

# WWF in numbers

40%

40% emissions reduction by 2020.

75%

75% reduction in Wales' ecological footprint by 2050.



2050

2050 - ensure Wales has decarbonised the electricity sector.

2000

2000 - WWF cymru is established and starts working in Wales.

100%  
RECYCLED



WWF CYMRU



CYMRU

REPORT

2011

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## Progress in embedding the 'One Planet' aspiration in Welsh Government

Report for WWF Cymru written by

Dr. Alan Netherwood, Netherwood Sustainable Futures



### Why we are here.

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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NETHERWOOD SUSTAINABLE FUTURES  
SUSTAINABLE DEVELOPMENT  
& CLIMATE CHANGE CONSULTANCY

REPORT FOR WWF CYMRU

Dr. Alan Netherwood,  
Netherwood Sustainable Futures

REVISED AND UPDATED  
MAY 2011

REPORT FOR WWF CYMRU

# PROGRESS IN EMBEDDING THE 'ONE PLANET' ASPIRATION IN WELSH GOVERNMENT

## FOREWORD

**For the past 50 years, WWF has been striving to find ways in which humans can live in harmony with the natural world. Even though it is a global organisation with a global perspective, WWF has a keen interest in a small country like Wales, which can show the way forward to others.**

The last Welsh Assembly Government aspiration for the people in Wales 'to live within their fair share of the earth's resources', as expressed in One Wales One Planet, was an important declaration of intent. The Global Footprint Network has recognised Wales as the first country in the world to formally monitor and report on changes to its Ecological Footprint and to start to plan to achieve this goal.

WWF Cymru felt it was important to assess how much progress had been made to turn this aspiration into reality. We wanted to both learn from these efforts and make recommendations for the new Government to build on progress to date and increase the scale and pace of delivery to meet the real world timetable.

Therefore, this report has three purposes.

Firstly, we hope the new Government in Wales learns from our research findings and takes forward the agenda, with renewed vigour. Its new powers offer new possibilities to make a difference.

It will be in charge at a critical time in terms of meeting climate change targets. According to the Tyndall Centre, global emissions must have peaked by 2015 if we are to have a 50% chance of keeping the rise in global warming to less than 2°C. We are fortunate that all political parties in the National Assembly for Wales are committed to reducing Wales' greenhouse gas emissions by 40% by 2020. The political conditions are right for Wales to lead by example.

**It really is time to *deliver* on the deep policy and investment shifts necessary to become a One Planet Wales.**

Secondly, WWF Cymru has commissioned this report as our contribution to the SD effectiveness review, which the new Welsh government will undertake.

Living within environmental limits is a fundamental necessity to sustain life on earth. We must learn all the lessons we can from the successes and failures of a government that has put this principle into their purpose for governing. When a government has had the political courage to show leadership and follow such an important path, it is important that the challenges faced and lessons learned are shared with others. Therefore this effectiveness review is critical.

Thirdly, we hope this report and the new Welsh Government's response, will be a useful contribution to the Rio + 20 global summit in 2012.

We wish to thank all those involved in getting us this far – Ministers, other politicians, civil servants, and the many committed individuals around Wales who continue to see that short term and short sighted measures will not bring about a happy, healthy and prosperous Wales in the future.

I hope this report will provide the evidence base for the Welsh Government to ask itself, and its partners, some searching questions on how to be more effective at 'embedding environmental sustainability as a central organising principle of Government'.

**Anne Meikle**  
Head of WWF Cymru  
June, 2011.

## BACKGROUND

**This report critically examines the appropriateness of policy mechanisms developed by Welsh Assembly Government to deliver their ‘One Wales: One Planet’ agenda set out in the Government’s *One Wales Agreement* and their *Sustainable Development***

***Scheme*. This commits Wales to an ecological footprint of 1.88 global hectares per person within a generation; to reduce carbon based energy use by 80-90% over the same period; while at the same time moving towards zero waste; less car travel and more sustainable food within a fairer society.**

A touchstone for this work is WWF Cymru’s report from 2007, *One Planet Wales*, which identified some key short term priorities, to 2011, to deliver appropriate footprint reductions, which would provide a springboard for further policy actions over the medium term 2020-2050. The report suggested, “*it is vital that the large, slow, structural change issues start to be addressed before 2011*”.

Key questions are - how many of these priorities are set in place? Where are the strengths, where are the weaknesses, and where does this leave a new WAG administration after the elections in 2011? *One Planet Wales* also suggested ambitious structural changes to governance, economic strategy, the public sector and consumer behaviour to work towards ecological footprint reduction. How well placed is Wales to achieve the required changes?

This report draws on documentary evidence from WAG strategies, policies, guidance and statements from a range of relevant policy areas, as well as WAG - commissioned reports from Stockholm Environment Institute on 2020 ecological footprint scenarios and the Tyndall Centre on carbon reduction. It also references the Wales Audit Office (2010) report on sustainable development and business decision making in WAG, which suggested the government still had some way to go to challenge business as usual approaches to policy making and to address policy conflicts, as well as ensuring that the One Planet aspiration is driven through financial systems. It also suggested a more consistent approach to ecological footprint reduction.

This report is structured to examine key policy areas which influence the reduction of Wales’

ecological footprint: food, energy, transport; waste - but also covers issues such as land use, the economy, the public sector and agriculture, which are critical to footprint reduction and the aspiration of One Planet Wales. To what extent do the proposed policy interventions match those recommended by WWF Cymru, SEI and Tyndall for carbon and footprint reduction?

Documentary evidence is important for a number of reasons: firstly the documents provide the frameworks and key messages to engage WAG departments and others in a One Planet vision, secondly they identify the specific policy mechanisms, whether legislative, financial or governance which help to drive forward the One Planet agenda, and thirdly, they provide a sense of how government and its partners will be held to account on delivering Welsh Assembly Government’s One Planet aspirations.

Documentary analysis was undertaken in Summer 2010, for the first iteration of this report and then updated, with help of WAG officials during April 2011 to provide a comprehensive coverage of relevant material.

Inevitably this report provides a snapshot of the ‘architecture’ for WAG to deliver One Planet Wales in mid 2011. It attempts to examine how effectively WAG are using their influence and policy levers to place Wales on a pathway to One Planet living, not just in how they operate themselves, but in how they engage with other organisations and use their influence to place others on that pathway. To what extent do the policy mechanisms and targets identified by WAG (rather than the production of a strategy itself) set us on the right path? What opportunities have WAG had to cement one planet thinking in their strategies, partnership work and communication since the One Wales agreement?

Can we get any sense of whether the range of initiatives adds up to more than its ‘parts’? Is all of this laudable cumulative effort from WAG and others really going to get us where we want to be in a generation? This report intends to provide evidence and to open up this debate in Wales at the start of a new administration.

There is a huge opportunity to set Wales on a path to footprint stabilisation between 2011 and 2015, as the new Labour administration progress their manifesto commitments from the 2011 elections by delivering commitments to:

- One Wales: One Planet - the Sustainable Development Scheme
- living within environmental limits;
- legislating for sustainable development as a central organising principle of government
- establishing a new independent body (a potential Sustainable Futures Commission) to pursue sustainable development;
- developing the green economy and pursuing carbon reduction.

## KEY FINDINGS

WAG in the Sustainable Development Scheme suggest that ‘One Wales One Planet’ will require “commitment and tenacity to deliver (this) over a 40 year timescale”. WWF Cymru suggests the need for a “multi-level programme - of policy and investment, visioning and capacity building - all of which should lead to measurable results on the ground”.

It is clear from the evidence cited in this report a lot of excellent work has gone on to develop statutory and financial mechanisms, policies and actions to develop footprint reduction, yet we do not have a clear idea of how far this is taking us in the right direction, if at all. It should be stressed that many of the prerequisites identified by WWF in One Planet Wales for short term footprint reduction by 2011 are in place in the policy architecture, if they are being and continue to be implemented effectively, and their cumulative impact is accounted for.

However, based on the documents reviewed as part of this report, there are some clear **causes of concern**, where ‘One Wales One Planet’ is *not* featuring in the policy discourse. Policy in these areas often has a strong sustainability message at the top of the policy hierarchy but these messages get diluted further down the ‘policy tree’. These include:

- **Economic Development** where WAGs key policy shift, the *Economic Renewal: a new direction* has failed to place ‘One Wales One Planet’ footprint reduction and sustainable consumption as part of its vision, action plan and monitoring.
- **Transport**, where the policy hierarchy, including *Regional Transport Plans, National Transport Plan, Wales Transport Strategy* and capital programmes are failing to show how Transport footprint reduction might be realised.
- **Public Sector**, where there have been missed opportunities to drive home the ‘One Wales One Planet’ agenda over recent discourse, including the *Local Government Measure*, guidance to *Local Service Boards* and the recent ‘Sergeant Review of public services “*Local Regional, National: What services can be delivered where?*” (2011)
- **Housing**, where the *Housing Strategy* shows little evidence of taking on the ‘One Wales One Planet’ vision or mechanisms for Building/Housing footprint reduction, despite progress in devolving Building Regulations to Wales.

The link between ‘One Wales One Planet’ and these policy areas are weak and recommendations are made in the report to embed ‘One Wales One Planet’ into the work of Welsh Assembly Government, partnerships, strategy and performance management, which would ensure greater transparency and accountability on the impact of these initiatives on footprint reduction and carbon abatement.

There are some notable areas of policy where Welsh Assembly Government is making excellent progress in creating the conditions for footprint reduction, where the notion of ecological limits and sustainable consumption are at the forefront of policy and mechanisms for intervention and footprint reduction are well developed. These are real **causes of optimism** and include:

- **Food and Agriculture** - the Food Strategy - *Food for Wales: Food from Wales* and the *Farming Strategy* provide excellent examples of forward thinking, well researched and evidenced policy, with sustainable development and the notion of One Planet living firmly embedded in both its high level aims and its detail.
- **Energy** - a wide range of policy interventions for carbon abatement and subsequent footprint reduction are identified in *A Low Carbon Revolution – The Welsh Assembly Government Energy Policy Statement and the Climate Change Strategy*.
- **Waste** - where Welsh Assembly Government’s strategy *Towards Zero Waste: One Wales: One Planet 2009-2050* includes footprint reduction targets for different sectors, and a clear relationship between past footprint analysis and policy interventions.
- **Public Sector** - progress by the NHS in Wales to measure and reduce its carbon footprint and the impetus that WAG provides to local government via the Sustainable Development Framework and Outcome Agreements.

## PRIORITIES FOR DELIVERY OF ONE PLANET WALES

The key recommendations coming out of the report are:

- A. that Welsh Assembly Government should measure - **footprint reduction and carbon abatement** for all of their relevant strategies and policy mechanisms in any given policy area in order to achieve an insight into progress towards ‘One Wales One Planet’.
- B. that ‘One Wales One Planet’, footprint reduction and carbon abatement should form part of the **performance management frameworks** for Welsh Assembly Government, Assembly Government Sponsored Bodies, local government and Welsh Assembly Government funded initiatives in different policy areas.
- C. Welsh Assembly Government reporting should, in addition to highlighting good practice, comment on the **cumulative impact** of initiatives, and the **scale of the intervention that is still required** to meet the ‘One Wales One Planet’ aspiration.
- D. that ‘One Wales One Planet’ should be **embedded in high level strategy and partnerships** for each policy area.
- E. Welsh Assembly Government and the public sector should, as part of their procurement powers, demonstrate how effectively the **‘Welsh Pound’ and the Euro (via WEFO and EU Structural Funding) are delivering on footprint and carbon reduction** and publish an annual account alongside financial reporting requirements.
- F. WAG should explore, with the Sustainable Futures Commissioner and Climate Change Commission, the potential for **a system of national carbon accounting to sit alongside financial reporting systems** and form a central part of the Wales performance management framework.
- G. A **One Wales: One Planet Routemap** is developed by Welsh Assembly Government, the Sustainable Futures Commissioner, the Climate Change Commission and others to promote the concept from **an aspiration to an imperative** for government functions and partnerships, with clear targets and measurement. This will aid reporting, scrutiny and accountability.
- H. A method of regular **scrutiny and reporting** is devised which critically examines how the One Wales: One Planet Routemap is being delivered or ignored by government functions and partnerships, involving Wales Audit Office and other relevant bodies in Wales.

Further specific recommendations are provided in the body of the report for each policy area and in Appendix 1.

# CONCLUSIONS

**Despite the successes highlighted in this analysis, a key question is evident for all the policy areas examined i.e. “is all of the admirable effort reviewed**

**in this report stemming footprint growth or even beginning to reduce it?”**

**The short answer is we just don’t know. Therefore many of the recommendations in this report are about *measurement, evidence and accountability.***

Despite the successes highlighted in this analysis, a key question is evident for all the policy areas examined i.e. “is all of the admirable effort reviewed in this report stemming footprint growth or even beginning to reduce it?” The short answer is we just don’t know. Therefore many of the recommendations in this report are about *measurement, evidence and accountability.*

Accounting for our actions in terms of carbon and footprint reduction, however statistically difficult, should be a pre-requisite of a nation aspiring to One Planet living. These measures should be embedded in the way we judge performance of our government(s) and public services.

Welsh Assembly Government has a very difficult and *immediate* challenge to meet their own supporting principle “all of our policies will show how we will reduce Wales’ Ecological Footprint to work towards our vision”. Given the weaknesses in ‘accounting’ and ‘accountability’ highlighted in this report, and despite the development of appropriate indicators, including the footprint, it is of real concern how progress will be measured and reported.

There is also a need to align ‘One Wales One Planet’ and financial mechanisms in Wales to achieve greater accountability for the role of the public purse in progressing the ‘One Wales One Planet’ aspiration.

Welsh Assembly Government’s own Sustainable Development Scheme target is for footprint stabilisation by 2020 and then reduction thereafter. 2020 is now nine years away, and the new Welsh Government will take us half way to that milestone.

Many of the key policy documents hardly have footprint reduction on the agenda, let alone a method of analysing where the biggest investments and efforts should be made to reduce the footprint.

Linking footprinting to Wales Spatial Plan, the Policy Gateway Tool and their Strategic Capital Investment Framework’s are smart moves. However, our current policies and immediate financial decisions leave long legacies in terms of infrastructural investments and our ‘direction of travel’, whether sustainable or unsustainable.

Time is short and a ‘tenacious’ effort will be required to re-focus policy towards ‘One Wales One Planet’ in the coming decade. Devolving Building Regulations is an excellent example of Welsh Government acquiring the tools to influence behaviour. What other opportunities, similar to this could be pursued under a Sustainable Development Bill in Wales? How can legislation quicken the pace of our journey to One Planet living?

Key questions are raised by this report regarding the governance approach to ‘One Wales One Planet’ and ensuring sustainable development is adopted as a central organising principle. These need to be considered by the new administration;

- Why is ‘One Wales One Planet’ so embedded in the Food Strategy and Farming Strategy but absent from the Economic Renewal, Housing Strategy and Transport planning?
- To what extent have ministerial leadership and the type of engagement and messaging as part of consultation influenced how effectively ‘One Wales One Planet’ has been embedded in policy? Can we learn anything from the successes of the last administration?
- How much do ‘strings’ attached to available financial mechanisms influence the adoption of footprint reduction and carbon abatement interventions and measures? (e.g. EU funding for Agriculture).
- The future role of mandatory targets and reporting for areas of footprint reduction - (e.g. waste targets have driven partnership work and implementation).
- To what extent does the messaging and policy of ‘One Wales One Planet’ agenda help to reduce vulnerability to future risks for Wales e.g. food security, resource scarcity, energy security.

The Sustainable Development Scheme does not provide a plan for One Planet living in Wales. There is a sense that a plan - an overall sense of progress, or lack of it, is desperately required to provide an overview of where our efforts are best concentrated to reduce the footprint.

One Planet living will not be pursued by default through existing policy mechanisms - something needs to drive the concept through policy silos. There is a danger OWOP will get lost in the ‘noise’ of funding cuts and entrenchment in different areas of high footprint impact. Its influence on the proposed Wales Strategic Infrastructure Plan will be a litmus test of WAG’s commitment to footprint reduction and One Planet living.

Current ‘scrutiny’ arrangements for the Scheme, and presumably therefore WAG’s approach to the One Planet aspiration are dealt with within WAG, within the National Assembly’s Sustainability Committee, who have undertaken a recent review of mainstreaming of sustainability in Ministerial portfolios, and in the past via SDC’s input into the Annual Report of the Scheme.

The potential for a new Sustainable Futures Commission, supported by new legislation to hold Welsh Government to account on the One Planet Aspiration is tantalising. The scrutiny of emissions reduction via the Climate Change Commission could also be a key lever for change.

Could Wales be one of the first countries in the world to get the accountability structure right for living within the Earth’s capacity? Could the Welsh Government tackle the weaknesses in accounting, policy, strategy and governance highlighted in this report and develop a routemap for a One Planet Nation? Could they report this meaningfully across sectors and engage others in a ‘movement’ towards sustainability? In four years time, following another Effectiveness Review of the Sustainable Development Scheme and a potential Sustainable Development Bill, we may have a clearer notion of whether this ‘journey’ will be successful or mired in bureaucracy and inertia.

WAG should be congratulated in setting sustainable development as key organising principle of government via the Sustainable Development Scheme, developing a mechanism for ‘sign up’ of partners via the Sustainable Development Charter (over 60 partners by May 2011) and for being so robust in its broad target setting for footprint reduction “one planet living within a generation”. Initiatives such as the Sustainable Development Challenge Fund, Sustainable Development Indicators; Ecological Footprint Grants; Hay on Earth and Community Action on Climate Change and continued support of Sustain Wales: Cynnal Cymru and others are helping to change behaviours of organisations, communities and individuals.

However at present there is no evidence that the cumulative effort adds up to what is required.

This report supports Wales Audit Office (2010) findings that Welsh Assembly Government need to develop a consistent approach to ecological footprint reduction, involving partnerships in all policy areas, until this is done, and a consistent measure is applied to the effectiveness of policy, all we have is a diverse set of policies, that we hope are broadly sending us on a more sustainable path.

To move Wales towards the goal of One Planet living - beyond rhetoric, beyond limited good practice and beyond incrementalism, it will require political leadership that takes WAG outside of its comfort zone, good communication of critical issues across sectors, and legislation and prescription to back up aspirational goals.

The analysis in this report provides a sense that we already have many of the tools, techniques and learning to influence ‘Team Wales’ and become a One Planet nation. Welsh Government needs to provide greater impetus, interventions up to the scale of the task and the political drive to help to deliver the One Planet imperative.

**Dr. Alan Netherwood**  
**Netherwood Sustainable Futures**  
**May 2011**

## KEY REFERENCES:

*One Planet Wales: Transforming Wales for a prosperous future within our fair share of resources (2007) WWF Cymru*

*One Wales: One Planet: The Sustainable Development Scheme (2009) WAG*

*Towards a 2°C future: emission reduction scenarios for Wales: A research report by The Tyndall Centre, University of Manchester (2009)*

*One Wales: One Planet: The Sustainable Development Annual Report 2008-09 (2010) WAG*

*Wales Audit Office: Sustainable Decision Making in Welsh Assembly Government Wales Audit Office (2010)*

*Climate Change Strategy WAG (2010)*

*Sustainable Development Scheme Annual Report 2009-10 WAG (2011)*

*Welsh Labour Party Manifesto (2011)*

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# ONE PLANET FOOD AND AGRICULTURE

WWF's report, *One Planet Wales (2007)* suggests that food and drink makes up 25% of Wales' ecological Footprint, and Tyndall (2009) suggest that 14% of Wales' emissions come from the agricultural sector. Clearly, to aspire to One Planet living - the food footprint (consumption) and Agricultural and land use emissions (production) need to be tackled in unison to achieve a more sustainable future in

Wales. WAG's aim from the Sustainable Development Scheme is to stabilise the ecological footprint of Food and Drink by 2020 and then reduce. Table 1 shows the 'asks' from the work of WWF, SEI and Tyndall and the WAG policy mechanisms referenced from a range of documents including the Farming Strategy, the Food Strategy - *Food for Wales: Food from Wales*, the Local Sourcing Action Plan, Rural Development Plan and others.

On the evidence of these documents, WAG has developed the policy mechanisms to achieve most of the conditions suggested by WWF to be in place by 2011. Their activity through Value Wales on public sector procurement, Growing for Growth on local sourcing and commitment in the Local Sourcing Strategy for an indicator on the proportion of local food uptake in the public sector are signs that this element of footprint reduction is central to their agenda. A major emphasis on organic food within the Farming Strategy, and True Taste Branding evidences that organic food promotion and local sourcing is also central to their economic agenda for food and agriculture. All of the elements are also in place to provide environmental support to the food supply chain via Farming Connect and Supply Chain Efficiency Scheme work within Annex 1 of the Rural Development Plan. Elements for potential 2020-2050 footprint reduction are also in place, work around Food Hubs to consider food distribution around retail and catering, and a strong drive towards low impact, organic and sustainable farming within RDP Annex 2 schemes (Organic Farming and Glastir) and the Farming Strategy provide the structure to deliver on further footprint reduction.

Food for Wales: Food from Wales, the Food Strategy published in 2010 provides a vision for a "sustainable food system", focusing on ecological efficiencies in production and supply chains, food waste, reduction of greenhouse gas emissions, local, seasonal and organic food and technological innovation particularly in the area of agricultural waste management. This high level, ambitious

strategy, with reduction of the footprint as a central tenet is encouraging.

SEI suggested a 10% reduction in the Food footprint by 2020, a 16.6% reduction on Food Waste would be required. WAG's Strategy consultation towards Zero Waste (2009) which covers the time period 2009-2050 suggests a number of targets around food diversion from the waste stream into composting and anaerobic digestion, of 12% by 2012/13 and 16% by 2024/25. Food waste seems to be central to WAG's planning on waste management, with a detailed sectoral plan for Food Manufacturing, Service and Retail Sector due over the next year. SEI's calls for supply chain efficiencies of 1.5% may be covered by the aforementioned Farm Advisory supply chain work, and increase in the proportion of organic food by the financial support from the RDP Axis 2 work.

The Tyndall work on emissions from agriculture and land use provide a sterner challenge to the policy framework in Wales, including reductions in red meat production and in beef herd numbers as well as white meat substitution for red meat to achieve a 3% annual emissions reduction. They go further for 6 and 9% suggesting a 60% reduction in livestock numbers. Unsurprisingly, this scale of shift in production is not reflected in the policy aims of the Farming Strategy, the Rural Development Plan, and Action Plans of the Red Meat and Dairy industries, although is acknowledged as a policy issue in the Farming Strategy. This is an unpalatable political and strategic message, and WAG have chosen to emphasise the benefits of increased efficiencies, changes to husbandry and farming methods and

anaerobic digestion to reduce greenhouse gas emissions in their policy frameworks. There is a fine balancing act for WAG to manage, between pushing for more sustainable production methods on the one hand, and ensuring an economically viable countryside on the other. Recent work from the Land Use and Climate Change group from the Climate Change Commission suggests a policy emphasis on rapid introduction of anaerobic digestion and use of biogas as well as offset from large scale tree planting (100,000 hectares) to address the emissions in this sector. It is an encouraging sign that one of the Farming Strategy indicators is the "Level of GHG emissions for land based activity". So despite the difficult nature of the policy problem of agricultural emissions, this seems to be an area where WAG wish to be held to account and explore policy options. This, on the face of it, is an extremely positive framework for food footprint reduction and emissions reduction on the food production side, provided that WAG are able to 'account' for the effect of these schemes and initiatives on the overall proportion of organic food consumption via the Food Strategy, Farming Strategy, Rural Development Plan and others and the success of supply chain efficiencies and public sector procurement etc. To this end, it is suggested that WAG become more specific about the cumulative effect of their achievements, for example in the case of supply chain efficiencies. They should not just flag up individual examples of good practice, but report on the take up of similar initiatives across the board- to give us an idea of the scale of change that is happening versus the scale of change that needs to happen. Another good example of this is *Glastir*, which will offer support to farmers via an Agricultural Carbon Reduction and Efficiency Scheme through grants for energy efficiency and carbon sequestration. What level of take up is necessary to make real progress in delivering a One Planet food system, and how can this be achieved?

The Farming Strategy (2010) and Food for Wales: Food from Wales (2010) provide excellent examples of forward thinking, well researched and evidenced policy, with sustainable development and the notion of One Planet living firmly embedded in both its high level aims and its detail. They certainly deliver many of the elements of a forward thinking One Planet Food Strategy suggested by WWF in 2007. The challenge for WAG is to express the success of the initiatives in

these strategies in 'footprinting' and emissions reduction terms. Financial support for many of these initiatives via the RDP lasts until 2013. There is an opportunity for WAG to reflect on the RDP 2007-13 and to consider how effectively these initiatives have reduced the food footprint and emissions from the food and agriculture sectors. This will help to target support and importantly *monitoring* post 2013 to help achieve these aims. There is also an opportunity to make the connection between sustainable food procurement and production, with a lower footprint and *healthy eating*, identifying the health benefits of local and organic food production and food consumption and promotion of healthy and sustainable food via retail and public sector food outlets.

## RECOMMENDATION 1

WAG should measure footprint reduction and carbon abatement for all of their relevant strategies and policy mechanisms in Food and Agriculture - in order to achieve an insight into progress towards OPW.

## RECOMMENDATION 2

WAG reporting should, in addition to good practice on reducing the Food footprint, comment on the cumulative impact of initiatives, and the scale of the intervention that is still required to meet the OPW aspiration.

## RECOMMENDATION 3

Greater emphasis should be placed on connecting the health benefits of lower footprint diets in WAG policy and funded interventions in all sectors.

**Table 1: Policy Mechanisms for Reduction of Food Footprint and Agricultural Emissions**

| WWF One Planet Food   | SEI 2020 scenarios  | Tyndall 3%, 6%, 9% asks  | WAG Policy Mechanisms and targets (where available)   |
|---|---|--|---|
| <p><b>In place by 2011 for 10% reduction in Food Footprint</b></p> <ul style="list-style-type: none"> <li>● Local organic food procurement for public catering</li> <li>● Local Organic food promotions</li> <li>● Environment – business initiative in the food processing and retail sector.</li> <li>● One Planet Food Strategy</li> </ul> <p><b>Strategies for 2020-2050</b></p> <ul style="list-style-type: none"> <li>● Low impact farming (15%)</li> <li>● Low impact imports (10%)</li> <li>● EMS in food and drink processing sector.(20%)</li> <li>● Distribution for retail and catering. (10%)</li> </ul> | <p><b>For 10% reduction in Food Footprint by 2020</b></p> <ul style="list-style-type: none"> <li>● 16.6% reduction in Food Waste</li> <li>● Annual food supply chain energy efficiencies of 1.5%</li> <li>● Increase in proportion of organic food (undefined)</li> </ul> | <p><b>For 3% annual emissions reduction</b></p> <ul style="list-style-type: none"> <li>● Reduction in red meat consumption</li> <li>● Increase in productivity and fertility in dairy herd</li> <li>● Organic sheep production</li> <li>● Reduction in beef herd numbers</li> <li>● White meat substitution for red meat</li> </ul> <p><b>For 6 and 9% emissions reduction</b></p> <p>All of the above extended</p> <ul style="list-style-type: none"> <li>● Livestock numbers reduced by 60 %</li> <li>● All sheep farming organic</li> </ul> | <ul style="list-style-type: none"> <li>● Food for Wales: Food from Wales</li> <li>● RDP Annex 1 Schemes: Farming Connect; Farm Advisory Supply Chain Efficiency - EMS support (from £89m budget)</li> <li>● RDP Annex 2 Schemes: Tir Mynydd, Tir Cynnal, Tir Gofal, Organic Farming (from £594m budget).</li> <li>● Glastir (from 2011) 5,000ha p.a.up to 2031</li> <li>● True Taste Branding</li> <li>● Value Wales for the public sector: Opening Doors (SMEs), sustainable procurement framework and group; Wales sourcing strategy</li> <li>● Growing for Growth (local sourcing for supermarkets)</li> <li>● Red Meat Environmental Roadmap</li> <li>● Dairy Industry Carbon footprint &amp; Environmental Plan</li> <li>● Key indicator:Level of GHG emissions for land based activity (Farming Strategy)</li> <li>● Key indicator: Local food uptake by the public sector (Local Sourcing Strategy)</li> </ul> <p><b>Support on</b></p> <ul style="list-style-type: none"> <li>● Food Hubs research (food services)</li> <li>● Direct Sales (Farm to Public)</li> <li>● Community Food Co-operatives</li> <li>● Regional seasonal availability studies</li> <li>● Community Growing</li> </ul> |
| <p><b>RELEVANT FOOD AND AGRICULTURE POLICIES AND STRATEGIES REVIEWED</b></p>  |   |  |   |
| <p><i>Rural Development Plan 2007-13 - WAG (2007)</i></p>   | <p><i>Farming Food and Countryside: Building a secure Future: a new strategy for farming WAG (2010)</i></p>   |  |   |
| <p><i>Dairy Strategy - WAG (2008)</i></p>   | <p><i>Food and Drink Strategy - WAG ( 2010)</i></p>   |  |   |
| <p><i>Red Meat Strategy - WAG ( 2009)</i></p>   | <p><i>Horticulture Action Plan - WAG (2010)</i></p>   |  |   |
| <p><i>Food Tourism Action Plan - WAG (2009)</i></p>   | <p><i>Climate Change Strategy (Draft) - WAG 2010</i></p>  |  |   |
| <p><i>Local Sourcing Action Plan - WAG ( 2009)</i></p>  | <p><i>Climate Change Commission - Land Use Working Paper (2010)</i></p>   |  |   |
| <p><i>Towards Zero Waste: One Wales: One Planet: Consultation WAG (2009) - WAG</i></p>  |   |  |   |
| <p><i>NaW Sustainability Committee (2011)- Evidence for mainstreaming Sustainability in Ministerial Portfolios - Department of Rural Affairs</i></p>  |   |  |   |

## ONE PLANET BUILDINGS

**According to WWF's *One Planet Wales*, in 2007, domestic building accounts for 1.09gha/cap of Wales ecological footprint, mostly through energy use, with some impact from construction activity and maintenance. Commercial buildings add another 0.38gha to the footprint, accounting in total to 1.47gha**

**or 28% of Wales ecological footprint. WAG's aim from the Sustainable Development Scheme is to stabilise housing's ecological footprint by 2020 and then reduce. Tyndall suggests residential emissions are responsible for 25% of Wales' total greenhouse gas emissions. Table 2 shows the 'asks' from the work of WWF, SEI and Tyndall and the WAG policy mechanisms referenced from a range of documents including *A Low Carbon Revolution – The Welsh Assembly Government Energy Policy Statement - WAG (2010)* and *Housing Strategy Improving Lives and Communities- Homes in Wales - WAG (2010)*.**

Clearly this policy area is of high relevance to the One Planet agenda and was afforded high priority in the One Wales agreement, with subsequent commitments to: adopt the Code for Sustainable Homes for new homes (level 3) under the influence or funded by WAG or their sponsored bodies (AGSBs); BREEAM Excellent standard for all new buildings funded by WAG and AGBSs, a 10% target for recycled and re-used materials in buildings promoted or supported by WAG and sponsored bodies; and all new buildings to be zero carbon from 2011. These are all clearly focused primarily on new build. However, the Economic Renewal, WAG's new economic development strategy (see section 4 of this report) suggests that devolution of Building Regulations will be by 2012 and subsequent policy on the zero carbon commitment will need to be carefully timed not to inhibit recovery in the building sector. Did this represent a strong message to the building sector, a watering down of policy or a sensible precautionary approach?

The table shown below shows that WAG have also concentrated efforts on the existing housing stock, working on devolved building regulations, support for home energy efficiency through HEES and the commitment of Structural Funds to innovative locational and partnership based low carbon work. Many of these initiatives do provide targets of households to be supported in energy efficiency and high levels of funding for community based energy projects, however, others provide no targets and it is difficult to get a sense of scale of input and outcome (Wales Housing Quality Standards, Smart Meters, Low Carbon Hub). However, WAG's work

on the Renewable Energy Routemap, National Energy Efficiency and Savings Plan, Fuel Poverty Strategy and the recent Energy Policy Statement "A low carbon revolution" certainly indicate, that One Planet Building is high on the agenda of this government. To what extent does this meet the conditions and targets suggested by WWF, SEI and Tyndall Centre?

Many of the policy mechanisms identified by WWF that are required by 2011 to set us a OPW path, seem to be in place. The Energy Strategy provides both direction and funding to promote microgeneration, feed in tariffs, new zero carbon homes and public buildings as well as the lever of the Carbon Reduction Commitment to promote energy efficiency across sectors. Clear targets and incentives for local government and other intervention via the Sustainable Buildings and Waste Action Plan (2007) has enabled partners to meet targets of 85% reuse of construction waste by 2010 and ecological footprint reduction is at the centre of construction waste targets in WAG's Zero Waste Strategy (2009). The Carbon Reduction Commitment, introduced in 2010, will theoretically result in not just caps to carbon emissions across sectors but also trading in carbon permits from 2012. For the longer term 'asks' of WWF, there is some work in Value Wales on sustainable procurement, which might lead to more local sourcing of materials, and guidance which might support this through Creating Sustainable Places (2006) but no clear targets. A greater emphasis is needed on developing low impact lifetime costs of the supply chain, although this is part of the work of the Low /Zero Carbon Hub and advisors network.

The Essex Review (2008) on affordable housing made a strong connection with the low carbon agenda, however the Housing Strategy (2010) *Improving the Lives of Communities - Homes in Wales*, although referencing the need for energy efficiency to tackle fuel poverty and meet climate change commitments, does not have the One Planet aspiration at its centre. Its tone is firmly bound up in the financial constraints facing government and partners. With no Action Plan for implementation planned, or targets, there seems to be a gap in an overarching vision of sustainable building, and co-ordination of activity, despite the wealth of positive work in Wales. There is also evidence of missed opportunities to flag up the One Planet work in recent communiqués with Housing Associations and the Private Rented Housing Sector. Wales is doing some excellent work in this area of policy and the Housing Strategy should have done it justice, and also provided clear consistent messages to partner organisations in the building and housing sector. Will all of this activity meet SEIs suggestion for a 6.4% reduction in the residential footprint by 2020?

HEES activity of 3,000 homes per year and the proposed activity of ARBED through structural funds may go some way to achieving SEIs retrofitting and energy reduction targets. However, this highlights the need for WAG to become more accountable and transparent around the effect of this cumulative effort on their policy targets - we need to know whether this effort is sufficient. Similarly, the rate of housing renewal is critical to both SEI's and Tyndall's suggestions for intervention for a 10% reduction in the footprint and a 6% emissions reduction. Clarity is needed on the Housing Renewal rate to inform this policy debate, and discussion of the costs and benefits of the Tyndall suggestions for universal insulation, cladding, solar thermal and heat pumps. This is especially important as Tyndall suggest that greater cuts in residential emissions are required to make up shortfalls in other sectors (e.g. agriculture) if they are to meet their 3% annual emissions reduction target.

WAG have targeted a 55% improvement (over the 2006 Building Regulations) as the first changes to devolved Building Regulations which come into force at the end of 2011, with a consultation planned for 2012 and implementation in 2013. This provides a clear signal to the housing sector,

potentially creating conditions to stimulate microgeneration, especially solar water heating and photovoltaics. This is a good example of government led intervention to reduce Wales' ecological footprint. What lessons can be learnt from this, leading into a potential Sustainable Development Bill? Where else can Welsh Government create the statutory conditions to work towards One Planet Wales?

Much of the policy architecture is in place to reduce the footprint and reduce emissions associated with building. The problem is one of **accounting** for the impact of all of these cumulative interventions on footprint reduction and carbon abatement and clear messaging to stakeholder organisations from WAG. It is unclear whether the scale and speed of action will be sufficient. The Housing Strategy Programme Board, who will oversee the implementation of the Housing Strategy, and help to oversee financial mechanisms such as the Social Housing Grant should be tasked to drive the OPW agenda through their work. This is not about flagship projects, and putting mechanisms in place to achieve positive action on low footprint building, it is about communicating how much this effort is likely to achieve and the scale and the rate of change required to meet OPW by 2050.

### RECOMMENDATION 4

WAG should measure - footprint reduction and carbon abatement for all of their relevant strategies and policy mechanisms on Housing and Building, in order to achieve an insight into progress towards OWOP.

### RECOMMENDATION 5

WAG reporting should, in addition to good practice on reducing the Building footprint, comment on the cumulative impact of initiatives, and the scale of the intervention that is still required to meet the OPW aspiration.

### RECOMMENDATION 6

The Housing Strategy Programme Board, or any other body tasked with delivery should drive the OWOP aspiration through all of their work on strategy, policy and finance and account for their progress with clear targets.

**Table 2: Policy mechanisms for Reduction of Building and Residential Footprint and Emissions**

| WWF One Planet Building   | SEI 2020 scenarios   | Tyndall 3%, 6%, 9% asks   | WAG Policy Mechanisms and targets (where available)   |
|---|--|---|---|
| <p><b>In place by 2011 for 10% reduction in Building Footprint</b></p> <ul style="list-style-type: none"> <li>● Construction industry supply chain</li> <li>● Re-used materials exchange scheme</li> <li>● Public sector low carbon house building demo</li> <li>● Public buildings programme and internal carbon market</li> <li>● Rapid zero carbon new homes</li> <li>● CSH compulsory</li> <li>● Programme for wind, solar, biomass local and regional</li> <li>● Microgeneration pilot programme &amp; utility rebates</li> </ul> <p><b>Strategies for 2020-2050</b></p> <ul style="list-style-type: none"> <li>● Local Materials (5%)</li> <li>● Sustainable construction (10%)</li> <li>● Housing Energy Efficiency (30%)</li> </ul> | <p><b>For 10% reduction in by 2020</b></p> <ul style="list-style-type: none"> <li>● Code for Sustainable Homes Compulsory</li> <li>● 5% households retrofitted per annum</li> <li>● 60% pop. achieve 15% reduction in energy use by 2020</li> <li>● Housing Renewal – 20,000 houses by 2020</li> </ul> | <p><b>For 3% annual emissions reduction</b></p> <ul style="list-style-type: none"> <li>● Building Regulations</li> <li>● CSH &amp; HEES expansion</li> <li>● Supplier Obligation</li> <li>● Smart Meter</li> <li>● Fuel Poverty</li> <li>● Microgeneration</li> <li>● Increased Occupancy</li> </ul> <p><b>For 6% emissions reduction</b></p> <ul style="list-style-type: none"> <li>● Increased rate of Housing Renewal</li> <li>● Behavioural change</li> </ul> <p><b>and 9% emissions reduction</b></p> <p>all of the above and</p> <ul style="list-style-type: none"> <li>● Universal Insulation</li> <li>● Cladding</li> <li>● Solar Thermal 20% Properties</li> <li>● Heat Pumps</li> </ul> | <ul style="list-style-type: none"> <li>● HEES support efficiency measures in 3000 homes per year</li> <li>● Extensive SMART meter installation (u)</li> <li>● Devolved Building Regulations</li> <li>● Code for Sustainable Homes Level 3 in all new housing</li> <li>● Wales Housing Quality Standards (u)</li> <li>● TAN 22 Sustainable Building</li> <li>● ARBED (Structural Funds) to support measures in 10,000 homes</li> <li>● Heads of Valleys Low Carbon region</li> <li>● Microgeneration programme,</li> <li>● Energy efficiency retrofit</li> <li>● Microgeneration loans for those able to pay</li> <li>● £15m for 22 Community Energy projects</li> <li>● 4 DECC Community led renewables projects</li> <li>● Reduce planning barriers to microgeneration</li> <li>● Advisors network and info; CT, EST, EAW, OFGEM</li> <li>● Wales</li> <li>● Low/Zero Carbon Hub</li> <li>● Carbon Reduction Commitment</li> </ul> |

**RELEVANT HOUSING/ BUILDING POLICIES AND STRATEGIES REVIEWED**

|  |  |
|--|--|
| <i>Creating Sustainable Places - WAG (2006)</i>  | <i>National Energy Efficiency and Savings Plan Consultation - WAG (2009)</i>   |
| <i>The Essex Review: Affordable Housing (2008)</i>   | <i>Sustainable Development Scheme - WAG 2009</i>   |
| <i>Improving Lives and Communities - Homes in Wales - WAG (2010)</i>   | <i>Towards Zero Waste: One Wales: One Planet: Consultation WAG (2009) - WAG</i>  |
| <i>The Private Rented Sector in Wales Consultation - WAG (2010)</i>  | <i>Climate Change Strategy - WAG 2010</i>  |
| <i>Developing a modern regulatory framework for Housing Associations in Wales - Consultation - WAG (2010)</i>                | <i>Fuel Poverty Consultation - WAG (2010)</i>  |
| <i>Renewable Energy Route Map for Wales: consultation on way forward to a leaner, greener and cleaner Wales - WAG (2008)</i> | <i>A Low Carbon Revolution – The Welsh Assembly Government Energy Policy Statement - WAG (2010)</i>  |
| <i>Consultation on a Bioenergy Plan - WAG (2009)</i>   | <i>Climate Change Strategy (2010)</i><br><i>WAG Policy Statement: WAG announces targets for first changes to Welsh Building Regulations (2011)</i> |

# ONE PLANET TRANSPORT

According to WWF's One Planet Wales (2007) the ecological footprint per capita for Transport is 0.88gha/cap, comprising vehicles, infrastructure, fuels for car, bus and rail travel and equates to roughly 18% of Wales' footprint. WAG's aim from the Sustainable Development Scheme is to stabilise transport's ecological footprint by 2020 and then

reduce. The Tyndall Centre suggests that transport also accounts for 20% of Wales' greenhouse gas emissions (predominantly carbon dioxide). Despite decades of policy intervention (and policy document production) on behalf of central, national and regional governments, the transport footprint is growing and emissions from this sector are increasing. How will Wales achieve One Planet Transport when transport trends suggest we are travelling in the wrong direction? Table 3 shows the 'asks' from the work of WWF, SEI and Tyndall and the WAG policy mechanisms referenced from a range of documents including the Wales Transport Strategy (2008), National Transport Plan (2010) and Regional Transport Plans.

The immediate 'asks' of WWF, to be in place by 2011, were incentives for low impact vehicles, across the board public sector action planning, work on integrated travel for tourism and a long term campaign strategy. WAG's National Transport Plan (2010) at first glance provides some solutions, Smarter Choices providing information and options for more sustainable travel, support for community transport, entitlement cards, safe routes to school support, together with a raft of funded initiatives including Sustainable Travel Centres, Park and Ride, a Freight Consolidation Centre and investment in the rail network and a bus route, with further work on speed limits and planning in Wales to encourage sustainable travel. Incentives for low impact vehicles will be dealt with at the UK level via Department of Transport Strategy (2010). A problem with much of this activity is that the targets and scale of activity is undefined.

Encouragingly, Wales Transport Strategy (2008) placed traffic growth, fossil fuel content of fuels and fuel efficiency as key measures to monitor the effectiveness of future plans. However, targets and numbers or measures of success are not made clear in the National Transport Plan. Despite references to climate change and carbon reduction, there is a no clear connection made between Transport and the One Planet aspiration of government. Delve a little deeper into the list of 99 different interventions provided, including those for sub

regions within Wales, and they paint a picture of 'business as usual', planning around car use, with some rail options:

- primarily road improvements and the support for the air service, with some rail improvement prioritised for North South link;
- an emphasis on rail network improvement East to West in the South;
- primarily road and some rail improvement East to West in the North.
- primarily road and one rail improvement East to West in Mid Wales.

This does not provide a clear sense of One Planet Living, and decarbonising transport as being central to national policy for transport in Wales. Can the same be said for the Regional Transport Plans from local transport partnerships? These also show a worrying absence of analysis on how effective their listed interventions will be in reducing emissions and developing sustainable modes of transport, TraCC (Mid Wales) refers to the One Wales One Planet aspiration and references SEIs work towards the end of the document concluding "TraCC considers the programme in Mid-Wales to be moving in the right direction" providing no evidence to back up this

claim, suggesting that all of the efforts of the RTP will implicitly help. Taith (North Wales) simply states that all of the interventions suggested in the SEI 2020 report will be worked on, with SEWTA (South Wales) committing to significantly reducing GHG emissions from transport (no targets provided) and SWWIFT (South West Wales) suggesting that once carbon targets were developed by WAG for transport, SWWIFT would work towards these, although carbon reduction is not one of their listed key measures. On the positive side, it is at this level, that public sector travel planning, awareness raising around sustainable modes of transport, and integrated transport for tourism is being worked on, satisfying some of WWF's conditions. But this hardly indicates that the One Planet aspiration has been transferred from the Welsh Government to regional planning on transport.

On this evidence at a Wales level, the dramatic shifts suggested by WWF for 2020-50, SEI for 2020 and Tyndall for 6 and 9% emissions reduction are unlikely to be met in either the short or medium term, in terms of the scale of Sustainable Travel centres required, congestion charging, rail investment, the scale of park & ride required, electrification of the transport network, cessation of road building and inter-city bus journeys. Sustainable Travel Centres are a good example of where the scale of intervention (3 suggested by WAG) is minimal compared to the number of areas required for 10% footprint reduction i.e. all urban areas over 10,000 population. At a UK level, the likelihood and effect of national interventions on vehicle infrastructure, supply chains, technology, vehicle efficiency in Wales are unclear.

What is clear is that in terms of *footprint reduction* and *carbon abatement*, the Transport policy 'landscape' in Wales continues to be messy and piecemeal, with no clear direction of travel or the cumulative effect of proposed policy. Much worthy work is going on in Wales at both a national and regional level, but decarbonisation of transport can only occur if there is an honest appraisal of where we are and where we need to be. Despite the wealth of 'planning' going on out there, there is little evidence that we will be shifting from the path we have been following for the past 50 years. One positive sign is the work proposed in the Energy Strategy for a Low Carbon Economy Transport

Network on M4 corridor (hybrid, hydrogen, electric).

More than any other area, there needs to be a clarity over how a policy intervention is helping or hindering the One Planet Wales agenda. We can easily get lost in the rhetoric of transport speak, with no real sense of the scale of the problem versus the solutions offered. Using the footprint reduction and carbon abatement potential as measures for Transport an opportunity to provide some clarity to a complex policy arena, which becomes even more complex if, as should be the case, aviation and shipping are included in the calculations. To this end the following recommendations are made:

## RECOMMENDATION 7

WAG should measure footprint reduction and carbon abatement, (including aviation and shipping) for all of their relevant strategies and policy mechanisms on Transport - in order to achieve an insight into progress towards OPW.

## RECOMMENDATION 8

WAG reporting should, in addition to good practice on reducing the Transport footprint, comment on the cumulative impact of initiatives, and the scale of the intervention that is still required to meet the OPW aspiration.

## RECOMMENDATION 9

Regional Transport Partnerships should drive the OWOP aspiration through all of their work on strategy, policy and finance and account for their progress with clear targets. This should be a requirement of *and for* Wales Transport Strategy and National Transport Plan and proposed Wales Strategic Infrastructure Plan.

**Table 3: Policy mechanisms for Transport Footprint and Emissions**

|  |  |  |  |
|--|--|--|--|
| <p><b>WWF One Planet Transport</b></p> <p><b>In place by 2011 for 10% reduction in Transport Footprint</b></p> <ul style="list-style-type: none"> <li>● Low impact vehicle incentive pilot programme</li> <li>● Green Travel planning for all public sector</li> <li>● Integrated travel for Green Tourism</li> <li>● Long term Campaign Strategy</li> </ul> <p><b>Strategies for 2020-2050</b></p> <ul style="list-style-type: none"> <li>● Vehicle infrastructure and fuel supply chain; (20%)</li> <li>● Park and ride; congestion charging; low impact vehicle incentives; occupancy schemes; fleet logistics management (30%)</li> <li>● Low transport impact development and Green Travel plans (25%)</li> </ul> | <p><b>SEI 2020 scenarios</b></p> <p><b>For 10% reduction in Transport Footprint by 2020</b></p> <ul style="list-style-type: none"> <li>● Sustainable Travel Towns all urban areas over 10,000</li> <li>● Occupancy rates of cars, buses, trains, 30%,40%,50%</li> <li>● Efficiency improvements of cars, buses and trains</li> </ul> | <p><b>Tyndall 3%, 6%, 9% asks</b></p> <p><b>For 3% annual emissions reduction</b></p> <ul style="list-style-type: none"> <li>● Technology (Hybrid, efficiency)</li> <li>● Demand reduction (eco-driving)</li> <li>● Biofuels</li> </ul> <p><b>For 6 and 9% emissions reduction</b></p> <ul style="list-style-type: none"> <li>● 60 mph speed limit</li> <li>● Road building ceased</li> <li>● Electrification</li> <li>● Inter-city bus journeys</li> </ul> <p><b>For 9% emissions reduction</b></p> <ul style="list-style-type: none"> <li>● Reverse growth in vehicle km (29% growth – 27% reduction)</li> <li>● Rail Investment</li> <li>● Hydrogen technology</li> </ul> | <p><b>WAG Policy Mechanisms and targets (where available)</b></p> <p><b>Targets:</b></p> <ul style="list-style-type: none"> <li>● Establish 3 Sustainable Travel Centres</li> <li>● Park and Ride (a series by 2014) £25m over 3 years for strategic park and ride</li> <li>● Freight consolidation centre by 2014</li> <li>● Meet Walking &amp; Cycling Action Plan targets by 2013</li> <li>● Investment in stations, rolling stock, station improvements and access via National Stations Improvements Programme</li> <li>● Plans for Traws Cymru bus launched 2011</li> <li>● Review of Speed Limits by April 2013</li> <li>● Climate resilience of trunk roads</li> </ul> <p><b>Mechanisms:</b></p> <ul style="list-style-type: none"> <li>● Smarter Choices support</li> <li>● Sustainable Travel Centres</li> <li>● Personalised Travel Planning</li> <li>● Land Use Planning</li> <li>● Safe Routes in Communities</li> <li>● Disused Railway Tracks research</li> <li>● Community Transport support</li> <li>● Entitlement card</li> <li>● Freight facilities grant</li> <li>● Travel-line Cymru</li> <li>● Local Transport Services Grant</li> <li>● Bwcabus</li> <li>● Variable Speed Limits</li> <li>● Concessionary Fares</li> </ul> <p><b>From Energy Statement</b></p> <ul style="list-style-type: none"> <li>● Low Carbon Economy Transport Network on M4 corridor (hybrid, hydrogen, electric)</li> </ul> <p><b>From UK Strategy</b></p> <ul style="list-style-type: none"> <li>● EU Co2 regulation</li> <li>● Vehicle Standards</li> <li>● Research</li> <li>● Lead low carbon cities</li> <li>● Infrastructure</li> </ul> |
|--|--|--|--|

**RELEVANT TRANSPORT POLICIES AND STRATEGIES REVIEWED**

|  |   |
|--|---|
| <i>Smarter Choices: Wales - WAG (2007)</i>   | <i>North Wales Regional Transport Plan TAITH (2009)</i>   |
| <i>One Wales: Connecting the Nation - The Wales Transport Strategy - WAG (2008)</i>                      | <i>South East Wales Transport Alliance Regional Transport Plan SEWTA (2009)</i>   |
| <i>A Walking and Cycling Action Plan for Wales 2009-13 - WAG (2008)</i>                                  | <i>National Transport Plan - WAG (2010)</i>   |
| <i>Progress in Partnership - the Regional Transport Plan for South West Wales 2010-15 SWWITCH (2009)</i> | <i>The Carbon Reduction Strategy for Transport 'Low Carbon Transport: A Greener Future' - technology and decarbonisation of transport by 2050 DoT</i> |
| <i>Mid Wales Regional Transport Plan TRACC (2009)</i>  |   |

## ONE PLANET ECONOMY AND BUSINESS

**In 2007, in *One Planet Wales*, WWF outlined the economic challenge behind a One Planet agenda including: the progression of carbon trading in Wales; product impact charging; congestion charging; and behaviour incentives for the public and organisations. They also outlined the critical role that government needs to play in this agenda; acting as a steward, a manager of markets in environmental assets, as direct**

**purchasers and clients, as operators of public services and as enablers/sponsors of market transformation. WWF suggested that WAG would need to bring to the One Planet agenda every kind of financial power available to the public sector. Since the economic downturn, the relationship between national government, the economy and its institutions has evolved and transformed, a greater emphasis has been placed on reducing debt, maintaining frontline services, cutbacks for the public sector and sound medium term financial management. This perhaps makes it even more important for WAG to plan well around low carbon, energy and resource efficient economy, reducing future financial risks and liabilities to help to maintain the economy and public services. The One Wales One Planet aspiration is central to a sound and financially sustainable economy in Wales.**

Table 5 sets out 'asks' from the work of WWF and Tyndall around the economy and sustainable consumption and the WAG policy mechanisms referenced from a range of documents including: *Capturing the Potential: A Green Jobs Strategy for Wales* (2009) the *Sustainable Development Scheme - WAG* (2009), the *Climate Change Strategy - WAG* (2010) and *Economic Renewal: a new direction* (2010). To what extent do these documents reflect the One Wales One Planet agenda within the current difficult financial conditions, and promote policy interventions for footprint reduction and carbon abatement?

The *Green Jobs Strategy* (2009) aims to green existing jobs, develop new green jobs and strengthen the low carbon economy, and provides an overview of the regulatory mechanisms, support services (via FS4B) and funding which are available to meet its aims. It places the Ecological Footprint at the centre of its monitoring with a clear link between Gross Value Added and carbon emissions, resource efficiency and greenhouse gas emissions. This provides the framework for delivery of many of the suggestions of WWF in 2007, regarding supply chain management, sustainable sourcing, retail partnerships and social enterprise, although it is perhaps too early to judge or illustrate whether this strategy is being effective

in these areas. In terms of the other interventions suggested by WWF, on Green Visitor schemes, the *Sustainable Tourism Framework* (2007) provides a clear emphasis on reducing and monitoring the ecological footprint of tourism, with indicators focusing on footprint and emissions. In terms of education campaigns, pending *Education for Sustainable Development and Global Citizenship Action Plan* should focus on methods of awareness raising sustainable consumption, to add to recent curriculum changes to promote learning on sustainability in Welsh schools. However there are currently no obvious mechanisms for engaging the financial sector in the One Planet agenda in Wales beyond the recently launched WAG Sustainable Development Charter or plans to develop a One Planet products strategy. The interventions suggested by WWF for 2020-50 will to some extent be determined by the success of the Green Jobs Strategy and a the Economic Development Review in providing the conditions for business to explore more sustainable production methods, design, sourcing and low carbon social enterprise.

It is difficult to see, given the existing policy framework, the conditions for the Tyndall 6 and 9% scenarios for business being prepared in the medium term. The Energy Statement does not suggest the shift required for the electrification of

heating and industrial and manufacturing processes (and the grid requirements of this). Some regulatory mechanisms are in place to reduce dirty production, and the Energy Statement does suggest WAG will consider Wales' carbon capture and storage (CCS) options, but there is no evidence that the shifts in the service economy and low carbon goods are part of the present policy discourse.

Another important mechanism for regional action within Wales to promote a sustainable economy is the Wales Spatial Plan. The *Wales Spatial Plan Update* (2008) provides an overview of regional thinking on plans over the next 20 years for investment needed in education, transport, housing and the economy, providing a "canvas against which WAG investment (of EU Structural Funds) can be considered and agreed". It suggests that sustainable development is central to this planning. These visions of 6 regions of Wales acknowledge common challenges including balancing the need for employment and services with a need to reduce energy use, better resource management and importantly reducing the ecological footprint of each region. NE and NW Wales see opportunities in enhancing the environmental goods and services sector, Pembrokeshire Haven suggest the opportunities for local sourcing, green tourism and growing biofuels, Swansea, the challenge of carbon footprint and GHG reduction and the South East Wales a low carbon region with reduction in GHG's and travel and energy footprints. However, the economic development model presented so far in this process is one of continued 'business as usual' growth without ecological limits. It must also be remembered that this update represents a vision and key priorities for each region, with no analysis of policy mechanisms to achieve these aims or suggestions for measuring progress. However, with a One Planet aspiration now in place, the challenge for the Wales Spatial Plan process from now on, is to drive this philosophy through the entire plan and evidence how a change in scope, focus and structural funding can achieve One Wales:One Planet aims, rather than focus on a growth model which is difficult to sustain. One groundbreaking tool for doing this is the Sustainable Development Commission's report *Low Carbon Wales: Regional Priorities for Action* (2009) which sets out not just a process for WSP areas to follow, but key

indicators and low carbon options for each Wales Spatial Plan area to research, evidence and plan around. This is a key building block to develop regional thinking on low carbon, and importantly a benchmark to measure each progress against in coming years - a critical role for the Low Carbon Regional Working Groups in each part of Wales.

In terms of economic regeneration, the North Wales Coast Action Plan 2016 (2009) provides some evidence that One Wales, One Planet and Green Jobs agenda is being considered, focusing on opportunities in the housing sector, renewable energy sector and the Rhyl Energy Strategy but suggests no appropriate monitoring arrangements to evidence progress. Mon a Menai's plan (2008) focuses on a skills cluster on nuclear skills (given the closure of Wylfa), with no mention of low carbon/renewables opportunities, and Heads of the Valleys plan (2006), highlights CSH, BREEAM and other guidance. WAG face a similar challenge with local regeneration plans, how to focus the funding better at One Planet outcomes, evidence those outcomes, and importantly account for the way they contribute to the 'whole' - i.e. carbon abatement and footprint production.

*WAG's consultation on an Economic Renewal Programme* during 2010 opened up the debate in Wales about what a future post - recession economy may look like in Wales asking consultees about appropriate government intervention, measurement and business support. References to sustainable consumption, the One Planet Agenda and footprint reduction were absent in the consultation document. This was either a significant missed opportunity or a deliberate move, in a key area of policy to start to move away from the One Planet commitment.

Close examination of the output of this consultation, the *Economic Renewal: a new direction* (2010) shows that the One Planet agenda has not been linked into the policy debate. Much is made of the use of sustainable development as a central organising principle to inform decision making, but there is no mention of ecological limits on resource use as part of the review. Mention of *sustainable consumption* is conspicuously absent, with a great emphasis on sustainability and efficiencies in *production*. The document does place sustainable development at the centre of its debate on infrastructure, approaches to land

management and planning and discussion on carbon and energy efficiency in its approaches to R&D and g There is much in the document in terms of re-aligning priorities and systems (e.g. planning) which will help in working towards a One Planet agenda, but there is no evidence that reduction of the ecological footprint is part of this policy discourse. There are also missed opportunities in giving a strong message to partners on zero carbon development via Building Regulations post 2011, and supply chain efficiencies as part of the procurement sections. In all, the document fails to acknowledge the *One Wales One Planet* commitment, providing a mixed message on its commitment to this policy aim.

Subsequent policy documents for Economic Renewal, the *Implementation Plan* (2011), *Framework for Measuring Success* (2011) and *Sectoral Approach Explanatory Note* (2011) take a similar approach, with no focus on footprint reduction as a policy aim. Key initiatives which should help in footprint stabilisation do appear: the ARBED energy efficiency scheme, Natural Environment Framework (focusing on ecosystem services), Zero Carbon Hub and Low Carbon economic area for alternative transport fuels. These initiatives are encouraging. However, with an absence of carbon or footprint related tracking or outcome indicators in the *Framework for Measuring Success* (2011) it is difficult to see how sustainable development can be the central organising principle of economic development approaches in Wales.

It is critical, if WAG are to have credibility on their commitment to long term footprint reduction and One Planet living, that debate around the proposed *Wales Strategic Infrastructure Plan* (which will consider approaches in Wales to resources, low carbon, waste, water, land, food, flood defence and housing) also includes footprint reduction as an ultimate measure of its progress and success.

There are some positive aspects from Economic Renewal process, particularly on the context and challenges for economic development in Wales around climate change, resource productivity, decarbonising the energy supply, pressure on land, ecosystems services and long termism acknowledging “*the land of Wales is our ultimate resource base*”. It seems strange then, that a measure, ecological footprinting and the One

Planet aim, which brings all of these elements together, is missing from the discourse.

There are many of the elements in place to drive the One Planet agenda into Wales’ economy, with financial, business support and performance measures in place to help progress this agenda. However, critically, One Planet and the ecological footprint are now absent from high level economic development policy in Wales. As a result, it is difficult to see how the work of WAG divisions responsible for economic development, the Wales Spatial Plan, regeneration and local government will help to develop an economic model for Wales which aims for footprint reduction, sustainable consumption and ultimately One Planet living. It is vital that stabilisation and reduction of the footprint are addressed in the Economic Renewal process and that the recently formed *Council for Economic Renewal* examine how this can be achieved.

#### RECOMMENDATION 10

WAG should firmly embed One Wales: One Planet as key principle within the Economic Renewal process and evidence how economic development policies and mechanisms will impact on footprint reduction and carbon abatement. The Council for Economic Renewal should examine how this can be achieved.

#### RECOMMENDATION 11

WAG should firmly embed One Wales: One Planet as key principle In its work with partners on Wales Strategic Infrastructure Plan and other economic/regeneration plans and evidence how economic development policies and mechanisms will impact on footprint reduction and carbon abatement.

**Table 5: Policy mechanisms for One Planet Economy and Business**

#### WWF One Planet Economy

##### In place by 2011 for 10% reduction in Ecological Footprint

- Sustainable sourcing pilot for materials and imports
- Supply chain management in industrial clusters
- Retail business partnership
- Social enterprise pilots
- Green visitor scheme
- Sustainable consumption campaign in schools and colleges
- Long term one planet products strategy
- Ethical investment programme and carbon trading in financial sector

##### Strategies for 2020-2050

- 100% sustainable ethical sourcing
- Integrated supply chain management
- Sustainable product life design
- Social enterprise to reduce product consumption
- Financial: Carbon trading, community credits; triple bottom line accounting; mutual/cooperative equity structures
- Retail: Logistics, premises, sourcing, product life, equity structure and local markets

#### Tyndall 3%, 6%, 9% asks for business

##### For 3% annual emissions reduction

- Maximum efficiency in energy management
- Biomass
- Building Regulations

##### For 6% annual emissions reduction

- Electrification of heating and processes

##### and 9% emissions reduction

- Carbon Capture and Storage depositories
- Restructure to service economy & low carbon goods

- Tourism: Transport, catering, accommodation, diversification and landscape management.
- Social enterprise, intermediate labour markets and community self help

#### WAG Policy Mechanisms and targets (where available)

##### Regulations:

EU Emissions Trading Scheme  
Carbon Reduction Commitment  
Pollution Prevention & Control  
Energy Using Products Directive

##### Support for business, training, education:

FS4B - EMS and low carbon  
WRAP - waste awareness  
Carbon Trust Low carbon and resilient business & Carbon Trust SME support. £1.2m over 3 years  
Constructing Excellence - construction  
Education for sustainable development and global citizenship  
Action Plan  
Sector Skills Council - renewables champions

##### Economic Renewal priorities:

ARBED energy efficiency scheme,  
Natural Environment Framework (focusing on ecosystem services),  
Zero Carbon Hub and Low Carbon economic area for alternative transport fuels

Enabling energy efficiency and environmental management

Low Carbon Regions

##### Funding:

Sustainable Risk Assessment  
Template for WAG contracts greater than £25K  
R&D and Commercialisation Funding  
RDP Axis 2 renewables funding  
Wood Energy Business Scheme  
Community Renewable Energy Pilots  
EU Convergence and Competitiveness funding Priority 4

##### Green Jobs Strategy measures:

Ecological Footprint  
GVA and resource efficiency  
Electricity from low carbon  
Co2 emission to GVA  
GHG emissions  
Waste arisings

##### Sustainable Tourism Measures:

% visit by public transport  
% visitor journeys by public transport  
Tourism enterprises with environmental certificate  
Visitor carbon emissions (as part of Tourism Footprint)  
Visitor waste arisings (as part of Tourism Footprint)

#### RELEVANT POLICIES AND STRATEGIES REVIEWED WHICH CONSIDER ECONOMIC DEVELOPMENT AND REGENERATION

*Turning Heads Strategy for Heads of the Valleys to 2020 - WAG (2006)*

*Sustainable Tourism Framework - WAG (2007)*

*Môn a Menai Action Plan - WAG (2008)*

*People Places Futures - Wales Spatial Plan Update - WAG (2008)*

*North West Coast Action Plan - WAG (2009)*

*NaW Sustainability Committee (2011)- Evidence for mainstreaming Sustainability in Ministerial Portfolios - Department for the Economy and Transport*

*Capturing the Potential: A Green Jobs Strategy for Wales - WAG (2009)*

*Sustainable Development Scheme - WAG (2009)*

*Low Carbon Wales: Regional Priorities for Action - SDC (2009)*

*Consultation Document: Economic Renewal Programme - WAG (2010)*

*Economic Renewal - a new direction - WAG (2010)*

*Economic Renewal - the Sectoral approach explanatory note - WAG (2011)*

*Economic Renewal - Implementation Plan (2011)*

*Economic Renewal - A Framework for Measuring Success (2011)*

*Climate Change Strategy - WAG (2010)*

## ONE PLANET PUBLIC SERVICES

WWF's suggested in their 2007 report, *One Planet Wales*, that the public sector role in a One Planet Economy will be to ensure the stewardship of our environmental assets and ecosystem services and to manage the markets in the public goods that they provide. A key opportunity was consistently

highlighted in the report - *public procurement* (expenditure was estimated then at £6 billion) and the report suggested that through this, the public sector could promote footprint reduction and emissions reduction in supply chains, more sustainable building, low impact infrastructure, sustainable regeneration and transport. It estimated that services and the public sector accounted for 12% of Wales ecological footprint in 2001 and that this impact was growing due to the shift towards service activity in Wales. The report also suggested that One Planet Wales needed a commitment to change from the public sector, skills in multi level governance and new partnerships particularly around health and education (a large component of the Services footprint). WAG state in their *Sustainable Development Scheme (2009)* that they aim to stabilise the public sector's ecological footprint by 2020 - is this achievable, and what mechanisms are WAG using to influence the public sector along this pathway?

Table 6 sets out 'asks' from the work of WWF and Tyndall for the public sector. By 2011, WWF were suggesting that we would need systems of local and organic food procurement, low carbon house building, carbon trading in the public sector and initiatives to consider transport and built environment impacts. Tyndall suggest that half of the required 3% emissions reduction can be achieved through existing measures within the public sector, with little detail of what might achieve the other 50%.

How effectively is the procurement system set up to deliver these changes to the now estimated £5 billion spend by the public sector in the Welsh economy? There is no doubt that some of the tools and partnerships are in place through the work of *Value Wales* and the involvement of a range of sectors and purchasing consortia in the *All Wales Sourcing Strategy*, and via WAG's own sustainable procurement strategy which involves a sustainability risk assessment on all spending over £25,000. There are impressive examples of good practice in procurement through WAG, of its buildings (Llandudno) and through its influence on NHS estates and its collaborative work with local government (see *Adding Value* 2009). In previous sections on One Planet Food and One Planet Building we have also seen an impressive range of

cumulative activity to pursue local sourcing and low carbon, energy efficient design. The introduction of the Carbon Reduction Commitment is also providing the basis for future carbon trading in the public sector. This framework initially seems a very good basis to develop a One Planet Procurement Strategy and further roll out of sustainable food, building and transport and carbon trading in the public sector suggested by WWF 2020-2050. However, to what extent do current activities make the 'outcomes for the Welsh pound' more sustainable? Again, as with other sections in this report, and absence of evidence on the cumulative impact of these initiatives, and accounting for carbon and footprint reduction means we have no clarity on how much of the £5 billion is now being spent more sustainably, and what proportion is still being spent unsustainably.

A more detailed examination of the *messages* to the public sector provide a 'patchier' picture, for both local government and the health sector. In recent years, not least because of the economic downturn, there has been a re-examination of WAG's relationship with local government (see *Local Service Boards in Wales - Realising the Potential* (2008), *A New Understanding between Welsh Assembly Government and Local Government in Wales* - WAG (2009) and *Better Outcomes: Tougher Times: The Next Phase of Public Sector Improvement* - WAG (2009)). There has also been a parallel restructuring of the health sector with the establishment of 7 Local Health Boards, each required to develop 5 year Strategic Workforce and Finance Plans. It could be argued that this debates and 're-organisation' of priorities has presented an opportunity for WAG to drive home the OWOP agenda into new mechanisms and arrangements - to deliver the changes to 'multi level governance needed' as suggested by WWF. It could be argued that they represent a series of missed opportunities.

- In guidance for setting up **Local Service Boards** in Wales (2008), WAG neglected to list specific policy deliverables for the One Wales agenda, including footprint or carbon reduction. Perhaps as a result, of the 90+ priorities identified by LSBs across Wales since 2008, only 6 deal with collaborative between local organisations on climate change, carbon reduction or footprinting.
- In their debate with **local government** via their publications *A New Understanding and Better Outcomes Tougher Times* (both 2009), WAG's references to climate change and sustainable development as key principles of collaboration, are supplemented by suggestions for shared outcome measures on sustainable travel, sustainable land management, low waste and low carbon. However, there is no mention of the One Planet aspiration or ecological limits on economic growth or sustainable consumption.
- As **health services** have restructured around Local Health Boards in Wales, there has been no mention of OWOP as part of their terms of reference, and no explicit reference to carbon reduction in the *NHS Operating Framework 2010/11*. There are

references to the aspiration as part of the NHS's e governance support, but no clarity on performance measurement. It is hard to find evidence in the policy 'architecture' of the commitment made in the SD scheme of "clear duties to the new (health) bodies to demonstrate best practice in planning and design, building, transport, waste management, and in use of energy and water". The work carried out by SEI and others in 2004 *Material Health - a mass balance and ecological footprint of the NHS in England and Wales* provides some clear indications of priorities for reducing the footprint of the NHS, however, these are not reflected in the NHS's performance management framework.

- The development of **Local Government Measure** is another key debate since the OWOP aspiration. The purpose of the Measure was to reform the statutory basis for service improvement and community planning by local authorities in Wales - a key mechanism for multi-level governance, and delivering the One Planet aspiration. As a result of the Measure's adoption (OPSI 2009) local authorities' performance will be monitored on how effectively it is improving its sustainability, efficiency and strategic effectiveness, and how it is working with community partners to deliver long term objectives for sustainable development. There is likely to be a light touch in monitoring of this by WAG and local authorities will be able to define their own performance indicators to demonstrate performance, although this does provide WAG with more powers to direct performance if they see fit, it is unlikely that specific references will be made to footprinting or One Planet living through the monitoring of the Measure.
- **Community Strategies** are identified by WAG as the key local level document to reflect One Wales policies. Advice notes from WAG on Sustainable Development (2008) and Climate Change (2009) do reference carbon and footprint reduction as aims of Community Strategies, but there is no *requirement* of local authorities to drive this into their local policy making, or have these as shared performance indicators at a local level.

Perhaps most worryingly, WAGs ‘Sergeant Review of public services “*Local Regional, National: What services can be delivered where?*” (2011) provides no evidence of referencing ecological or carbon footprinting, emissions reduction or the Sustainable Development Scheme as part of the debate on delivery or procurement of services in Wales. Any reform, collaboration, co-location, or amalgamation of services needs to consider resource efficiencies (energy, travel, waste, assets, food). Ecological footprinting would provide an excellent baseline and measure for decision making for public sector reform. Waste provides a good example of the added value of this approach (see Section on One Planet Resources). However good examples of co-ordinated work do exist:

- Progress by the NHS in Wales in measuring its carbon footprint and setting targets via its Estates Reporting, use of the Sustainable Development Toolkit and Travel Plan Toolkit for NHS bodies in Wales, and use of the BREEAM Healthcare standard for new build. This has resulted in significant resource efficiencies in energy, waste, water and travel.
- Outcome agreements negotiated between the 22 Welsh local authorities and WAG, particularly in the area of resource efficiency mean that local government is committed to measurable and reported improvements over the next 3 years, with financial incentives for delivery. 8 are committed to improvements in carbon mitigation; 12 in the area of waste and recycling and 2 are combining an approach to both. However, reduction and stabilisation of the ecological footprint and the One Planet aspiration are not referenced in any of the documentation from these authorities.
- The WLGA Sustainable Development Framework, funded by WAG, provides support and resources to authorities on carbon reduction, sustainable travel, ecological footprinting, energy and food security, sustainable procurement, peak oil and asset management among others.

From this evidence a familiar pattern is emerging of: developing and encouraging good practice; failing to mainstream OWOP into extremely important, strategic collaborative work; an absence of OWOP measures in the performance

management requirements for WAG and for others. To this end the following recommendations are made to ensure we can more effectively account for the public sector’s contribution (negatively or positively) to One Planet living.

### RECOMMENDATION 12

WAG should consistently embed One Wales: One Planet as key principle within all of their discourse with the public sector, local government, AGSBs and the health sector, particularly as part of the public service reform agenda.

### RECOMMENDATION 13

WAG should influence public sector performance management frameworks in Wales to account for carbon and footprint reduction through policy and delivery of services and to require the public sector to report on delivery of associated targets. This should also apply to WAG divisions.

### RECOMMENDATION 14

WAG and the public sector should as part of their procurement powers demonstrate how effectively the ‘Welsh Pound’ and the Euro (via WEFO and EU Structural Funding) are delivering on footprint and carbon reduction and publish an annual account alongside financial reporting requirements.

**Table 6: Policy mechanisms for One Planet Public Services**

| WWF One Planet Services   | Tyndall 3%, 6%, 9% asks   | WAG Policy Mechanisms and targets (where available)  |
|---|---|--|
| <p><b>In place by 2011 for 10% reduction in Footprint</b></p> <ul style="list-style-type: none"> <li>● Local and organic food procurement for public catering</li> <li>● Low carbon house building demonstration</li> <li>● Public sector internal carbon market</li> <li>● First phase greening of health and education buildings, catering transport and other suppliers</li> </ul> <p><b>Strategies for 2020-2050</b></p> <ul style="list-style-type: none"> <li>● One Planet Procurement Strategy</li> <li>● Energy procurement and supply partnerships,</li> <li>● Pilot internal carbon trading market for the public sector with energy partnership investment programme</li> <li>● Demand management for food in public sector</li> </ul> | <p><b>For 3% annual emissions reduction</b></p> <p>50% of emissions can be dealt with using existing possible approaches:</p> <ul style="list-style-type: none"> <li>● Building Regulations</li> <li>● Carbon Trust</li> <li>● Pay-back Schemes</li> </ul> <p><b>For 6 and 9% emissions reduction</b></p> <p>No recommendations</p> | <ul style="list-style-type: none"> <li>● All Wales Sourcing Strategy (for Higher Education, Local Government, WAG, NHS and Further Education)</li> <li>● 21st Century Schools</li> <li>● Designed for Life</li> <li>● Llandudno Junction WAG building</li> <li>● Sustainable Procurement Action Framework</li> <li>● Sustainable Risk Assessment for WAG contracts greater than £25K</li> <li>● Sustainable Buildings Action Plan (10% recycled materials)</li> </ul> <p><b>Mechanisms to engage Local Government and NHS</b></p> <ul style="list-style-type: none"> <li>● 19 National Outcome Statements</li> <li>● Local Service Board delivery Agreements</li> <li>● Local Authority Outcome Agreements</li> <li>● Community Strategies</li> <li>● Local Health Board 5 year Strategic Plans</li> </ul> |

### RELEVANT POLICIES AND STRATEGIES REVIEWED ON THE PUBLIC SECTOR

*Local Service Boards in Wales - Realising the Potential Routemap - WAG (2008)*

*A New Understanding between Welsh Assembly Government and Local Government in Wales - WAG (2009)*

*Better Outcomes: Tougher Times: The Next Phase of Public Sector Improvement - WAG (2009)*

*In the eye of the storm -The political, financial and service challenges 2009-14 - WLGA (2009)*

*Adding Value: examples of good practice in procurement and delivery - WAG (2009)*

*WAG (2009) Explanatory Memorandum*

*Local, Regional, National: what services are best delivered where? Carl Sergeant AM - WAG (2011)*

*Our Healthy Future: Public Health Strategy Framework - WAG (2009)*

*Our Healthy Future: Technical working Paper -WAG (2009)*

*Our Healthy Future: Progress Report 2009-10 WAG (2011)*

*NaW Sustainability Committee (2011)- Evidence for mainstreaming Sustainability in Ministerial Portfolios - Department for Social Justice and Local Government*

*NaW Sustainability Committee (2011)- Evidence for mainstreaming Sustainability in Ministerial Portfolios - Directorate General for Health and Social Services*

*Outcome Agreements for all 22 authorities via WAG Department for Social Justice and Local Government (2011)*

*NaW Sustainability Committee (2011)- Evidence for mainstreaming Sustainability in Ministerial Portfolios - Business and Budget Portfolio*

*WLGA Sustainable Development Framework <http://www.wlga.gov.uk/english/sustainable-development-framework/>*

*Designed for Life: Creating World Class Health and Social Care in Wales in the 21st Century - WAG 2005*

*NHS in Wales - why we are changing the structure - WAG (2009)*

*NHS Operating Framework 2010/11 - WAG & NHS in Wales - WAG (2010)*

*Material Health- a mass balance and ecological footprint of the NHS in England and Wales SEI, BFF, RSNC, Biffa Waste, NHS -(2004)*

**Early work by SEI and WWF in Wales (2005) calculated the energy footprint of Wales at 0.92 gha or 17.5% of Wales' total footprint. More recent studies by SEI have calculated the embodied energy footprint in other footprint components such as services, food, travel, tourism and consumables, and not calculated a**

**separate energy footprint. This illustrates that, in order to achieve One Planet Wales we need to consider both direct and indirect energy use in the goods and services we consume. Previous sections of this report have dealt with energy reductions within the Food, Building and Transport sectors, nevertheless, it is useful to examine some of these policy mechanisms again in Table 4 which sets out the Energy 'asks' from the work of WWF, SEI and Tyndall and the WAG policy mechanisms referenced from a range of documents including *A Low Carbon Revolution – The Welsh Assembly Government Energy Policy Statement - WAG (2010)*, the *Climate Change Strategy (2010)* *Bioenergy Action Plan (2010)*, *Marine Renewable Energy Strategic Framework* project, and *Welsh Government's action with partners on microgeneration and hydropower*.**

What is evident from a review of documentation is that WAG have been incredibly active in this area since 2007, particularly in building up evidence base and seeking to understand the policy 'problems' of energy use, emissions reductions and climate change in Wales, set out in the *Energy Statement (2010)* and *Climate Change Strategy (2010)*. WAG have developed a set of clear targets and policy mechanisms to deliver emissions reductions across Wales. Their One Wales 3% emissions reduction commitment has been supplemented by an assessment of Wales' sustainable renewable energy potential to 2025, which provide a basis for monitoring and accountability in the medium term:

- Aim to generate, by 2025, up to twice as much electricity annually from renewables as we use today
- 80% reductions in emissions by 2050
- Offshore Wind- 15kWh/d/p by 2015/216
- Tidal - 10% tidal/wave captured by 2025
- Onshore Wind - 4.5kWh/d/p by 2015/17
- Hydro & Geothermal 1kWh (by unknown)
- Bioenergy 6kWh/d/p by 2020 (50% domestic and 50% imported)

(Note: 1 kilowatt hour per day per person [kWh/d/p] is, for Wales, about 1.1TWh/yr)

The *Energy Statement* document certainly provides the national programme for energy called for by WWF in 2007, and includes plans for microgeneration, large scale renewables (on and offshore) feed in tariffs and grid improvement and also sets out WAG's position on nuclear energy and the proposed Severn Barrage. In terms of the other early interventions suggested by WWF in 2007, EU Emissions Trading is still receiving strong criticism across Europe and within the UK, and questions still remain over its effectiveness in Wales to cap emissions, however, the introduction of the Carbon Reduction Commitment has put in place some key components for future carbon trading in the public, education and retail sectors in the medium term. Local actions on energy will be potentially delivered through TAN 8: Renewable Energy and the Infrastructure Planning Commission and the proposed Low Carbon Hub and Low Carbon Transport Network, as well as local authority responses to CRC, HEES and ARBED, as well as the financial investment for Community Energy project, Woodland Energy and Biogas. It is also clear that there are a raft of financial mechanisms in place to drive emissions reductions and energy efficiency.

This approach by WAG has set a clear direction on energy policy and climate change in Wales with a strong evidence base, giving opportunities to develop partnerships in the future to deliver some of the policy interventions suggested by WWF for 2020-50. The One Planet aspiration seems to have been at the heart of the debate. The discourse on energy security and carbon abatement is developing. A Wales Energy Summit in 2010 involved energy suppliers as well as other sectors focused on the challenge of energy security, while at the same time reducing emissions; a consultation via DECC in 2011 is considering the powers to allow Local Authorities to sell electricity; and the Environment Agency has provided some clarity on hydro power via the Hydropower permitting Review (2010). A key question remains, following the Severn Tidal Power Report (2010) - to what extent alternative and, possibly, smaller scale technology in the Severn can deliver energy footprint reduction.

This activity all seems very positive and might suggest that all of this collective effort will enable the SEI and Tyndall interventions to be achieved, however, as with other policy areas, a clearer *accounting* system for the exact emissions reduction expected for each policy intervention would enable us to get a sense of whether these efforts are equivalent to a 15% reduction in energy use by 60% of the population or a 10% emission reduction by the public sector, or over the longer term a zero carbon public sector. Regular stock takes of the extent of microgeneration or heat pump uptake in the residential sector would also provide a clearer picture of progress and what needs to be done. A clear and understandable performance monitoring process needs to be set up for both the Energy Statement and Climate Change Strategy. It is encouraging that WAG will report separately on Wales' total consumption emissions, using the ecological footprint in their annual progress reports on the Climate Change Strategy alongside reporting on the 3% target.

If we are to get a clear picture of our efforts towards One Planet Energy, and our efforts towards other One Planet aspirations, it is suggested that WAG and the Climate Change Commission explore the potential for a system of **national carbon accounting**, where carbon abatement or growth figures are placed alongside financial information for government, AGSB and

local authorities, and against policy interventions to understand their worth or cost in financial and carbon terms. The performance measurement framework in Wales should be increasingly geared towards the One Planet agenda, and this is an opportunity where Wales could lead in monitoring and reporting on its progress - is this making enough difference soon enough?

## RECOMMENDATION 15

WAG should measure footprint reduction and carbon abatement for all of their relevant strategies and policy mechanisms on Energy & Climate Change - in order to achieve an insight into progress towards OPW.

## RECOMMENDATION 16

WAG should explore, with the Climate Change Commission, the potential for a system of national carbon accounting to sit alongside financial reporting systems and form a central part of the Wales performance management framework. This would include an assessment of the effectiveness of the Carbon Reduction Commitment.

## RECOMMENDATION 17

WAG reporting should, in addition to good practice on reducing Energy footprint and Emissions reduction, comment on the cumulative impact of initiatives, and the scale of the intervention that is still required to meet clear targets.

**Table 4: Policy mechanisms for Reduction of Energy Use and Emissions**

|   |   |   |  |
|---|---|---|--|
| <p><b>WWF One Planet Energy</b></p> <p><b>In place by 2011 for 10% reduction in Energy Footprint</b></p> <ul style="list-style-type: none"> <li>● Medium to long term programme for wind, solar and biomass at local and regional level</li> <li>● Microgeneration programme with utility rebates</li> <li>● Internal carbon trading &amp; energy partnerships in public sector</li> <li>● Strategic programme for national energy</li> </ul> <p><b>Strategies for 2020-2050</b></p> <ul style="list-style-type: none"> <li>● Fourfold increase in renewable energy from 2000-2010 levels offshore, onshore, biomass and waste recovery</li> <li>● Utility finance and distribution partnerships for microgeneration</li> <li>● Carbon trading and quota schemes for affordable warmth and commercial mega-watt investment</li> </ul> | <p><b>SEI 2020 scenarios</b></p> <p><b>For 10% reduction by 2020</b></p> <ul style="list-style-type: none"> <li>● 60% of the population achieve a 15% reduction in energy use by 2020 through behavioural change</li> </ul> | <p><b>Tyndall 3%, 6%, 9% asks</b></p> <p><b>For 3% annual emissions reduction</b></p> <ul style="list-style-type: none"> <li>● 2011 onwards all new houses zero carbon</li> <li>● Train and bus journeys increasingly powered by zero carbon grid</li> <li>● Business adopt energy efficiency and biomass</li> <li>● 10% emission reduction by public sector</li> </ul> <p><b>9% emissions reduction</b></p> <ul style="list-style-type: none"> <li>● 2011 onwards all new houses zero carbon</li> <li>● Heat pumps in 60% houses</li> <li>● 20% of homes have solar water heating</li> <li>● For business, fossil fuel replaced by electricity from zero carbon grid</li> <li>● Zero carbon public sector</li> </ul> | <p><b>WAG Policy Mechanisms and targets (where available)</b></p> <p><b>Mechanisms:</b></p> <ul style="list-style-type: none"> <li>● EU Emissions Trading Scheme</li> <li>● Carbon Reduction Commitment</li> <li>● Permitting</li> <li>● Climate Change Levy</li> <li>● Renewables Obligations</li> <li>● Renewables Heat Incentives</li> <li>● TAN 8 - Renewable Energy</li> <li>● HEES support efficiency measures in 3000 homes per year</li> <li>● ARBED £30 million to support energy measures in 10,000 homes in 2011/12</li> <li>● extensive SMART meter installation</li> <li>● £15m for 22 Community Energy projects</li> <li>● 4 DECC Community led renewables projects</li> <li>● Reduce planning barriers to microgeneration</li> <li>● £5m for Anaerobic Digestion expansion via Glastir from 2012</li> <li>● £17m for Wood Energy Business Scheme</li> <li>● early adoption of renewable energy heat incentive</li> <li>● pilot smart grid technology</li> <li>● support for feed in tariffs</li> <li>● Carbon Capture and Storage Research and requirement of new fossil fuel plants</li> <li>● Low Carbon Economy Transport Network on M4 corridor (hybrid, hydrogen, electric)</li> <li>● Wales Low/Zero Carbon Hub</li> <li>● Carbon Trust/Energy Savings Trust support;</li> <li>● Land Use Planning</li> </ul> |
|---|---|---|--|

**RELEVANT ENERGY AND CLIMATE CHANGE POLICIES AND STRATEGIES REVIEWED**

|   |  |
|---|--|
| <p><i>Wales Ecological Footprint (2005) SEI, WAG, WWF</i></p>   | <p><i>Fuel Poverty Consultation - WAG( 2010)</i></p>   |
| <p><i>Microgeneration Action Plan for Wales (2007)</i></p>  | <p><i>A Low Carbon Revolution –The Welsh Assembly Government Energy Policy Statement - WAG (2010)</i></p>        |
| <p><i>Renewable Energy Route Map for Wales: consultation on way forward to a leaner, greener and cleaner Wales - WAG (2008)</i></p> | <p><i>Climate Change Strategy (2010)</i></p>   |
| <p><i>Consultation on a Bioenergy Plan - WAG (2009)</i></p>   | <p><i>Bioenergy Action Plan: Progress Report - WAG (2010)</i></p>  |
| <p><i>National Energy Efficiency and Savings Plan Consultation - WAG (2009)</i></p>   | <p><i>Marine Renewable Energy Strategy Framework -WAG (2007)</i></p>   |
| <p><i>Consultation: Allowing Local Authorities to sell electricity. DECC (2011)</i></p>   | <p><i>Report on Hydropower Permitting Review - Environment Agency (2010)</i></p>                                 |
|   | <p><i>Wales Energy Summit Papers - WAG (2010)</i></p> <p><i>Severn Tidal Power: Final Report DECC (2010)</i></p> |

## ONE PLANET RESOURCES

**WWF in One Planet Wales (2007) provided a vision of a future before 2050 of high material and commodity prices and expensive waste management solutions, where more intelligent approaches to resource recycling, re-manufacture and re-use would minimise the need for virgin products and imports. WWF (2007) suggested that waste accounts for around 15% of the ecological footprint of Wales with 50% of this from commercial sources, 35% from municipal waste and 15% from construction and demolition waste. In 2009, WAG placed the One Planet aspiration and footprint reduction at the very centre of its consultation on the waste strategy *Towards Zero Waste: One Wales: One Planet 2009-2050* with footprint reduction targets for these different sectors, and a clear relationship between past footprint analysis and policy. Clear targets of 70% recycling rate in all sectors by 2025 and to work towards zero waste by 2050 provide strong, long term market signals across Wales, and a raft of other targets firmly link waste to climate change (greenhouse gas emissions) and sustainable consumption (resource efficiency, Wales domestic material consumption).**

Table 7 shows the requirements suggested by WWF, by 2011, to set the right path for 10% footprint reduction, as well as policy measures suggested by SEI and Tyndall Centre and WAG policy mechanisms suggested in *Towards Zero Waste*, the Sustainable Development Scheme and draft Climate Change Strategy. There are clearly strong supporting mechanisms, legislative (e.g. Waste Framework Directive), financial (e.g. Sustainable Waste Management Grant), practical (e.g. Sector Skills Councils) and behavioural (e.g. Waste Awareness Wales), to help to drive forward policy and targets. In terms of WWF's ask pre-2011: the Waste Protocols Project and support for community led initiatives such as Freecycle are helping to focus on re-use and material exchanges; Supply Chain Action plans should help to ensure material recovery in supply chain management; the Waste Wales Measure 2010, is targeting plastic bags through charging from autumn 2011; and schools programmes are supported indirectly via the Keep Wales Tidy Eco-Schools campaign, Waste Awareness Wales, Cylch and local authority activity resulting in 1,508 Eco schools in Wales. (SEI's ask around reduction of food waste has been dealt with in Section 1).

According to Tyndall, implementation of the Zero Waste Strategy will meet the 3% reduction targets, it is unclear what *significant* investment would help to provide 6% reduction, other than perhaps

extensive investment in Anaerobic Digestion (see comments in Section 1) however, it is unlikely that the Zero Waste target would be brought forward to 2025 to achieve a 9% reduction in this sector, given the policy being developed by WAG.

For WWF's strategies 2020-2050, there are still clearly some challenges, for EU and UK campaigns on eco-labelling, but also in term of creating Wales' own market and legislative conditions where deposit return, product take-back, packaging return are the norm. *The Courtaulds Commitment 2* with over 40 retailing signatories committing to packaging reduction is a positive step, as is the establishment of a Packaging Advisory Group to reduce packaging and activity around the Producer Responsibility Obligations on agricultural packaging. *Towards Zero Waste* commits to the development of action plans in key sectors, domestic, municipal, construction and demolition, food and drink and the public sector, which should also focus on supply chain efficiencies. As mentioned in previous sections Value Wales and the Sustainable Buildings Action plan are encouraging the re-use of materials through procurement and construction. *The Regional Waste Management Plans* also identify the use of end of pipe energy recovery as a key issue and the priorities for local investment in the waste infrastructure, backed up by the *Waste Infrastructure Procurement Programme*.

In short, most of the dialogue, mechanisms, targets and partnerships seem to be in place to drive waste footprint reduction and importantly account for its reduction. This is a real success story, in terms of integrating One Planet living into a policy area for WAG. The *Municipal Waste Sector Plan* (2011) and *Municipal Waste Collections Blueprint* (2011) examine and propose policy interventions based on their ability to reduce both ecological and carbon footprints. A similar approach is being taken in consultations on *Collections, Infrastructure and Markets* (2011) and *Food Manufacture, Services and Retail* (2011) sector plans. A key question is, if the ecological footprint is deemed to be robust enough to monitor progress in this area, why not other areas of WAG policy?

While WAG uses footprinting to examine waste resources at a sectoral level, it is the translation of these commitments, measurement and accounting for waste footprint reduction at a *regional* level in Wales that presents a stern challenge for WAG. One key mechanism for this is the Wales Spatial Plan, which also commits to footprint measurement at a regional scale within Wales. The recently proposed Wales Strategic Infrastructure Plan and Regional Waste Management Plans, if they are to be updated, and the sectoral action plans need to consistently provide footprint measurement as their baseline.

One key component that also needs to be at the centre of the One Planet Resources dialogue, referred to by WWF in One Planet Wales, is the *water footprint*. The impact of climate change on water resources in Wales and internationally provides an imperative for Wales to account for its consumption beyond Wales' borders as part of its One Planet aspiration. Clearly the *embodied* water consumption via supply chains is not currently accounted for in current discussions and strategic planning and needs to be prioritised at a national and regional level as a target to meet the One Planet aspiration. Involvement of Dwr Cymru, Dee Valley and Environment Agency Wales would help in this process.

### RECOMMENDATION 18

The Waste Footprint is used as key indicator at a regional level within Wales to inform the work of Wales Spatial Plan, Regional Waste Plans, proposed Wales Strategic Infrastructure Plan and also for local authorities, private and third sectors. Waste footprint reduction is accounted for.

Table 7

**WWF One Planet Resources**

**In place by 2011 for 10% reduction**

- Reuse and remanufacturing, material exchanges
- Waste technology, material recovery and supply chain management
- Bag free retail centres with deposit return schemes
- School programmes for creative recycling

**Strategies for 2020-2050**

- Deposit return, product take-back, eco-labelling regulation of high impacts products
- Waste recovery (end of pipe) and energy recovery
- Zero packaging return deposit systems
- Sectoral strategies for waste management – procurement, incentive, local tax and investment
- Water and timber (as well as carbon trading)

**SEI 2020 scenarios**

Tyndall 3%, 6%, 9% asks

**SEI 2020 scenarios for 10% reduction in Food Footprint by 2020**

- Reducing food waste across the population by a sixth by 2020

Tyndall 3%, 6%, 9% asks

**For 3% annual emissions reduction**

Zero Waste Strategy

**For 6%**

Significant investment in infrastructure

**and 9% emissions reduction**

Zero Waste by 2025 and not 2050

**WAG Policy Mechanisms and targets (where available)**

**Long term targets:**

- One Planet Waste by 2050
- Waste 70% recycling rate across all sectors by 2025.

**Policy levers:**

- Waste Framework Directive 2010
- Waste Wales Measure
- Landfill Directive & Allowance
- Packaging Directive
- Environmental permits
- WRAP & WAW
- Regional Waste Plans
- Waste Protocols Project
- Sectoral Supply Chain Action Plans
- DCELLS Skills Council
- FS4B
- Envirowise
- Constructing Excellence

**Financial levers:**

- Annual Sustainable Waste Management Grant £59 million in 2009/10
- Anaerobic Digestion £3.5 million p.a. 2010/11 - £20 million
- Landfill Tax
- Aggregates Levy
- Plastic bag levy – r whatever its called

**Proposed measures in Towards Zero Waste Strategy:**

- Waste Ecological Footprints
- Greenhouse Gas Emissions from waste
- Waste arisings
- Wales domestic material consumption
- Resource efficiency CO2 to GVA

**RELEVANT POLICIES AND STRATEGIES REVIEWED ON WASTE**

*Towards Zero Waste: One Wales: One Planet 2009-2050 - WAG (2009)*

*North Wales Regional Waste Management Plan 1st Review (2008)*

*South West Wales Regional Waste Management Plan 1st Review (2008)*

*South East Wales Regional Waste Management Plan 1st review (2007)*

*Courtaulds Commitment 2*  
[http://www.wrap.org.uk/retail/courtauld\\_commitment/](http://www.wrap.org.uk/retail/courtauld_commitment/)

*Consultation on Collections, Infrastructure and Markets Sector Plan - WAG (2011)*

*Consultation on Food Manufacturing, Services and Retail Action Plan - WAG (2011)*

*Municipal Waste Sector Plan - WAG (2011)*

*Municipal Waste - Collections Blueprint for Kerbside Collections - WAG (2011)*

## WWF, SEI and Tyndall identify a number of conditions which are required in Wales to achieve footprint and carbon reduction and One Planet living, which fall into the broad definition of ‘governance’ and all point to ‘scaling up’ of activity, understanding, influence and investment.

These include:

- High level policies needed which explicitly reference role in footprint reduction/growth.
- Local schemes which target high footprint activities.
- Broad infrastructural changes to support sustainable behaviours.
- Broad understanding of the population of aim to reduce footprint.
- For 6% emissions reduction - significant upfront capital investment.

WAG themselves suggest that OWOP will require “commitment and tenacity to deliver this over a 40 year timescale”. WWF suggest the need for a “multi-level programme - of policy and investment, visioning and capacity building - all of which should lead to measurable results on the ground”. It is clear from the evidence cited in this report that a lot of excellent work has gone on to develop statutory and financial mechanisms, policies and actions to develop footprint reduction, yet we do not have a clear idea of how far this is taking us in the right direction, if at all. It should be stressed that many of the prerequisites identified by WWF in One Planet Wales for short term footprint reduction by 2011 are in place in the policy architecture, *if* they are being and continue to be implemented effectively.

There are some good examples where footprint measurement is at the heart of policy making (waste) and some poor examples where footprinting could provide different perspective on the success, or lack of success in our policy (transport). There have been missed opportunities - particularly in engagement with the public sector and economic development review. We can all point to great examples of doing things in the right way, but at the same time we can question whether these are exceptions to the rule, and make relatively little difference to an unsustainable trend (e.g. four Sustainable Travel Centres versus projected traffic growth) or do they represent tangible change to our current unsustainable ways of doing things? Is all of the admirable effort reviewed in this report stemming footprint growth or even beginning to reduce it?

The short answer is we just don’t know. Therefore

many of the recommendations in this report are about *measurement, evidence and accountability*. Accounting for our actions in terms of carbon and footprint, however statistically difficult, should be a pre-requisite of a nation aspiring to One Planet living. These measures need to be communicated as we develop policy and make difficult choices about finance and investment in the future. They should help us to avoid passing on greater liabilities to our descendants. They should be embedded in the way we judge performance of our government(s) and public services. WAG have a very difficult and *immediate* challenge to meet their own supporting principle “all of our policies will show how we will reduce Wales’ Ecological Footprint to work towards our vision”.

This report supports WAO findings that WAG need to develop a consistent approach to ecological footprint reduction, involving partnerships in all policy areas (e.g. Wales Spatial Plan, Regional Transport Plans, Regional Waste Plans). Until this is done, and a consistent measure is applied to the effectiveness of policy, all we have is a diverse set of policies, that we hope are broadly sending us on a more sustainable path. WAG’s own Sustainable Development Scheme targets a stabilisation by 2020 and then reduction of the ecological footprint in housing; food and drink; transport; consumer items and Wales Spatial Plan areas. 2020 is now nine years away, and the new Welsh Government will take us half way to that milestone. Many of the key policy documents (Regional Transport Plans) hardly have footprint reduction on the agenda, let alone a method of analysing where the biggest investments and efforts should be made to reduce the footprint. These policies leave long legacies in terms of infrastructural investments. Time is short and a ‘tenacious’ effort will be required to re-focus policy towards OWOP in the coming decade.

There are clearly areas of difficulty for the Welsh government to influence One Planet living, where things are dealt with at a UK level, where they do not have the statutory footing to compel others to act, where influencing lifestyles and behaviours, beyond signposting support and good practice can be interpreted as the actions of a ‘nanny state’. However, what is clear from this report is that Welsh government has a wealth of tools at its disposal to

influence ‘Team Wales’ in the right direction, and to exert its influence beyond Wales borders. We need a method to judge whether these tools are being used effectively enough, soon enough. Ecological footprint, water footprint and carbon accounting provide methods of helping with that accountability.

There is a huge opportunity to set Wales on a path to footprint stabilisation between 2011 and 2016 as the new Labour administration progress their manifesto commitments from the 2011 elections: maintaining commitments to One Wales; One Planet and living within environmental limits; legislating for both sustainable development as a central organising principle of government and also a new independent body (a potential Sustainable Futures Commission) to pursue sustainable development; with strong commitments from Labour to the green economy and carbon reduction. Devolving Building Regulations is an excellent example of Welsh Government acquiring the tools to influence behaviour. What other opportunities, similar to this could be pursued under a Sustainable Development Bill in Wales?

WAG should be congratulated in setting sustainable development as the key organising principle of government via the Sustainable Development Scheme, developing a mechanism for ‘sign up’ of partners via the Sustainable Development Charter (over 60 partners by May 2011) and for being so robust in its broad target setting for footprint reduction “one planet living within a generation”. Initiatives such as the Sustainable Development Challenge Fund, Sustainable Development Indicators; Ecological Footprint Grants; Hay on Earth and Community Action on Climate Change and continued support to Sustain Wales: Cynnal Cymru and others are helping to change behaviours of organisations, communities and individuals. However at present there is no evidence that the cumulative effort adds up to what is required. Linking footprinting to Wales Spatial Plan, the Policy Gateway Tool and their Strategic Capital Investment Framework’s are smart moves. However, there is a sense that the Scheme does not provide a plan for One Planet living in Wales, and that a plan - an overall sense of progress, or lack of it, is desperately required to provide an overview of where our efforts are best concentrated to reduce the footprint. One Planet living will not be pursued by default through existing policy mechanisms - something needs to drive the concept through policy silos. There is a danger OWOP will get lost in the ‘noise’ of funding cuts and entrenchment in different areas of high footprint impact. Its influence on the proposed Wales Strategic Infrastructure Plan will be a litmus test of WAG’s commitment to footprint reduction and One Planet living.

Current ‘scrutiny’ arrangements for the Sustainable Development Scheme, and presumably therefore WAG’s approach to the One Planet aspiration are dealt with within WAG, within the National Assembly’s Sustainability Committee, which has undertaken a recent review of mainstreaming of sustainability in Ministerial portfolios, and in the past via SDC’s input into the Annual Report of the Scheme. Challenging scrutiny of emissions reduction is possible via the Climate Change Commission. The potential for a new Sustainable Futures Commission, supported by new legislation to hold Welsh Government to account on the One Planet Aspiration is tantalising. Could Wales be one of the first countries in the world to get the accountability structure right for living within the Earth’s capacity? Could the Welsh Government tackle the weaknesses in accounting, policy, strategy and governance highlighted in this report and develop a routemap for a One Planet Nation, report this meaningfully across sectors and engage others in a ‘movement’ towards sustainability?

To move Wales towards this goal, beyond rhetoric, beyond limited good practice and beyond incrementalism, it will require political leadership outside of comfort zones, good communications of critical issues across sectors and legislation and prescription to back up aspirational goals. The analysis in this report provides a sense that we already have many of the tools, techniques and learning to become a One Planet nation. Welsh Government needs to provide greater impetus, interventions up to the scale of the task and the drive to help to deliver this imperative.

The following recommendations are made for One Planet Governance:

### RECOMMENDATION 19

**A One Wales:One Planet Routemap is developed** by WAG, Climate Change Commission and others to promote the concept from an **aspiration to an imperative** for government functions and partnerships, with clear targets and measurement. This will aid reporting, scrutiny and accountability.

### RECOMMENDATION 20

A method of **regular scrutiny and reporting** is devised which critically examines how the One Wales: One Planet Routemap is being delivered or ignored by government functions and partnerships, involving Wales Audit Office and other relevant bodies in Wales.

# APPENDIX 1 REPORT RECOMMENDATIONS

## RECOMMENDATION 1

WAG should measure **footprint reduction and carbon abatement** for all of their relevant strategies and policy mechanisms in **Food and Agriculture** - in order to achieve an insight into progress towards OPW.

## RECOMMENDATION 2

WAG reporting should, in addition to good practice on reducing the **Food footprint**, comment on the **cumulative impact** of initiatives, and the **scale of the intervention that is still required** to meet the OPW aspiration.

## RECOMMENDATION 3

Greater emphasis should be placed on connecting the **health benefits of lower footprint diets** in WAG policy and funded interventions in all sectors.

## RECOMMENDATION 4

WAG should measure - **footprint reduction and carbon abatement** for all of their relevant strategies and policy mechanisms on **Housing and Building**, in order to achieve an insight into progress towards OWOP.

## RECOMMENDATION 5

WAG reporting should, in addition to good practice on reducing the **Building footprint**, comment on the **cumulative impact of initiatives**, and the **scale of the intervention that is still required** to meet the OPW aspiration.

## RECOMMENDATION 6

The **Housing Strategy Programme Board** or any other body tasked with delivery should drive the OWOP aspiration through all of their work on strategy, policy and finance and account for their progress with clear targets.

## RECOMMENDATION 7

WAG should measure **footprint reduction and carbon abatement, (including aviation and shipping)** for all of their relevant strategies and policy mechanisms on **Transport** - in order to achieve an insight into progress towards OPW.

## RECOMMENDATION 8

WAG reporting should, in addition to good practice on reducing the **Transport footprint**, comment on the **cumulative impact** of initiatives, and the **scale of the intervention that is still required** to meet the OPW aspiration.

## RECOMMENDATION 9

**Regional Transport Partnerships** should drive the OWOP aspiration through all of their work on strategy, policy and finance and account for their progress with clear targets. This should be a requirement of *and for Wales Transport Strategy* and **National Transport Plan** and proposed **Wales Strategic Infrastructure Plan**.

## RECOMMENDATION 10

WAG should firmly embed One Wales: One Planet as key principle within the **Economic Renewal process** and evidence how economic development policies and mechanisms will impact on footprint reduction and carbon abatement. The **Council for Economic Renewal** should examine how this can be achieved.

## RECOMMENDATION 11

WAG should firmly embed One Wales: One Planet as key principle In its work with partners on **Wales Strategic Infrastructure Plan** and other **economic/regeneration plans** and evidence how economic development policies and mechanisms will impact on footprint reduction and carbon abatement.

## RECOMMENDATION 12

WAG should consistently embed One Wales: One Planet as **key principle within all of their discourse with the public sector, local government, AGSBs and the health sector** across all of their own divisions, requiring each division to report each year on how they have done this.

## RECOMMENDATION 13

WAG should influence **public sector performance management frameworks** in Wales to account for carbon and footprint reduction through policy and delivery of services and to require the public sector to report on delivery of associated targets.

## RECOMMENDATION 14

WAG and the public sector should as part of their procurement powers demonstrate how effectively the **'Welsh Pound' and the Euro (via WEFO and EU Structural Funding) are delivering on footprint and carbon reduction** and publish an annual account alongside financial reporting requirements.

## RECOMMENDATION 15

WAG should measure **footprint reduction and carbon abatement** for all of their relevant strategies and policy mechanisms on **Energy & Climate Change** - in order to achieve an insight into progress towards OPW.

## RECOMMENDATION 16

WAG should explore, with the Climate Change Commission, the potential for a **system of national carbon accounting to sit alongside financial reporting systems** and form a central part of the Wales performance management framework. This would include an assessment of the effectiveness of the Carbon Reduction Commitment.

## RECOMMENDATION 17

WAG reporting should, in addition to good practice on reducing Energy footprint and Emissions reduction, comment on the **cumulative impact of initiatives**, and the **scale of the intervention** that is still required to meet clear targets.

## RECOMMENDATION 18

The **Waste Footprint** is used as key indicator at a regional level within Wales to inform the work of **Wales Spatial Plan, Regional Waste Plans, proposed Wales Strategic Infrastructure Plan** and also for local authorities, private and third sectors. Waste footprint reduction is accounted for.

## RECOMMENDATION 19

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## RECOMMENDATION 20

A method of regular **scrutiny and reporting** is devised which **critically examines how the One Wales: One Planet Routemap is being delivered** or ignored by government functions and partnerships, involving Wales Audit Office and other relevant bodies in Wales.