

# Why socio-economics matters in the marine and coastal environment



[Chris.williams@neweconomics.org](mailto:Chris.williams@neweconomics.org)

Marine Socio Economics Project  
Coordinator



**economics**  
real wealth  
means well-being



**environment**  
lifestyles must  
become sustainable



**society**  
communities need  
power and influence

## **3 things:**

- 1. Re-think economics**
- 2. Challenge current thinking & assumptions**
- 3. Change is possible, desirable & necessary**

## Presentation:

- ✓ About NEF
- ✓ NEFs work on EU fisheries  
& our fisheries model (BEMEF)
- ✓ The Marine Socio-Economics Project  
& The Blue New Deal

**NEF (New Economics Foundation - 1986)**

**Working towards an economy  
which delivers:**

high **well-being** and **social justice**  
within **ecological limits**

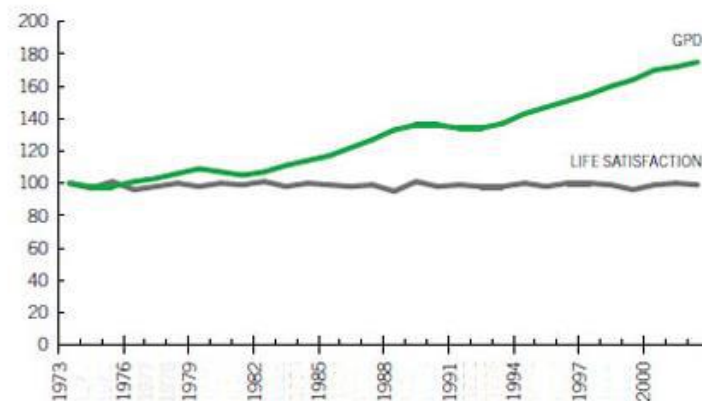
# Why new economics?

## 4 'U's of our current economic system

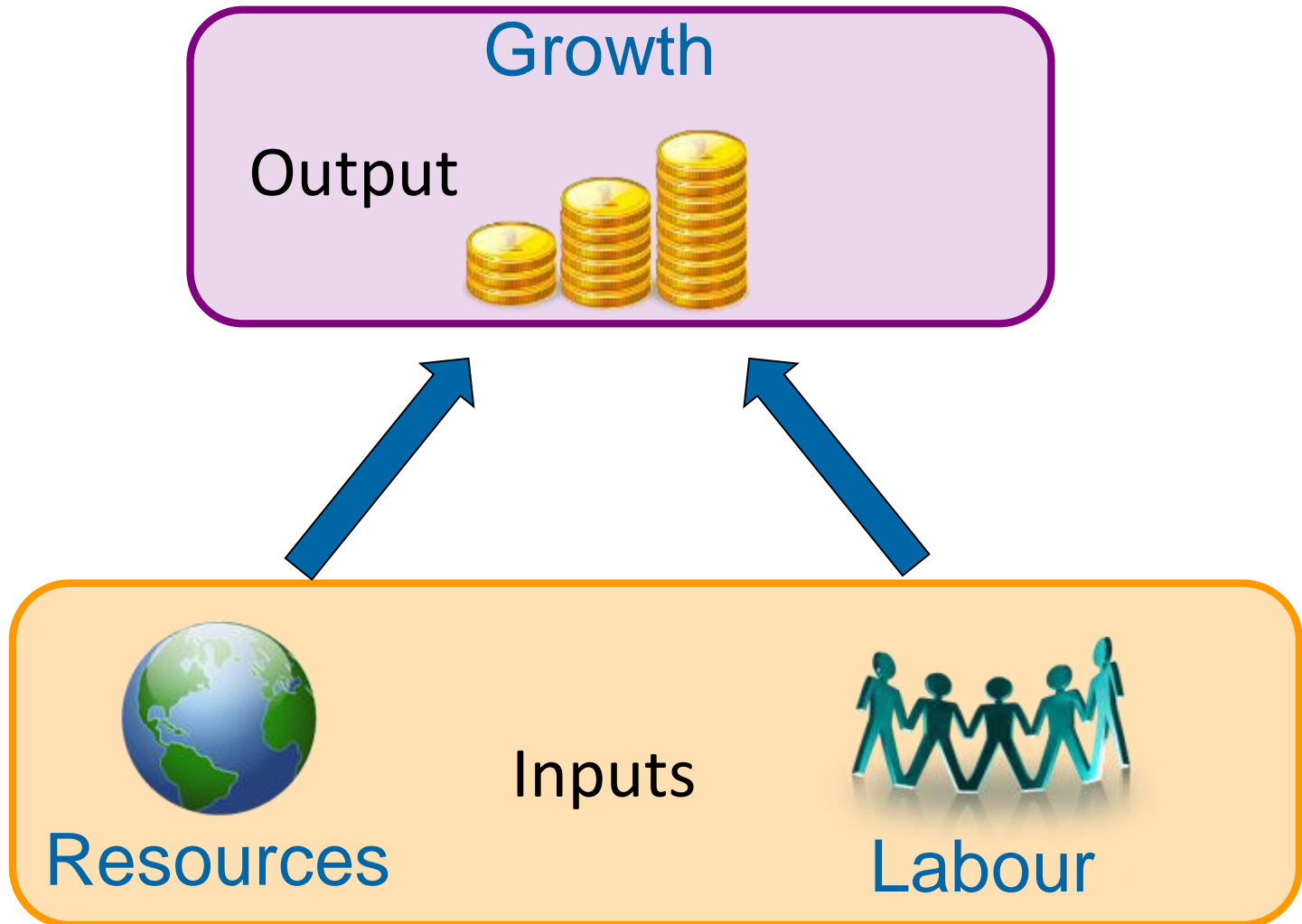
- › Unsustainable
- › Unstable
- › Unfair
- › Unhappy



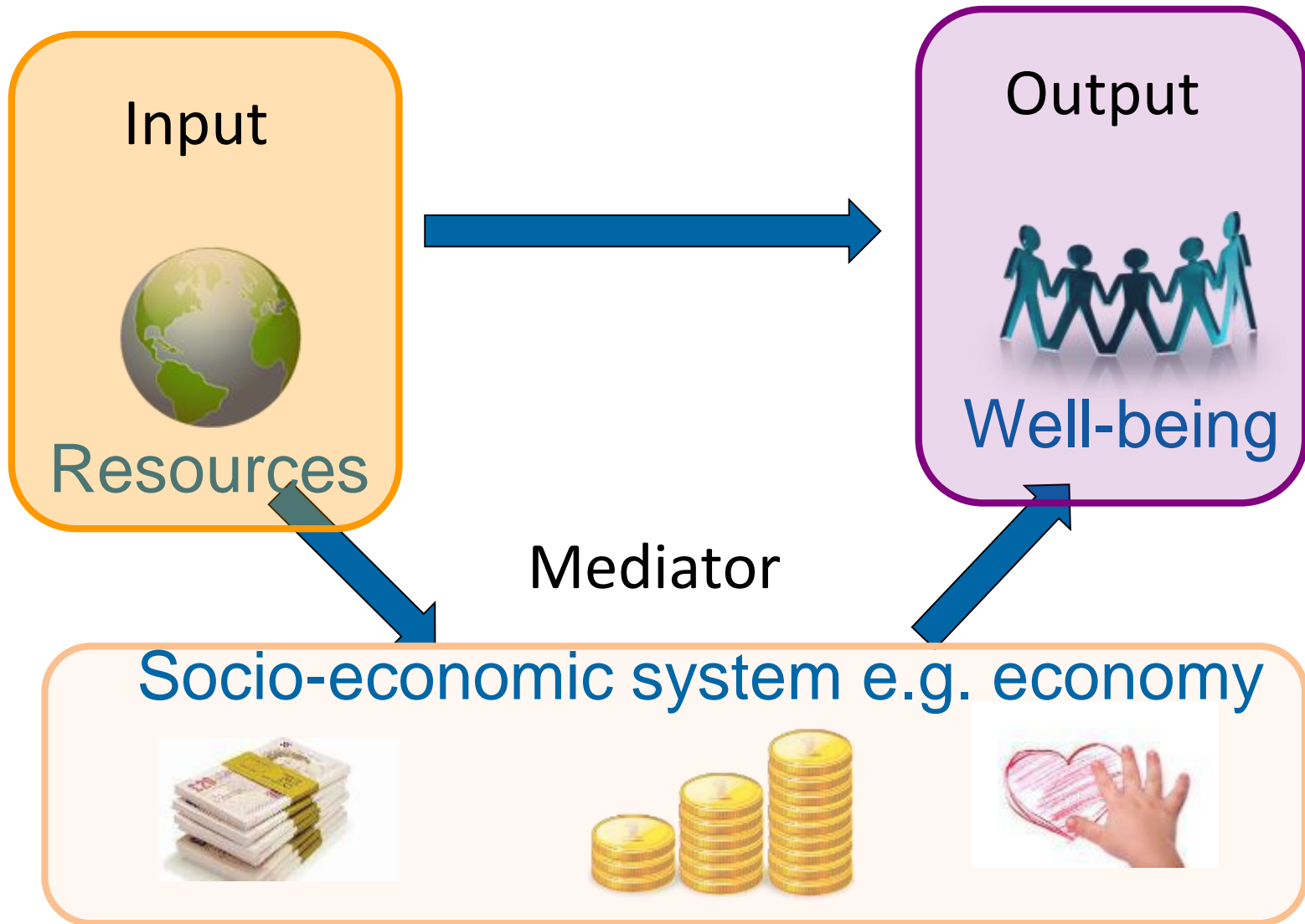
Figure 4: Economic growth in US and Britain



# Current thinking– ‘progress?’



# New thinking - Progress



# Trust facts, not economic mythology...

- Infinite growth?
- Natural capital = “substitutable”?
- People = rational?
- Information = perfect?
- Future generations = richer?
- Markets = fair and efficient?
- Wealth trickles down rich → poor?
- Future discounted?
- Natural wealth loss = gains in GDP?



theguardian.com has a new look coming soon [preview it now](#)

## David Cameron aims to make happiness the new GDP

Prime minister acts on pledge to find out what matters most to the public



Allegra Stratton, political correspondent  
The Guardian, Sunday 14 November 2010

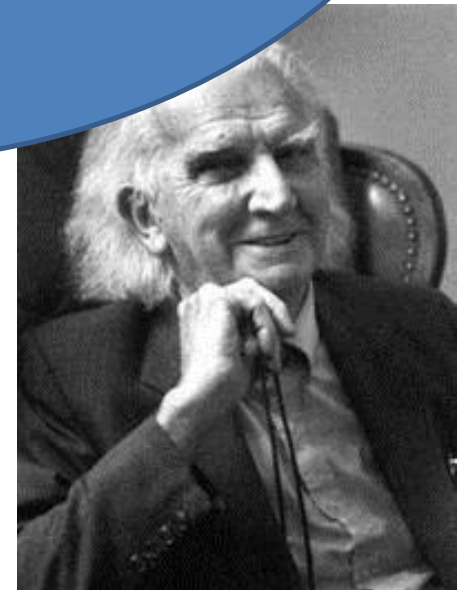


Smile please: happiness is the new GDP. David Cameron launches wellbeing

*"Wellbeing can't be measured by money or traded in markets. It's about the beauty of our surroundings, the quality of our culture and, above all, the strength of our relationships. Improving our society's sense of wellbeing is, I believe, the central political challenge of our times."*

(2010)

....and we are not the only people talking about it.



## A snapshot of NEFs work.....

- Redefining 'efficiency'
- Monetary reform
- Understanding systems
- Influencing policy (fisheries)

# HPI -

What is the measure of economic success?

Long and happy lives that don't cost the earth

3 components  
Life expectancy  
Life satisfaction  
Ecological footprint

## WHICH ECONOMY IS MORE EFFICIENT?



VS



78

YEARS

LIFE  
EXPECTANCY

79

YEARS

7.2

/10

AVERAGE  
HAPPINESS

7.3

/10

7.2

GHG

ECOLOGICAL  
FOOTPRINT  
PER PERSON

2.5

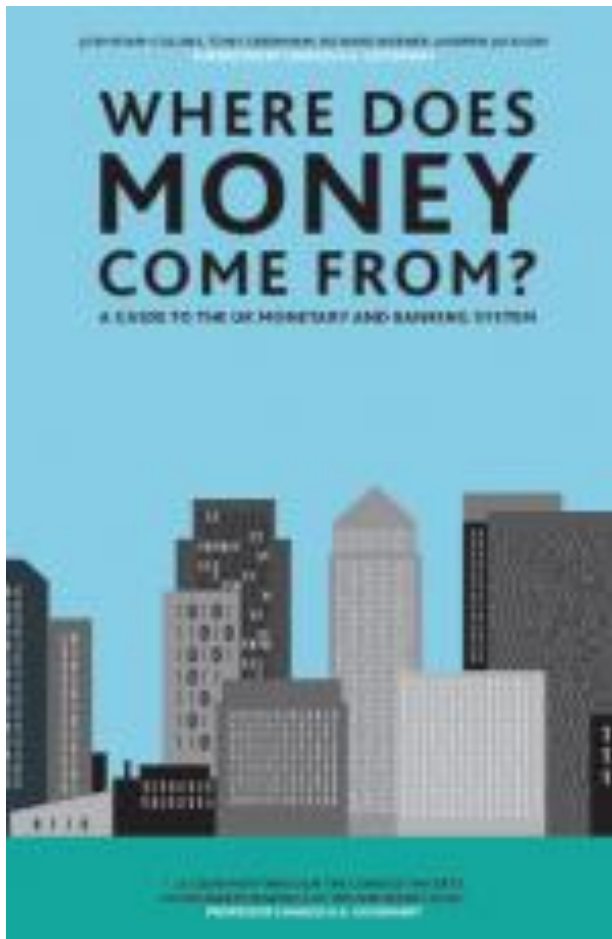
GHG

SEE HOW OTHER COUNTRIES COMPARE:  
[WWW.HAPPYPLANETINDEX.ORG](http://WWW.HAPPYPLANETINDEX.ORG)

HAPPY  
PLANET  
INDEX



# Monetary Reform



- **Banks create new money**  
(bank deposits) when they  
lend (97% !!!)

Home » News » Poll: three quarters of MPs don't understand how money is made

## Poll: three quarters of MPs don't understand how money is made

Tuesday, August 19th, 2014 By Tom Revell

[Share](#) [Tweet](#) [Email](#) [Share](#) [Like](#) 139 [g+](#)



Some 80% of MPs lack basic understanding of where the UK's money comes from, according to a new poll.

The survey, commissioned by the reform campaign group **Positive Money**, found that 71% of MPs believe that only the government has the power to create money. A further 9% said they didn't know who creates the nation's money.

However, most new money is now created when commercial banks give out loans. The government only creates coins and notes, which make up around 3% of all the money in the economy.

In response to the statement "New money is created when banks make loans, and existing money is

***“Most money in the modern economy is in the form of bank deposits, which are created by commercial banks themselves... When a bank makes a loan to one of its customers it simply credits the customer’s account with a higher deposit balance. At that instant, new money is created...” (BoE, 2014)***



# Understanding systems

THE  TIMES

## Environment

News Opinion Business Money Sport Life Arts Puzzles Papers

Welcome to your preview of The Times

‘The more we know of climate change, the murkier it all gets’

Article

Cheltenham tweets

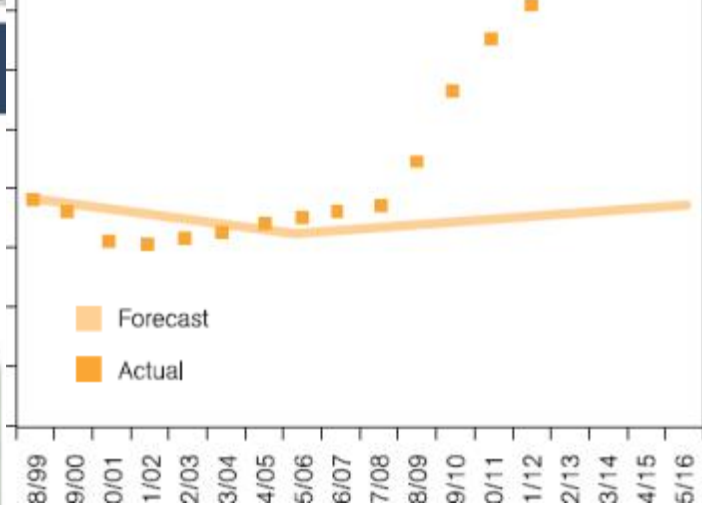


Tom Whipple, Science Correspondent and Oliver Moody  
Last updated at 12:01AM, June 14 2012

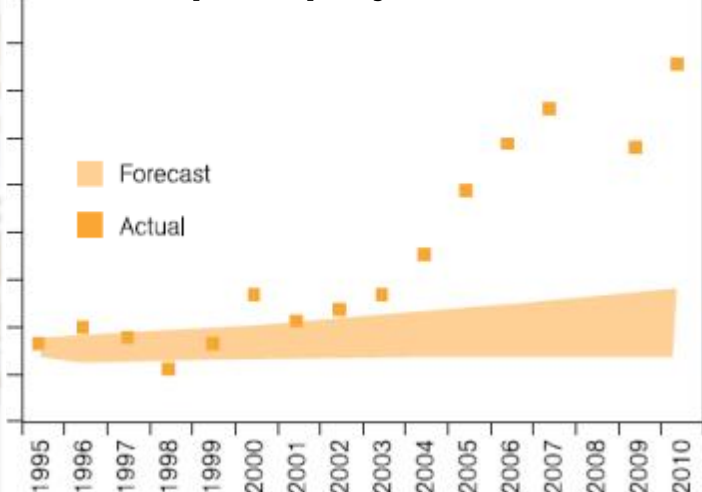
The more we know about climate change the more uncertain our

The Mekong River in Laos: forecasts of its flow in the future range from a fall of 16% to a rise of 55%

### HMT net debt



### IEA oil price projection





# ✓ Influencing the EU Common Fisheries Policy (CFP)



## **Key message from NEFs work on EU fisheries:**

**“Restoring fish stocks is good for  
employment & the economy”**



# Jobs lost at sea (2012)

Compared the performance of 43 (of 150) EU fish stocks with their potential if at Maximum Sustainable Yield (MSY).

**1) Catches**

**2) Revenues**

**3) Employment**



With every passing year that EU stocks remain overfished we are losing out on **2.7 billion pounds** and the potential to support **100,000 jobs**.



**Jobs lost at sea**  
Overfishing and the jobs that never were

# EU Common fisheries policy reform



*‘Therefore, the Union should improve the CFP by adapting exploitation rates so as to ensure that, within a reasonable time-frame, **the exploitation of marine biological resources restores and maintains populations of harvested stocks above levels that can produce the maximum sustainable yield.** The exploitation rates should be achieved by 2015.’*

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0022:0061:EN:PDF>

We have choices  
about how we fish...

How can we allocate  
resources to those  
that create best  
value to society?



**Value Slipping Through the Net**  
Managing fish stocks for public benefit

## Case study: North Sea Cod



## Good value

- Viable / profitable
- Low subsidy dependence
- Jobs
- Low impact on seabed
- Low discards
- Low C emissions
- Low by-catch
- Etc

# Bad value

- The opposite

## Looking at trawling vs gillnets:

Who creates **value**?

Who gets the **quota**?

Who gets the **subsidies**?

- For every tonne of cod landed, trawlers delivered negative value ranging from -£116 for the smallest trawlers to almost -£2,000 for the largest.
- Gillnets, on the other hand, generated a net +£865 of value.
- Trawlers landed almost 6,000 tonnes of cod, while gillnets landed less than 3 per cent of this – just 163 tonnes.
- The largest trawlers received direct subsidies of £219/tonne of cod landed while gillnets received £38.

# EU Common fisheries policy reform





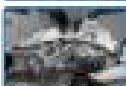





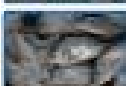



## Article 17:

Criteria for the allocation of fishing opportunities by Member States

*When allocating the fishing opportunities available to them, as referred to in Article 16, Member States shall use transparent and objective criteria including those of an environmental, social and economic nature.*

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0022:0061:EN:PDF>

# Fish dependence day calendar 2014

JAN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
									SLOVAKIA								AUSTRIA																
FEB		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
														ROMANIA			BELGIUM						SLOVENIA		LITHUANIA								
MAR		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
APR		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
					GERMANY								ITALY																				
MAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
		PORTUGAL					CYPRUS					POLAND		CZECH REPUBLIC				FRANCE															
JUN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
		MALTA										SPAIN					BULGARIA																
JUL		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
								HUNGARY			EU27																						
AUG		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
														NETHERLANDS																	LATVIA		
SEP		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
												UK																					
OCT		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
																								FINLAND									
NOV		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
																														SWEDEN			
DEC		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
							GREECE																								DENMARK		





NOVEMBER 19, 2013

## Deep trouble

Deep-sea bottom trawling causes significant environmental damage - and for little economic return.

[More »](#)

**Deep trouble**  
Deep-sea bottom trawling causes significant environmental damage - and for little economic return.



OCTOBER 31, 2014

## Landing the blame: overfishing in the Baltic Sea

Uncovering the countries most responsible for overfishing in EU waters

[More »](#)

**Landing the blame: Overfishing in the Baltic Sea**  
Uncovering the countries most responsible for overfishing in EU waters

Fisheries ministers risk damaging our natural resources beyond repair by consistently fishing over and above the limits recommended by scientists. This is the first in a series of briefings to identify which countries are standing in the way of more fish, profits and jobs for European citizens.

Read the report published 100 million EU citizens at [www.nef.org.uk/baltic](#). It details the impact of overfishing in the Baltic Sea, the world's most overfished sea, and the impact on the environment and the economy.

### Fishing boats in scientific advice

Every year fisheries ministers meet to agree on the limits for fishing in EU waters. But the advice they receive from scientists is often ignored. This is the first in a series of briefings to identify which countries are standing in the way of more fish, profits and jobs for European citizens.

Read the report published 100 million EU citizens at [www.nef.org.uk/baltic](#). It details the impact of overfishing in the Baltic Sea, the world's most overfished sea, and the impact on the environment and the economy.

### Agreements behind closed doors

Read the report published 100 million EU citizens at [www.nef.org.uk/baltic](#). It details the impact of overfishing in the Baltic Sea, the world's most overfished sea, and the impact on the environment and the economy.



JULY 3, 2013

## Paying for overfishing

Why subsidising new vessel construction is bad news for EU taxpayers and our oceans

[More »](#)

**Paying for overfishing**  
Why subsidising new vessel construction is bad news for EU taxpayers and our oceans

# The Bio-Economic Model of European Fleets (BEMEF)

# What is the BEMEF?

- ...a tool designed to **visualise the economic impacts of fish stock restoration and quota re-allocation.**
- ...for fleets where adequate data is available, BEMEF **calculates current and future economic outputs including profitability, wages, and jobs.**
- Feb 2015 + report [www.fisheriesmodel.org / .eu](http://www.fisheriesmodel.org/.eu)



- Countries / fleets within countries
- Fish price elasticity / fuel prices / jobs est.
- Change quota allocation: historic / jobs / effort / fuel
- Landings / earnings/ VA / Profit / jobs / wages / Carbon

✓ The Marine Socio-Economics Project  
(MSEP)

& The Blue New Deal



# The Marine Socio-Economics Project (MSEP)

Building the Socio-Economic Capacity of Marine NGOs

Coordinated by NEF. Four NGO partners.



**economics**  
real wealth  
means well-being



**environment**  
lifestyles must  
become sustainable



**society**  
communities need  
power and influence

Started in 2012.

**Two key outcomes:**

- NGOs with increased economic capacity
- NGOs working together effectively



# Project activities

## Workshops\*

- Impact Assessment workshops - 2012
  - MSFD (Including Defra economist)
  - MCZs (Including Natural England economists)
- Theory of Change – 2013 (outputs > outcomes).
- Valuation – 2013 (focus on economic tools and techniques)
- Nature & Progress seminar – July 2014 – \*\*upcoming paper: “Devaluing Nature?!”
- EMFF workshop: Poole, Nov 2014. Including Defra, IFCAs fishermen, aquaculture businesses and FARNET / FLAGs

**\*all presentations online – [www.mseproject.net](http://www.mseproject.net)**





# Project outputs

- [www.mseproject.net](http://www.mseproject.net)
- project website and newsletter
- Economics Briefings and marine case studies



## Economics in policy-making 3

### Valuing the environment in economic terms

Unlike mainstream economics (which often disregards the environment's central role in our economy), both environmental and ecological economics argue that economic processes cannot be detached from the natural environment in which they operate.

In this briefing, we discuss the different approaches that exist towards valuing nature, and the challenges inherent in doing so.

As shown in the diagram below (Figure 1), the economy cannot operate without a constant flow of matter and energy coming from the natural environment.

For this reason, environmental degradation has a huge economic impact on human societies and productive activities. If, for example, energy flows from the environment were to suddenly stop, then most human economic activity would be impossible. Similarly, if critical natural resources like metals, fossil fuels or water

were to vanish, so too would the human economic activities that rely on them.

The central role of the natural environment in economic processes means that nature has an economic value. But unlike other commodities, the value of nature is not reflected, represented or quantified through the price system. For instance, we do not 'pay' for the air we breathe and there is no 'market price' for consuming clean air.

Figure 1: The role of the natural environment in the economy



Published by nef (the new economics foundation), April 2012 as part of the MSE2 project to build the wide-economy capacity of marine NGOs. [www.mseproject.net](http://www.mseproject.net) Tel: 0151 783 0389 Email: [info@neweconomics.org](mailto:info@neweconomics.org) Registered charity number: 1055254.



economic to provide empirical evidence.

Is environmental valuation an acceptable methodology?

The practice of putting a price tag on environmental natural resources is not without its limitations. The first of these relates to accuracy: considering the complex, non-linear nature of ecosystems, valuing the worth of their non-market goods can be an imprecise exercise. This uncertainty needs to be acknowledged in the analysis.

Critics also question the very notion of monetising natural assets, arguing that changes to nature should not be judged on the same scale as the consumption and production of goods. Can we really weigh up the extinction of species (expressed in dollar values) with consumption gains?

A final criticism of incorporating environmental valuation into CBA warns that doing so may encourage the adoption of a 'weak sustainability' approach (which assumes manufactured capital can replace natural capital) rather than a 'strong sustainability' approach (which views natural capital as irreplaceable). After all, the method does make it possible for market benefits to override environmental losses. This is because it is only the aggregate costs and benefits (as they translate, economic or environmental) of a project that matter. For instance, a project which decreased environmental capital by £50 but raised economic capital by £70 might still go forward in spite of it resulting in an irreversible environmental loss.

Alternatives to environmental valuation: Critics of valuation have proposed some alternatives which include:

1. Using multi-criteria analysis (MCA) techniques which assess a mixture of monetary and non-monetary benefits rather than CBA when an intervention has considerable environmental impacts and/or implications. MCA does not require the monetisation of environmental gains or losses. This technique is described in detail in briefing 6.
2. Using a 'strong sustainability' criterion when carrying out cost-benefit analysis. In this scenario, projects which generate greater overall benefits than costs are only considered 'efficient' if they do not reduce levels of natural capital at all. This follows a precautionary principle approach in concept which aims to enhance environmental protection by taking preventative decisions, i.e. acting on the side of caution when not all facts are known.

Briefing 3: Valuing the environment in economic terms

## CASE STUDY

Economic tools used to value nature have been described at the Total Economic Value (TEV) framework in studies present examples of valuation techniques and ecosystem services.

Why a TEV risk assessment decision? By valuing ecosystem services, TEV values include cost for losses and gains measured in

Table 1

Benefits and products provided by marine ecosystems	
Category	Good or service
Production services	1. Food provision 2. Non-material

## Publications

### VIEW BY WORK AREA

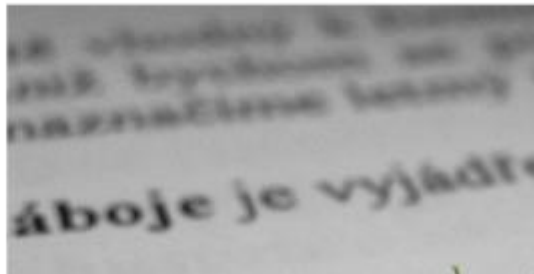
-  Economy
-  Environment
-  Society

Search  
publications

### TOP ISSUES

Energy & Climate  
Change  
Public Service  
Reform

### Economics in policy-making - briefings



[Briefing 1 - An overview of economics](#)

[Briefing 2 - How economics is used in government decision-making](#)

[Briefing 3 - Valuing the environment in economic terms](#)

[Briefing 4 - Social cost-benefit analysis and social return on investment](#)

[Briefing 5 - Discounting and time preferences](#)

[Briefing 6 - Multi-criteria analysis](#)

[Briefing 7 - Beyond GDP: Valuing what matters and measuring natural capital](#)

[Briefing 8 - Markets, market failure and regulation](#)

[Briefing 9a - Finance and money: the basics](#)

[Briefing 9b - What's wrong with our financial system?](#)

[Briefing 10 - Property rights and ownership models](#)

[Briefing 11 - Behavioural economics - dispelling the myths](#)

<http://www.neweconomics.org/publications/entry/economics-in-policy-making>

# • Facts and Figures ↓



In 2011, the industry overall (including direct, indirect, and induced impacts) supported just nearly £21.2 billion in UK GDP, 391 800 jobs, and over £6.2 billion in tax receipts for the UK Exchequer.<sup>2</sup>

The UK has 110 commercially active ports and harbours.<sup>3</sup> These include major all-purpose ports, ferry ports, specialised container ports, and ports catering for specialised bulk traffic, such as coal or oil.<sup>4</sup> Table 1 shows the top 10 UK ports by

**Table 1. Top 10 UK ports by tonnage (2012).**

Port Name	Tonnage handled	Percent	Type and Cargo	Ownership
Grimsby & Immingham (Humber Estuary)	60,091	12.0	Leisure, fishing, commercial (coal and ore)	Private, ABP Holdings Ltd
London	43,742	8.7	Leisure, commercial	Trust, Port of London Authority
Millford Haven (Wales)	39,632	8.0	Commercial (bulk fuel, LNG, oil products)	Trust, Millford Haven Port Authority
Southampton	38,107	7.6	Leisure, commercial (crude oil), ferry terminal	Private, ABP Holdings Ltd
Tees and Hartlepool	33,967	6.8	Commercial (iron and steel products), ferry terminal	Private, PD Teesport
Liverpool	32,924	6.6	Commercial (agricultural products)	Private, Peel Ports
Felixstowe (East Anglia)	26,269	5.2	Commercial (container traffic)	Private, Hutchison Ports
Forth Ports (Scotland)	25,332	5.1	Commercial (LNG, crude oil)	Private, Forth Ports
Dover	22,902	4.6	Leisure, commercial, ferry terminal (over main freight units)	Trust, Dover Harbour Board
Clyde (Scotland)	15,421	3.1	Commercial (coal)	Private, Peel Ports
All UK ports	500,860	100		

Source: DfT Port Statistics; last updated: September 2013.

<sup>1</sup> HM Government (2013) Maritime UK Open for Maritime Business.  
<sup>2</sup> Oxford Economics (2013) The economic impact of the UK Maritime Services Sector Summary.

<sup>3</sup> HM Government (2013) Maritime UK Open for Maritime Business.  
<sup>4</sup> <http://www.maritimeports.gov.uk/pages/industry-profile>

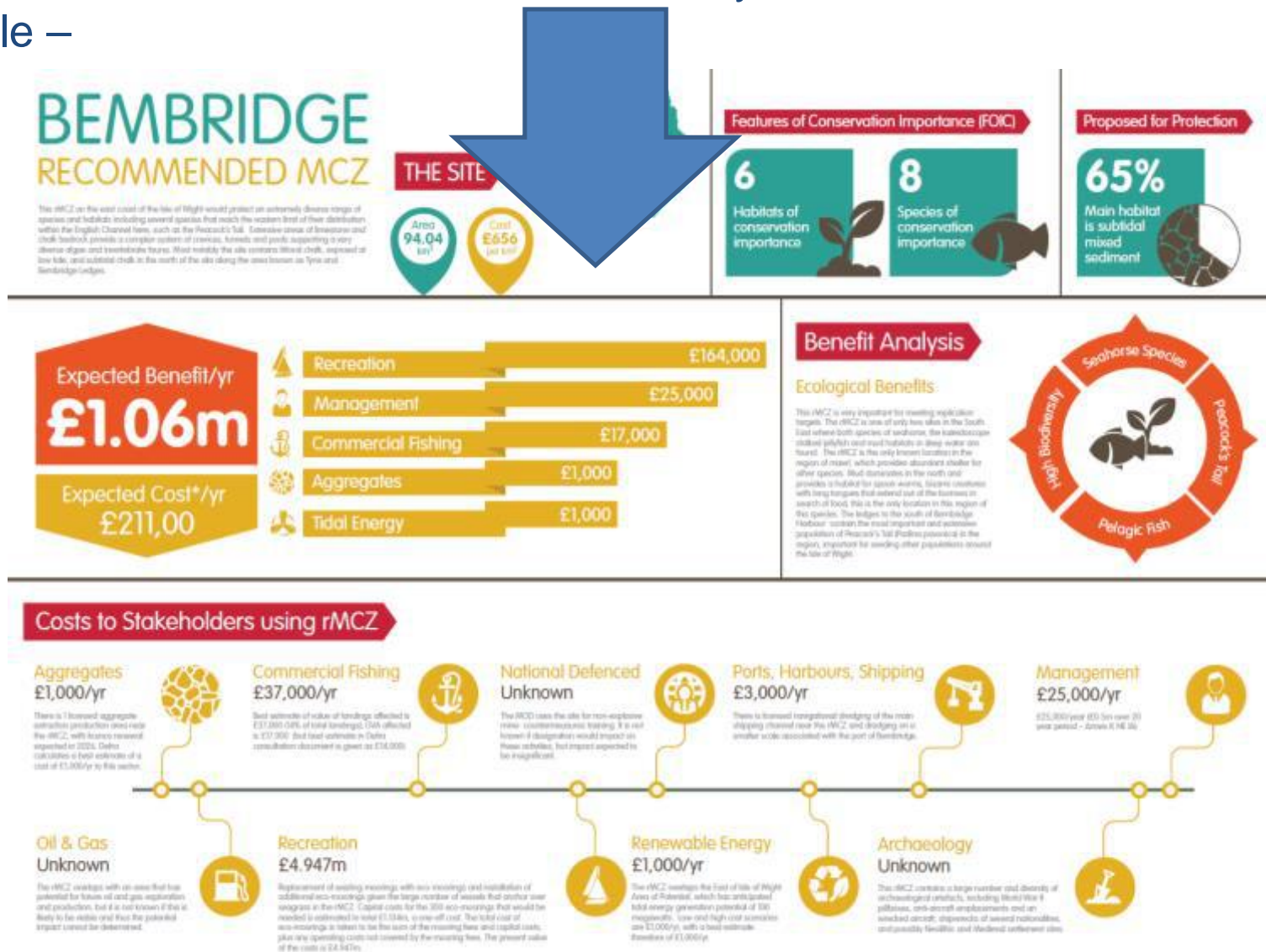
## Briefings:

- Capture fisheries
- UK marine infrastructure
- Marine Energy
- Marine Recreation
- Flows & aquaculture

# Developing an Improved Impact Assessment (IIA) for MCZs

Using best available evidence in a visual way

Example –





# BLUE NEW DEAL



- Numerous challenges for coastal communities....
- Re-frame the marine conservation debate...
- ...opportunities through the marine environment.

# 'Blue New Deal'



A healthy marine environment can support:

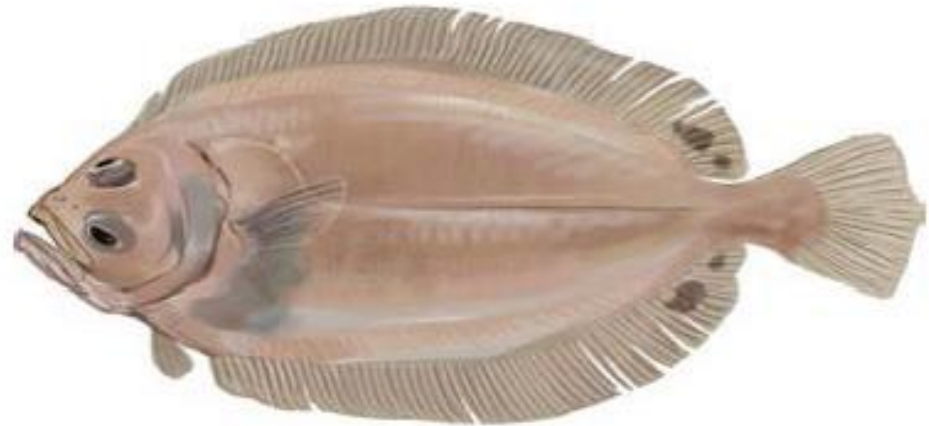
- Good jobs;
- Providing sustainable food and energy;
- Increasing wellbeing;
- Delivering public goods cost-effectively;
- Building resilience.

- **Identifying solutions** – More UK examples...
- Contact: [fernanda.balata@neweconomics.org](mailto:fernanda.balata@neweconomics.org)

## **3 things:**

- 1. Re-think economics**
- 2. Challenge the current model & assumptions**
- 3. Change is possible, desirable & necessary**

# THANK YOU



Reports available at: [www.neweconomics.org](http://www.neweconomics.org)

Email: [Chris.williams@neweconomics.org](mailto:Chris.williams@neweconomics.org)

Follow us on twitter: @nef @MarineEconomics

Newsletter(s): NEF and MSEProject available online -  
the links are in the delegates notes.



# Key Components of a new economy

1. Measure the right things
2. Reform finance
3. Live within environmental limits
4. Reduce inequality
5. Create Good Jobs
6. Move public policy and investment upstream/prevention
7. Reframe the role of markets and companies
8. Rethink work (paid and unpaid)
9. Build strong local economies
10. Empower people to be economic citizens