

EU Energy Policy 2030

"Zest for Enlightenment"

Friends & Foes Of Energy Investment 19 November 2013

Professor Michael Mainelli

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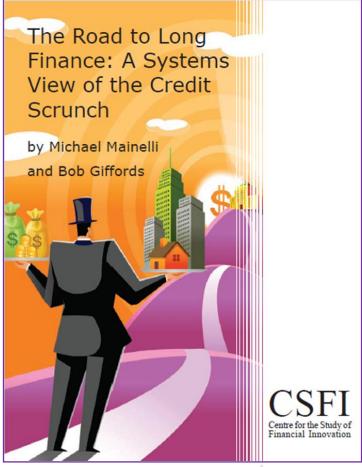


Introduction

Professor Michael Mainelli Chairman, Z/Yen Group







'When would we know our financial system is working?'

Objectives:

- ♦ Expand Frontiers
- ♦ Change Systems
- ◆ Deliver Services
- ♦ Build Communities







London Accord



Financial Centre Futures



Meta-Commerce



Eternal Coin

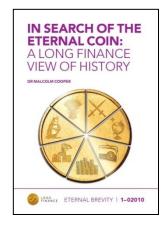


Long Finance Publications

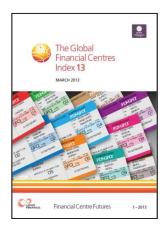


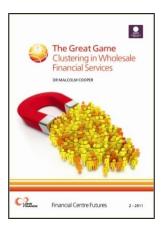


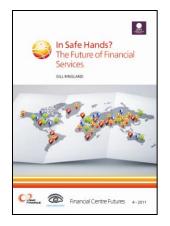


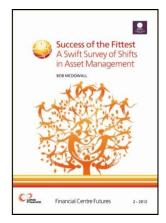


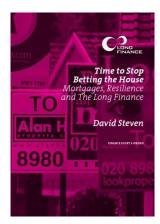






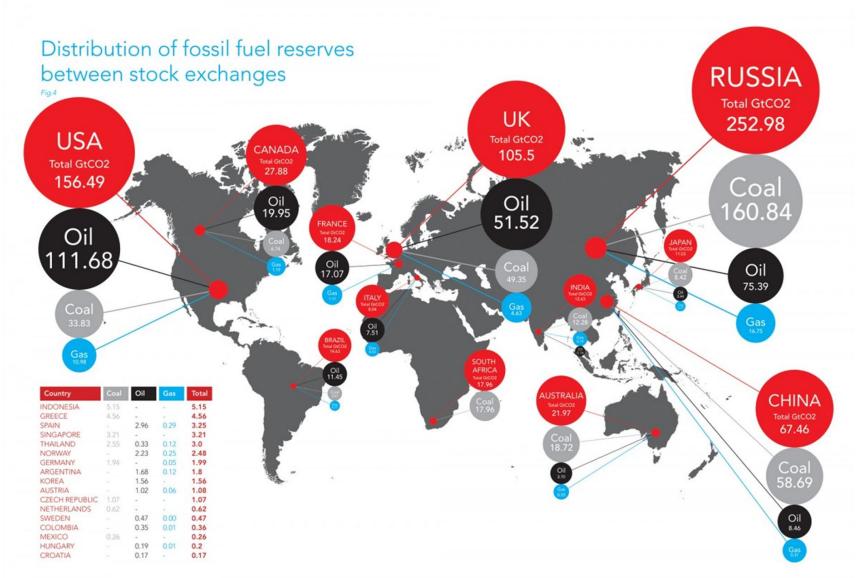








Unburnable Carbon





Learning Curves Matter



[Source: IRENA (2012), "Renewable Energy Technologies: Cost Analysis Series"; IEA (2011), "Solar Energy Perspectives" http://www.sbc.slb.com/SBCInstitute/Publications/SolarPhotovoltaic.aspx



Trends

Economic trends:

- low energy costs correlate with growth and economic success
- energy security leans towards in-country production and a mixed portfolio
- greater policy stability on fossil fuels favours fossil fuel investment
- low carbon may be desirable, but difficult to sell
- Europe risks being high-cost in a low-cost energy world in 2020

Technological trends:

- local renewable generation will get better, but unlikely to be sufficient
- solar learning curve compelling, nuclear not so
- solar, and wind, and the market, would benefit from working storage technology



Policy Implications

- ◆ Should Europe focus on large storage projects, comparable to the US National Strategic Oil Reserve, that might put a base price on daytime renewable and perhaps encourage exports of sunshine from south to north? Is the 'grid' for distribution (historic reason), or energy trading and emergency supply?
- Do we believe in open data and open, competitive markets?
- How should we 'internalise' sustainability into economic measurement and reporting?
- How do we 'prove' stability of policy?



Open Data

Finance, Biodiversity And Managed Ecosystems: Where's The Data?	2011	Natural Environment Research Council, Financial Services Knowledge Transfer Network and Z/Yen Group
Finance And Water: Where's The Data?	2010	Natural Environment Research Council, Financial Services Knowledge Transfer Network and Z/Yen Group
Finance And Forestry: Where's The Data?	2010	Natural Environment Research Council, Financial Services Knowledge Transfer Network and Z/Yen Group



Confidence Accounting – Scientific Measurement

Balance Sheet as at TO

Debt securities

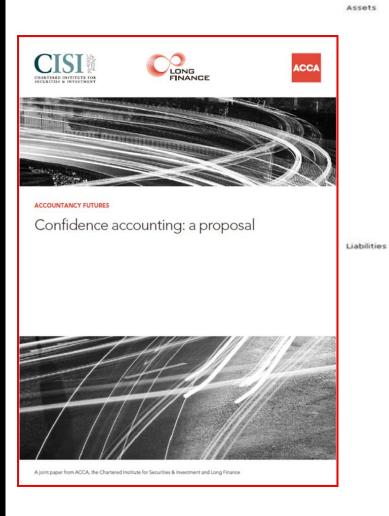
Subordinated debt

Total liabilities

Equity

Other (accruals, tax, short positions)

Derivatives



in millions Nominal Expected loss Estimated value Loans and advances - banks 50,000,000 SE-04 25,000 Loans and advances - corporate customers 100,000,000 0.007 700,000 Loans and advances - retail customers 200,000,000 0.015 3,000,000 197,000,000 Debt securities Level 1 and 2 60,000,000 0.002 120,000 Level 3 10,000,000 0.002 20,000 Derivatives Level 1 and 2 150,000,000 3E-04 45,000 149,955,000 Level 3 10,000,000 SE-04 5,000 Other 120,000,000 120,000,000 Total 700,000,000 3,915,000 696,085,000 NLOW True 350,000,000 Deposits 350,000,000

> 60,000,000 60,000,000 40,000,000

49,975,000 99,300,000

59,880,000

9,980,000

9,995,000

75,000,000

25,000,000

150,000,000

36,085,000

Total 700,000,000 696,085,000

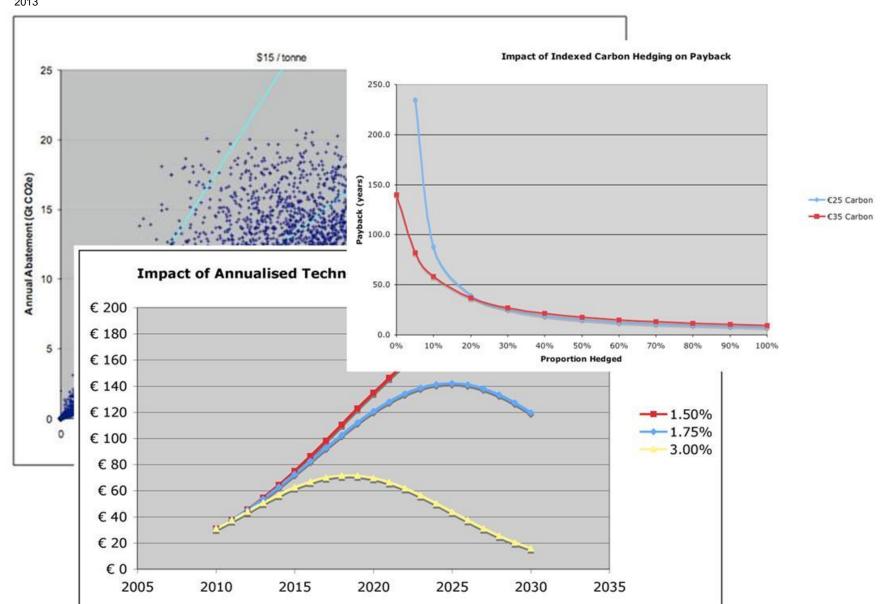
75,000,000

25,000,000

150,000,000



Policy Performance Bonds





Policy Thoughts

- Open data
- Open, competitive markets focus on storage, not carbon capture & sequestration?
- Confidence accounting for sustainability issues
- Policy performance bonds



Speakers

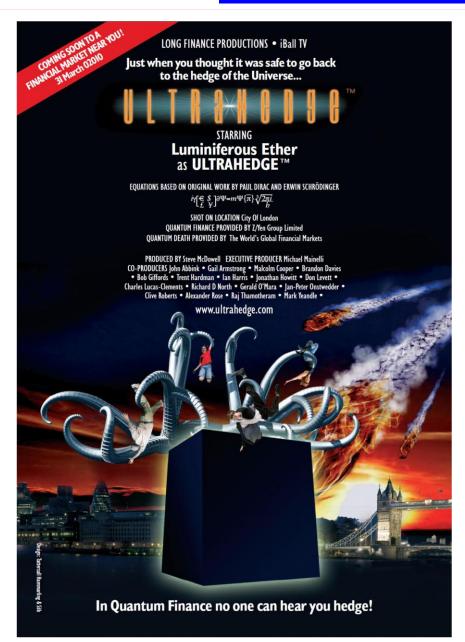
Baroness Scott
Michael Wilshire

Matt Hinde

Neil Angell



Film Interlude – <u>www.ultrahedge.com</u>





Outlook 2013-2014

Events

- Financing Tomorrow's Cities Lord Mayor Fiona Woolf, Mukhtiar Tanda, Sir David King, Trevor Maynard, Roger Bayliss, Simon Mills, Michael Mainelli – 19 November 2013
- Evolution or Revolution? Democratising Money Shann Turnbull – 16 January
- Measuring Up Cities Lord Mayor, Tony Travers, and others 30 January 2014

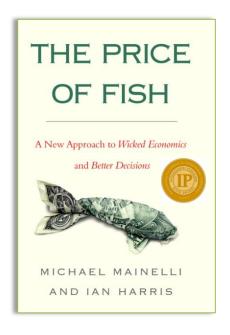
Publications

- Uses & Abuses of Discount Rates
- Long Term Insurance Issues
- Euro Crisis and Emerging Economies
- Backing Market Forces: How To Make Voluntary Standards Markets Work For Financial Services Regulation



When Would We Know Our Commerce Is Working?

- When we're equitable space?
- When we're sustainable time?
- When we're happy?







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