Agency, but in its new guise now offers sustainable energy support to the entire Mid Wales region. MWEA is a company limited by guarantee; it is a not-for-profit organisation, and has charitable status. Funded and supported by Powys CC, WWF Cymru, WDA and European

USEFUL WEB ADDRESS

www.gwyneddgynladwy.org.uk

NGOs and Civil Society Bodies

programmes including Altener, SAVE Agency and FEDARENE. MWEA provides householders, local authorities, businesses and community groups with expertise and advice of a technical nature, awareness raising of energy issues, the support of rural regeneration through sustainable energy and the promotion of investment into energy efficiency and renewable energy especially through access to grants and funding.

Its projects include renewable energy sources, energy auditing, development of wood fuels, heat surveys, solar water heating grants, no and low carbon technologies for mobile homes, community wind power and others. It also contributes to planning and policy guidance for energy strategies at the community level and to assist energy strategies developed by different organisations.

Research and Academic Bodies

Forum for the Future

Forum for the Future is a charity founded in 1996 with the aim of accelerating sustainable development through the adoption of a solutions-oriented approach, in the belief that many of the solutions needed to build a more sustainable society are already to hand. The Forum has developed several key initiatives aimed at pushing forward the sustainability agenda amongst a wide range of opinion-formers and decision-makers in UK society and beyond.

Some of its principal initiatives include:

- Sustainable Economy Programme – This programme seeks to develop an economy that combines environmental sustainability with economic and social well being. It focuses on three areas: sustainable agriculture and rural development; capital markets and sustainability (through the Centre for Sustainable Investment); and sustainable accounting methodologies and delivery.
- Forum’s Business Programme – This programme seeks to transform corporate thinking and behaviours such that sustainability principles become an integral part of business strategy and practice. The programme’s core activity is its partnerships with over 45 businesses.

USEFUL WEB ADDRESS

www.forumforthefuture.org.uk

New Economics Foundation

The New Economics Foundation is an independent ‘think and do tank’ that strives to inspire and demonstrate real economic well being. Founded in 1986 by the leaders of *The Other Economic Summit* (TOES) which forced issues such as international debt onto the agenda of the G7 and G8 summits, the New Economics Foundation aims to improve the quality of life by promoting innovative solutions that challenge mainstream thinking on economic, environmental and social issues. They seek to combine analysis and policy debate with practical solutions on the ground, often run and designed with the help of local people. They also create new ways of measuring progress towards increased well being and environmental sustainability, and have, for example, played an important role in the development of the Index for Sustainable Economic Welfare.

USEFUL WEB ADDRESS

www.neweconomics.org

Research and Academic Bodies

USEFUL WEB ADDRESS

www.copenhagencentre.org

The Copenhagen Centre

The Copenhagen Centre (TCC) is an autonomous, international institution established and funded by the Danish Government following the 1995 UN World Summit for Social Development.

The TCC aims to identify, develop and produce knowledge about corporate social responsibility with a particular focus on new social partnerships. The organisation disseminates information aimed at enhancing cooperation and building partnerships between business, government and civil society organisations in their efforts to address social challenges.

Key projects include:

- The Cross-Sector Partnership Initiative that has been designed to provide intellectual challenge, practical training, advice and support for those who are leading their organisations in the development of cross-sector partnerships.
- The Responsible Competitiveness Index undertaken in collaboration with AccountAbility, is a research initiative that focuses on how corporate responsibility practices impact on the international competitiveness of nations and regions.
- The European Academy of Business in Society, launched in 2002, is an alliance of academic institutions, companies, business networks and governmental institutions aimed at integrating corporate social responsibility into the heart of business theory and practice.

USEFUL WEB ADDRESS

www.cpi.cam.ac.uk

University of Cambridge Programme for Industry

The Cambridge Programme for Industry (CPI) provides leadership development programmes and learning services for senior individuals and major organisations around the world. Its focus is on developing capacity within business, governments and civil society to respond to contemporary societal challenges.

CPI's expertise lies in understanding how people learn and in developing learning processes that can change individuals and organisations in ways that will move society towards sustainability. Its programmes draw on world-class contributors from academic, policy and practitioner circles and its active alumni networks provide a vehicle for ongoing debate and development. CPI collaborates with academic and other partners and its work is underpinned where relevant by applied research.

The work of CPI supports the mission of the University of Cambridge, which is to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

World Resources Institute

Established more than 20 years ago with the objective of creating solutions to protect the Earth and improve people's lives. The work of the WRI focuses on four key goals: protecting the Earth's living systems, increasing access to information, creating sustainable enterprise and opportunity, and reversing global warming. The organisation strives to catalyse change by establishing partnerships that implement incentive-based solutions, harnessing the power of markets to ensure change.

The WRI provides information for policy and institutional change aimed at fostering environmentally sound and socially equitable development.

Wuppertal Institute

The Wuppertal Institute, established in 1991 by the government of North Rhine-Westphalia in Germany, is an interdisciplinary and practice-orientated institute that seeks to mediate between politics, economy, and the sciences in communicating the concept of sustainable development as defined at the 1992 Rio Earth Summit. The Institute's underlying working guideline is 'more wealth, less natural resource use.' It has been active in developing and promoting such concepts as Factor Four and eco-efficiency.

USEFUL WEB ADDRESS

www.wri.org

USEFUL WEB ADDRESS

www.wupperinst.org

Research and Academic Bodies

USEFUL WEB ADDRESS

ABERYSTWYTH:

www.aber.ac.uk/publications/ug/country/bscruraldevelopment.shtml

BANGOR:

www.bangor.ac.uk/

www.bangor.ac.uk/ies/ies.html

www.cazs.bangor.ac.uk/

www.bc.bangor.ac.uk/

www.bangor.ceh.ac.uk/

www.bangor.ceh.ac.uk/English/ecw.htm

www.bangor.ac.uk/addysgbyd/eng/home.htm

www.calu.bangor.ac.uk/

www.ifanc.bangor.ac.uk/

Universities within Wales

- **ABERYSTWYTH** Aberystwyth runs a BSc degree course in Sustainable Rural Development, with a focus on the particular social, economic and environmental challenges faced by rural areas. It also has research expertise on rural sciences and development, environmental change and environmental impacts, grassland environments and organic farming.
- **BANGOR** The University of Wales, Bangor has a history of research excellence in sustainable development and its academics have been training environmental scientists and managers, researching key environmental questions, and interacting with government and its agencies in providing answers to both questions of pure science and the integration of science into policies which underpin sustainable development for many years. Its range of SD expertise spans numerous departments: Agricultural & Forest Science, Biological Science, Chemistry, Informatics and Ocean Sciences, School of Business and Regional Studies and the School of Social Sciences and Law. This broad remit stimulates interdisciplinary research across a wide spectrum which is integrated at undergraduate level by The Institute of Environmental Sciences in its sustainable development degree. The University of Wales Bangor also has centres which focus on sustainability orientated research and development work:
 - *CAZS Natural Resources* is a semi-autonomous self-funding centre within the University of Wales, Bangor with more than 20 years' experience of rural development work in some of the world's poorest countries, where it has consistently applied, and at times pioneered, a holistic approach throughout its activities to improve rural livelihoods and promote SD.
 - *The Centre for Applied Marine Sciences (CAMS)* provides world-class research services to industry, governmental and non-governmental organisations. Part of the School of Ocean Sciences, University of Wales, Bangor, it is one of the largest marine science laboratories in Europe.
 - *Centre for Alternative Land Use (CALU)* is the fifth Farming Connect Development Centre and is based in Bangor. It is a partnership between: the University of Wales, Bangor; the Welsh College of Horticulture; ADAS Wales Ltd; Coed Cymru; and Coleg Llysfasi.

- *The Institute of Food, Active Living and Nutrition, Cymru (ifanc)* was established in September 2003 at the University of Wales, Bangor. Its major objective is to improve policy relevant research and education in the areas of food, nutrition and active living, thereby assisting the improvement of public health in Wales.
- *The BioComposites Centre* is a designated Scientific Centre of Excellence, which was established in 1989 at the University of Wales, Bangor, with the assistance of the Welsh Development Agency and industry. The aim of the Centre is to provide world leading fundamental and applied research into products and processes, based upon wood, industrial crops, recycled materials and industrial residues and to transfer these technologies to industry.
- *The World Education Centre (WEC)* is a Development Education Centre working throughout the six counties of north Wales offering advice, consultancy and team-teaching service to primary and secondary teachers and students and has a large range of resources available for loan from the RE Resources Centre.
- *The Environment Centre for Wales*, a newly approved Welsh Centre of Excellence for Environmental Science will bring together the scientific expertise of NERC's Centre for Ecology & Hydrology (CEH) and the University of Wales, Bangor (UWB). Housed in a new, purpose-built laboratory on the university campus, the Centre will allow CEH and University staff to work together more closely to provide a focal point for science research and training in Wales.
- **CARDIFF** Cardiff provides masters level SD orientated teaching through the School of City & Regional Planning's MSc in Sustainability, Planning and Environmental Policy. Research strength related to SD is spread throughout the University's Schools and includes particular strengths in biodiversity, environmental ethics, and contaminated land. It is also a focus for sustainability orientated research through the following centres:
 - *BRASS*: this interdisciplinary research centre funded by the ESRC specialises in research related to the sustainability and social responsibility of business, with an emphasis on the food, automotive and electronics industries;

Research and Academic Bodies

USEFUL WEB ADDRESS

CARDIFF:

www.cardiff.ac.uk/cplan/ri/index.html

www.cardiff.ac.uk/cplan/cres/index.html

www.sustainableregions.net/site/?category=2

GLAMORGAN:

www.glam.ac.uk/coursedetails/686/521

LAMPETER:

www.lamp.ac.uk/cem/course_emsd/shemsd_intro.html

SWANSEA:

www2.swan.ac.uk/research/groups.htm

- *Centre for Rural Environment and Society*: seeks to bring together environmental and social research themes in respect to rural areas, making connections between natural, social, cultural, economic and political processes within rural spaces.
- *Institute of Sustainability, Energy and Environmental Management*: This research centre pulls together engineering expertise on geoenvironmental, hydroenvironmental, energy, waste and other environment issues;
- *Regeneration Institute*: This multi-disciplinary institute focuses on the social, economic, environmental and cultural dimensions of regeneration for regions and communities.
- *Sustainable Regions*: this initiative within Cardiff Business School's Observatory of Innovation seeks to monitor and evaluate new innovative approaches to regional SD, and to disseminate research and best practices on SD to politicians, policy makers, academics, business leaders and the general public.
- **GLAMORGAN** Glamorgan offers a MSc in Sustainable Environmental Development, with an emphasis on policy and planning in housing, infrastructure, transport and the political dimensions of sustainability management. Their Sustainable Environment Research Centre includes the Hydrogen Research Unit has a focus on technological progress to a low-carbon economy and expertise on waste water research.
- **LAMPETER** Lampeter delivers an Environmental Management and Sustainable Development undergraduate degree which focuses on the physical processes that shape the natural environment, the monitoring and assessment of physical environments through field and laboratory work, mapping and remote sensing, and on the different ways in which society can develop strategies for managing its resource base of water, soils, plant and animal communities and the atmosphere.
- **SWANSEA** Swansea addresses many components of SD through its research and teaching. The Centre for Development Studies conducts research with a focus on poverty reduction, globalisation and governance, and health. There are other particular research strengths in relation to biology and marine biology, social justice, gender and culture, and environmental monitoring and modelling.

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Cynnal Cymru

Cynnal Cymru, the Sustainable Development Forum for Wales, is an independent not-for-Profit company led by a Board of Directors. Cynnal Cymru exists to promote sustainable development, be a catalyst for change towards sustainable development in all sectors of Welsh society and act as a forum within Wales for the development, canvassing, exchange and dissemination of views, information and policies on sustainable development.

Public Service Management Wales (PSMW)

Public Service Management Wales (PSMW) aims to support and improve the skills, knowledge and understanding of public service managers, leaders and new entrants about working together across traditional public service boundaries and engaging the workforce in improving public services for people in Wales. Over 70 public sector organisations are members of Public Service Management Wales and are working together to develop leadership and management capacity through shared learning, organisational development and improved planning and management of the workforce to create better and more joined up public services. This is an integral part of the Welsh Assembly Government's vision for public services as highlighted in Making the Connections.

Project Board

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