

# NEWSLETTER

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**Please contact us:**

- If you have any suggestions for articles for future newsletters or would like to comment on this one
- If you would like to offer to help
- If you have any comments on any matter related to resource and environment

**Diary dates**

The next REG Networking Evening will be on Wednesday 28 November.

The conclusions of the research on “Limits to Growth” will be presented on 17 January 2013.

More details on both of these events shortly.

## RESOURCE AND ENVIRONMENT GROUP — BEYOND GDP

This issue reviews various initiatives to improve on GDP growth as a measure of “progress”, and suggests potential implications for actuaries. We also focus on infrastructure investment.

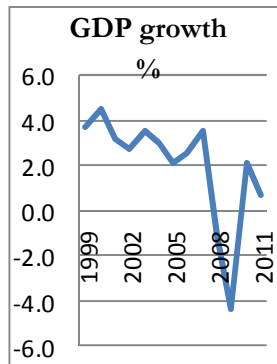



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We are listing below email addresses for the REG managing committee. You can also contact Craig Ajimuda ([craig.ajimuda@actuaries.org.uk](mailto:craig.ajimuda@actuaries.org.uk)) who is communities leader for the Profession. We welcome new member Bill Rayner.

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## Sustainable Development Indicators

## National well-being

## Natural Capital Accounting



## Alternatives to GDP?

DEFRA is seeking views on its proposals for a new set of **sustainable development indicators** to inform Government policy, see

<http://sd.defra.gov.uk/new-sd-indicators/>

Assessing sustainable development is no easy task. Four headline indicators are proposed under each of three broad sections: the economy, society and the environment, making 12 in total. These are backed up by a further 25 supplementary indicators focussing on particular aspects.

Most of the economic indicators are relatively straightforward: economic prosperity being defined in terms of growth of GDP, GDP per head and median household income. In the other sections healthy life expectancy is included and GHG emissions, both in terms of those generated here and those in respect of UK consumption (all those imports from China). Various bird numbers are proposed as a proxy for “wildlife & biodiversity”.

Some of the indicators would appear to present significant problems in terms of definition and collection of appropriate and reliable statistics. For example, “social capital” is intended to include measures or proxies for social networks, communities, cultural activities and participation. Government policies should no doubt help to increase our social capital, or at least not destroy it, so perhaps we should try to assess what is going on in this area.

At the same time the ONS has been developing measures of “**national well-being**” and their latest thinking was published at the end of July, see

[http://www.ons.gov.uk/ons/dcp171766\\_272242.pdf](http://www.ons.gov.uk/ons/dcp171766_272242.pdf)

There is some overlap with the DEFRA indicators but there is also much more on subjective assessments of “well-being” based on national surveys. We learn that Rutland is the happiest English county but neighbouring Leicestershire is the most anxious. Whilst it is easy to poke fun at these results, it is encouraging that in a relatively rich, sophisticated economy there is starting to be some questioning of GDP growth as the only measure of “progress”.

These developments are part of an international trend. The UN’s High-Level Panel on Global Sustainability published its final report in January, see [http://www.un.org/gsp/sites/default/files/attachments/GSP\\_Report\\_web\\_final.pdf](http://www.un.org/gsp/sites/default/files/attachments/GSP_Report_web_final.pdf)

It advocates a wide-ranging, highly ambitious global agenda. It includes the suggestion that a sustainable development index or set of indicators be developed.

The moves towards **natural capital accounting** are another strand: factoring in the value of natural assets like clean air, water, forests and other ecosystems into accounting systems, both nationally and at the corporate level, so as to make better long term decisions. The World Bank put an introduction to the subject on YouTube for the Rio+20 conference, see

<http://www.youtube.com/watch?v=kUnM05Mpiyw>

This initiative is widely supported, by many countries, including the UK and the USA, by the EU and by many multinationals. It follows on from the “TEEB” initiative (the economics of ecosystems and biodiversity) which was developed through the UN Environmental Programme in recent years. What price GDP growth if natural resources, fisheries being an obvious example, are thereby destroyed?

What are the implications for actuaries of these more sophisticated measures of “progress”?

- Clearly potentially huge in the longer term as a move to a more sustainable, lower growth economy may have implications for discount rates and benefit design?
- A potential role for actuaries in developing natural capital accounting, involving as it does the quantification of future costs and benefits?
- Will natural capital accounting lead to more litigation and exposure for corporations, and their insurers, who fail to recognise the impact of their actions on ecosystems?
- Actuaries who are investment consultants or managers should clearly take these trends into account in assessing managers or evaluating investments.

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### Infrastructure investment

Has been a regular topic of discussion in recent years, and infrastructure investment has attracted the attention of parties ranging from the NAPF to Alex Salmond. And the reasons for considering infrastructure as an asset class are sound; with the potential to generate a satisfactory level of real returns, primarily through an inflation-linked long-term income stream that can be matched to long-term benefit payments. For politicians such private sector investment also has the attraction of being “off balance sheet” finance!

Infrastructure can be regarded as being “the fabric of society”. The asset class embraces transport (roads, bridges, railways, ports and airports), energy (generation and transmission), water supply (storage, pipes, waste treatment), and social infrastructure such as social housing, hospitals, schools, stadiums, courthouses, and prisons. Whilst the majority of these assets may historically have been provided by the state, over the last 20 or so years, privatisations and public/private partnerships have drawn private sector capital into this area.

Hence in the UK, many utilities have already been privatised and competition for assets, when they become available, is high. New infrastructure projects (e.g. HS2) require significant capital and carry with them substantial development risks. The majority of institutional investors seem to be more attracted to acquiring such assets in their working phase and thus deriving the more predictable returns from the revenue streams that come from owning and operating the asset.

Access to suitable infrastructure investments could be addressed by looking farther afield. In other developed countries, the potential sale of existing, state-owned infrastructure assets to reduce high levels of sovereign debt may offer an opportunity to private sector investors, as could new infrastructure projects in developing countries. In the UK, investment in social housing is being considered.



*UK markets are struggling to deliver infrastructure investment?*

Other challenges with infrastructure investment lie in achieving both scale and the necessary commitment from investors over the very long-term. In this regard, there has been a concerted effort from the NAPF and PPF to develop the Pensions Infrastructure Platform. The PIP proposes to create a fund tailored to the requirements of UK pension funds, with the primary objective of investing in brownfield, operational assets that are already generating inflation linked cash-flows.

From an environmental perspective, huge investment will be required, in the UK and overseas, in climate change mitigation and adaptation: for example renewable energy and flood management projects. We referred in our February edition to the Climate Bonds Initiative as one mechanism. Infrastructure investment may need to become a substantial part of investors' portfolios if these demands are to be met.

The UK investment markets are clearly highly efficient in terms of mechanisms for dealing in existing securities but seem to be struggling in terms of raising finance for new investment projects. However, Government also clearly has a crucial responsibility in this asset class in terms of defining the long term financial framework in which investment is facilitated.

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### **IAA Environmental Working Group (“EWG”)**

Congratulations to our Chair, Oliver Bettis, who has now been appointed Chair of the IAA EWG. This appointment was made by the Executive Committee of the IAA. There is now a Resources and Environment group on LinkedIn which you can join automatically if you have joined the EWG (and of course LinkedIn):

<http://www.linkedin.com/groups?gid=4417984&trk=myg>

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### **REG Googlegroup**

REG has created this group so all members can exchange information as it emerges. In deference to our “Inbox”, it is not intended as a discussion forum as such! Use the LinkedIn group (above) for discussions.

To join, email: [resenv+subscribe@googlegroups.com](mailto:resenv+subscribe@googlegroups.com)

Visit the webpage (if you log in you will have access to a more complete list of REG documents):  
<http://www.actuaries.org.uk/members/pages/resource-and-environment-member-interest-group>