

Regional accounting framework Working Paper

JR 23-01-06

Regional accounts

Inter-regional comparison

Baseline

- Direct MFA via consumption
- Direct MFA / indirect MFA
- Direct MFA via production
- Regional direct CO₂
- Regional CO₂ in imports
- Regional EF / UK average
- Largest components in regional EF

Forward strategy

- Trend & alternative trends in CO₂ / 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 CO₂ / EF / MF: per unit of floorspace.
- Total construction supply chain CO₂ / EF / MF
- Construction life-cycle – incl all buildings.

Forward strategy

- Effect of BREEAM standards on building stock
-

Built environment Forward strategy

- Increase in CO₂ / EF / MF due to RSS targets
- Effects on CO₂ / 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 ₂ eq	t CO ₂ eq	gha	£	£	£	£	(£)	(£)
UK												
UK net TOTAL												
Production												
Exports												
Imports												
HH demand												
Government demand												
REGIONS												
NI												
Scotland												
Wales												
NE												
NW												
Y&H												
WM												
EM												
EE												
SE												
SW												
GL												
ACTIVITY MODULES												
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)
MASS BALANCE							
DMC to production							
DMO to consumers							
Export %							
Import %							
Waste							
Air emissions							
Climate emissions							
SHADOW VALUE							
Resources (opp cost)							
Waste (opp cost)							
Emission (damage cost)							
Climate emissions							
Import %							
Env. Assets???							
FINANCIAL VALUE							
GVA in production							
FD by consumers							
FD by government							
FD by exports							
GFCF Investment							
Labour factors							
Producer tax							
Consumer tax							
Public subsidy etc							
SOCIAL VALUES							
<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
MASS BALANCE						
DMC to production						
DMO to consumers						
Export %						
Import %						
Waste						
Emissions / other						
<i>Balance</i>						
SHADOW VALUE						
Resources (opp cost)						
Waste (opp cost)						
Emissions (damage cost)						
Import % (net embodied cost)						
FINANCIAL transfers						
GVA in production						
FD by consumers						
FD by government						
FD by exports						
Labour						
Producer tax						
Consumer tax						
Public subsidy etc						
INVESTMENT						
GFCF general investment						
Producers environ investment						
Govt environ investment						
NET total financial / shadow costs / benefits / investment						