

## *Regional accounting framework Working Paper*

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### **Regional accounts**

#### **Inter-regional comparison**

##### *Baseline*

- Direct MFA via consumption
- Direct MFA / indirect MFA
- Direct MFA via production
- Regional direct CO<sub>2</sub>
- Regional CO<sub>2</sub> in imports
- Regional EF / UK average
- Largest components in regional EF

##### *Forward strategy*

- Trend & alternative trends in CO<sub>2</sub> / EF / MF
- Comparison with Factor 4 targets.
- Policy options for regional development.
- Policy options for international trade.

### **Local results**

##### *Baseline*

- Best & worst LA in the region
- Footprint / average income per cap
- Footprint / LA areas
- Consumption – largest items for footprint
- Consumption – most footprint / £

### *Forward strategy*

- Local Factor Four solutions

## **Construction & built environment**

### *Baseline*

- Construction CO<sub>2</sub> / EF / MF: per unit of floorspace.
- Total construction supply chain CO<sub>2</sub> / EF / MF
- Construction life-cycle – incl all buildings.

### *Forward strategy*

- Effect of BREEAM standards on building stock
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### *Built environment Forward strategy*

- Increase in CO<sub>2</sub> / EF / MF due to RSS targets
- Effects on CO<sub>2</sub> / EF / MF of BREEAM policy options
- Targets for stabilization of EF in built environment
- Effects of alternative energy sources.
- Effects of urban planning on transport demand.

## **Waste**

- MSW – proportion of consumer input going to waste
- MSW – footprint of ‘resources lost’ in waste –
- C&I – proportion of DMI going to waste
- C&I – footprint of ‘resources lost’ in waste
- C&D – buildings lost in waste stream ...
- Recycling -

## Reporting summary tables

Each of these values can be expressed as per capita, or as absolute value.

	Direct Material Consumption (t)	To stock	To waste /emis	C02 & GHG	C02 & GHG	Eco footprint	Financial GVA in production	House hold final demand	Govt / other final demand	Net transfer to govt	Shadow environment costs	Adjusted net GNP
	t	t	t	t CO <sub>2</sub> eq	t CO <sub>2</sub> eq	gha	£	£	£	£	(£)	(£)
<b>UK</b>												
UK net TOTAL												
Production												
Exports												
Imports												
HH demand												
Government demand												
<b>REGIONS</b>												
NI												
Scotland												
Wales												
NE												
NW												
Y&H												
WM												
EM												
EE												
SE												
SW												
GL												
<b>ACTIVITY MODULES</b>												
Food												
Shelter												
Transport												
Products												
Services												
Public												
Energy												
Waste / resources												
(Land)												

For each column, the following could be relevant, where data exists:

- Baseline (which year?)
- Trend & projection
- Target (if it exists)
- Trend-target index

For each cell the following indices could be relevant, where this can be identified:

- Per GVA
- Per person or absolute values
- Per employee

## Activity / supply chain: values & transfers

This is a template for each of the activity sectors – food, transport etc. Each one involves a combination of supply & demand sectors.

	Primary	Secondary	Factors (buildings, transport)	Tertiary	Demand	Externality (waste, emissions)	Loops (recycling & reuse)
<b>MASS BALANCE</b>							
DMC to production							
DMO to consumers							
Export %							
Import %							
Waste							
Air emissions							
Climate emissions							
<b>SHADOW VALUE</b>							
Resources (opp cost)							
Waste (opp cost)							
Emission (damage cost)							
Climate emissions							
Import %							
Env. Assets???							
<b>FINANCIAL VALUE</b>							
GVA in production							
FD by consumers							
FD by government							
FD by exports							
GFCF Investment							
Labour factors							
Producer tax							
Consumer tax							
Public subsidy etc							
<b>SOCIAL VALUES</b>							
<i>To be defined!!</i>							

## Market transformation scenarios

Showing alternative balances between damage cost / re-investment

Time steps to be defined as either 10, 20, 45 years.

	Past	Present baseline	F1 (BAU) scenario	F4 (SD) scenario A	F4 (SD) scenario B	F4 (SD) scenario C
<b>MASS BALANCE</b>						
DMC to production						
DMO to consumers						
Export %						
Import %						
Waste						
Emissions / other						
<i>Balance</i>						
<b>SHADOW VALUE</b>						
Resources (opp cost)						
Waste (opp cost)						
Emissions (damage cost)						
Import % (net embodied cost)						
<b>FINANCIAL transfers</b>						
GVA in production						
FD by consumers						
FD by government						
FD by exports						
Labour						
Producer tax						
Consumer tax						
Public subsidy etc						
<b>INVESTMENT</b>						
GFCF general investment						
Producers <b>environ</b> investment						
Govt <b>environ</b> investment						
NET total financial / shadow costs / benefits / investment						