



Institute for European  
Environmental Policy

# The use of indicators in the policy cycle and introduction to the brainstorming session

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# Structure & content of this presentation



## I. Overview of the qualitative analysis: Aims, Approach & In-Stream indicators

## II. Introduction to the policy cycle

## III. Policy analysis for green growth: (climate change, energy efficiency, Cohesion Policy).

- **Approach to collecting information** on indicators used across relevant policy areas: **using the policy cycle**
- **Specific objectives of current phase and especially the policy-maker consultation on use of indicators**
- **Green growth related policy cycles and opportunities for using indicators to achieve objectives**

## IV. Intro to brainstorming session

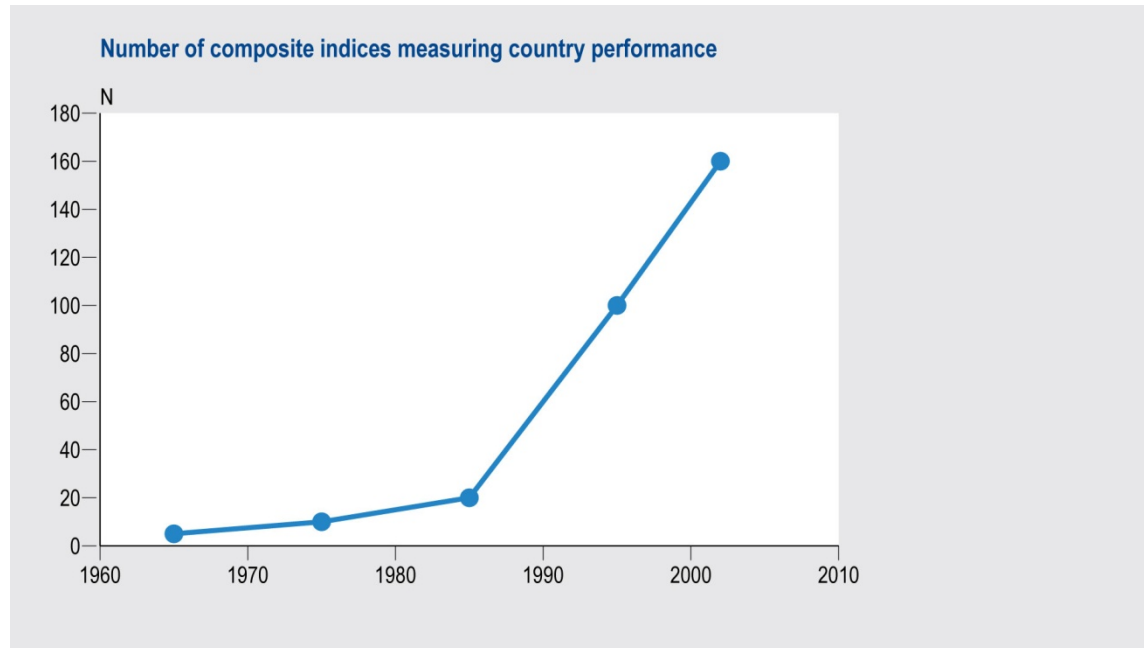
# Context: indicators in policy making



**Multiple ways in which indicators can support decision-making for more sustainable outcomes:**

- **identifying conditions and trends**  
**filling related gaps in knowledge**
- **measuring progress and efficiency of measures taken;**  
**consequences of action or inaction**
- **benchmarking and monitoring performance in relation to targets set**  
**whether - how - when**
- **enabling policymakers to set new or change policy priorities**

# Context: A quest for better indicators



*Figure 1: Growth in number of composite indices (UNDP Office of Development Studies, 2006). The indices cover a diverse set of issues including competitiveness, governance, social aspects, human rights, the environment, security and globalization.*

**More and more people are searching for better indicators**

# Aims of the qualitative analysis



- ❖ Analyse **sustainability indicators** of relevance for policy making
- ❖ Identify **policy implications** of different indicator approaches
- ❖ Collect and incorporate **stakeholders' feedback**
- ❖ Identify **best examples/potential future use** of indicators in policy making

# How is the analysis conducted



**Analysis of a set sustainability indicators**

**Identification of policy implications:** when to use indicators, connections, need for better info, recommendations – desk based + questionnaire to stakeholders

**Case studies on policy implications:** focus on 2-3 countries (in progress)

**Public communication and the press:** where/how indicators are taken up by media

**Present/discuss results with stakeholders:** the workshops

**Summarising finding and identifying way forward for policy processes:** the deliverables

# Indicators covered in IN-STREAM (I)



## Environmental indicators

### Composite environmental indicators

E.g. Ecological footprint, Adjusted net savings, Environmentally weighted Material Consumption (EMC) etc.

### State of nature & biodiversity

E.g. Common Bird Index, Red list, Potentially Disappeared Fraction, etc.

### Loss of natural areas

Annual increase in built-up areas, Forest fires, etc.

### Over-use of nature

Eg. Fish catches outside safe biological limits, loss of soil quality reserves, etc.

### Ecosystem Service (ESS) indicators

Eg. Removal of nutrients by wetlands, atmospheric cleansing capacity

### Climate change & Energy

Eg. UNFCCC GHG emissions including land use change, Energy consumption, share of renewable energy, etc.

### Air pollution

Eg. nitrogen oxides emissions, Emissions of PM 2.5, etc.

### Waste

Eg. Amount of waste generated per capita

### Resources

Eg. Domestic material extraction/consumption, etc.

### Transport

Eg. Freight transport volume, total passenger transport

# Indicators covered in IN-STREAM (II)



## Socio-economic indicators

### Composite indices

Eg. Human Development Index (HDI), Happy Planet Index, Wellbeing accounts, Inequality Index

### GDP; Net national Income; etc.

### Labour productivity

### Net investment in fixed capital; value of built capital

### Household income; Household saving rate; Comparative price levels

### Total investment

e.g. In infrastructure, gross fixed capital formation (GFCF)

### Gross domestic expenditure on R&D; Innovation

e.g. Patents

### Employment/Unemployment (economic)

### Employment (social)

e.g. Employment rate of older workers, gender, religion etc.

### At-risk-of-poverty rate after social transfer (by gender/ total)

### Healthy life years, Female/Male; Loss of life years

### Life expectancy at birth, Female/Male

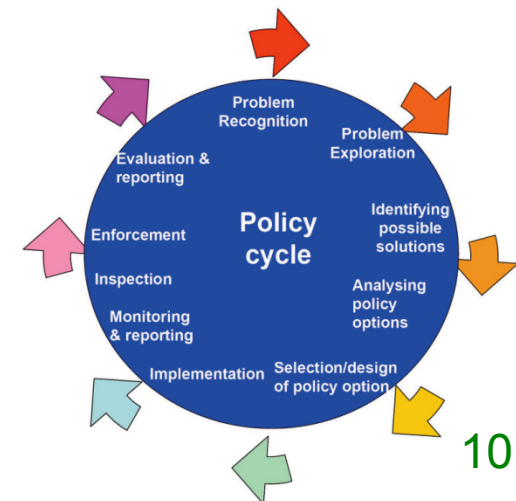
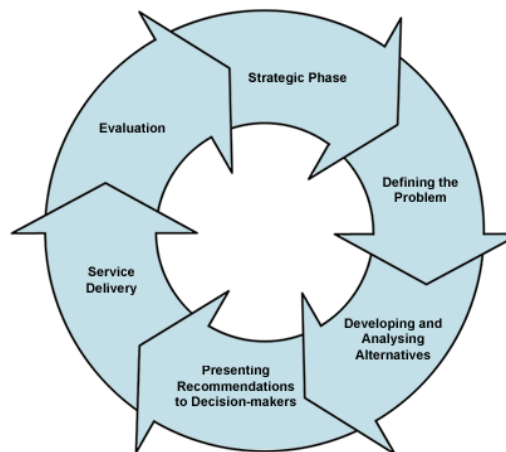
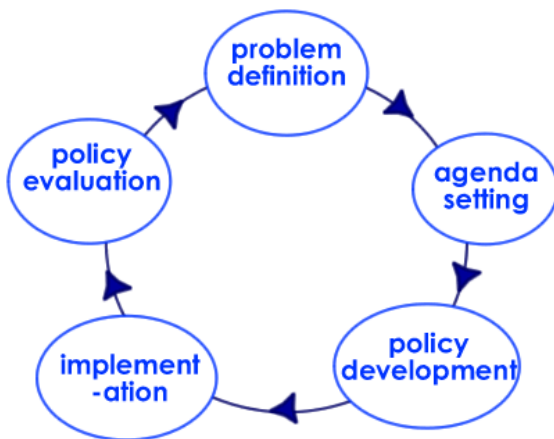


## **II. Introduction to the policy cycle**

# The Policy Cycle: Introduction



- ❖ Policy making can be divided into **phases**: planning, implementation, monitoring etc...
- ❖ The **policy cycle** is a tool to help better understand the lifecycle of single policies
- ❖ There are different versions of the policy cycle - depending on the emphasis/complexity etc



# The Policy Cycle: 10 Phases (I)



**Example – there are other possible ways of dividing up the cycle.**



# The Policy Cycle: 10 Phases (II)



**1. Problem recognition:** Issues become “problems” on which action needs to be taken, when perceived by political actors

**2. Agenda setting:** Decide when and who will deal with the problem and in what form

**3. Problem exploration:** The problem is defined – e.g. size and impact (assumptions and public opinion can play a critical role)



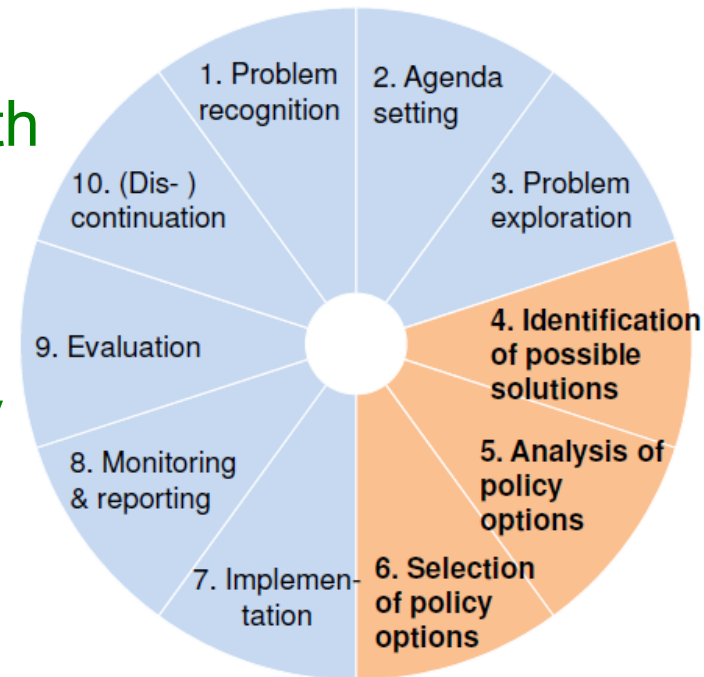
# The Policy Cycle: 10 Phases (III)



**4. Identification of possible solutions:** identify policy options, actions etc

**5. Analysis of policy options:** Different policies are assessed (regulations, standards, plans, programmes, etc.) with different content, aims, instruments, strategies, responsibilities, funds, etc.

**6. Selection of policy options:** Policy makers choose between several alternative options



# The Policy Cycle: 10 Phases (IV)

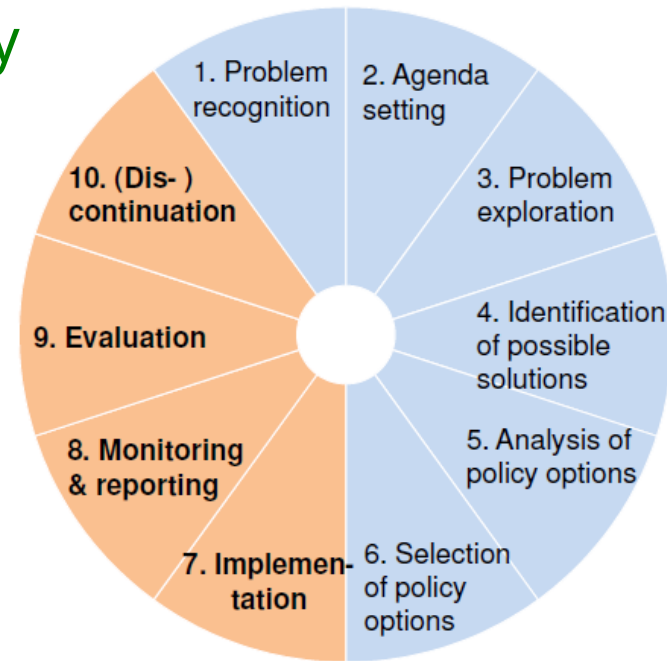


**7. Implementation:** Administrations implement what has been decided by the policy makers

**8. Monitoring and reporting:** Administrations monitor actions and report back to policy makers

**9. Evaluation:** The effectiveness of the policy measure is assessed

**10. (Dis-)continuation:** Policy makers decide whether a policy measure will continued or not





### **III. Policy-cycle analysis & implications for green growth policies**



- ❖ **Step 1: Identify policy areas** in which policy-makers would be invited to indicate which indicators they use/ could use/ don't use/ where they feel there is a gap to be filled
- ❖ **Step 2: Develop and adapt the common framework – the policy cycle** to link the different indicators to different steps in the policy-cycle in the different policy areas
- ❖ **Step 3: produce a mapping of opportunities** for the use of indicators and potential indicators (ONGOING)
  - => **Carrying out structured interviews and brainstorming sessions/discussions as part of the workshops**

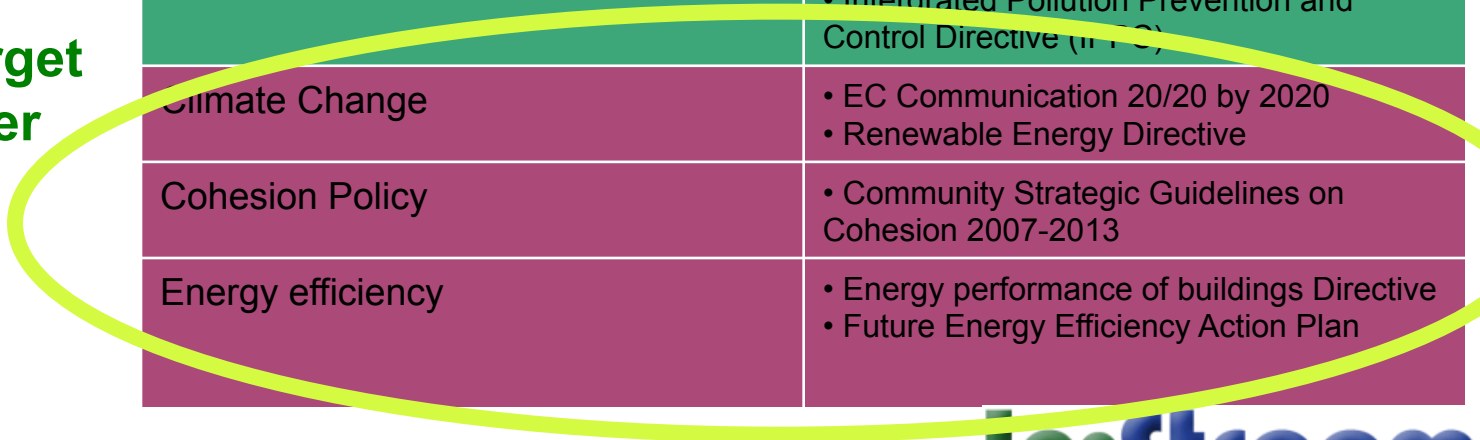
# Step 1. Key policy areas identified



❖ **Selected policy areas were meant to :**

- **form the backbone of the green growth storyline**
- **allow us to target our policy-maker consultation specific areas**

Policy areas	Specific policies
Biodiversity	<ul style="list-style-type: none"><li>• Biodiversity Action Plan</li><li>• Habitats Directive</li><li>• Birds Directive</li></ul>
Agriculture	<ul style="list-style-type: none"><li>• Rural Development programme 2007-2013</li><li>• 2007 Council Regulation on organic production and labelling of org. products</li></ul>
Fisheries	<ul style="list-style-type: none"><li>• Green Paper on the reform of the CFP</li></ul>
Resource efficiency	<ul style="list-style-type: none"><li>• Resource Thematic Strategy</li><li>• EU Flagship Initiative – A resource efficient Europe</li></ul>
Waste	<ul style="list-style-type: none"><li>• Thematic Strategy on the prevention and recycling of waste</li><li>• 2008 Directive on Waste</li><li>• Integrated Pollution Prevention and Control Directive (IPPC)</li></ul>
Climate Change	<ul style="list-style-type: none"><li>• EC Communication 20/20 by 2020</li><li>• Renewable Energy Directive</li></ul>
Cohesion Policy	<ul style="list-style-type: none"><li>• Community Strategic Guidelines on Cohesion 2007-2013</li></ul>
Energy efficiency	<ul style="list-style-type: none"><li>• Energy performance of buildings Directive</li><li>• Future Energy Efficiency Action Plan</li></ul>

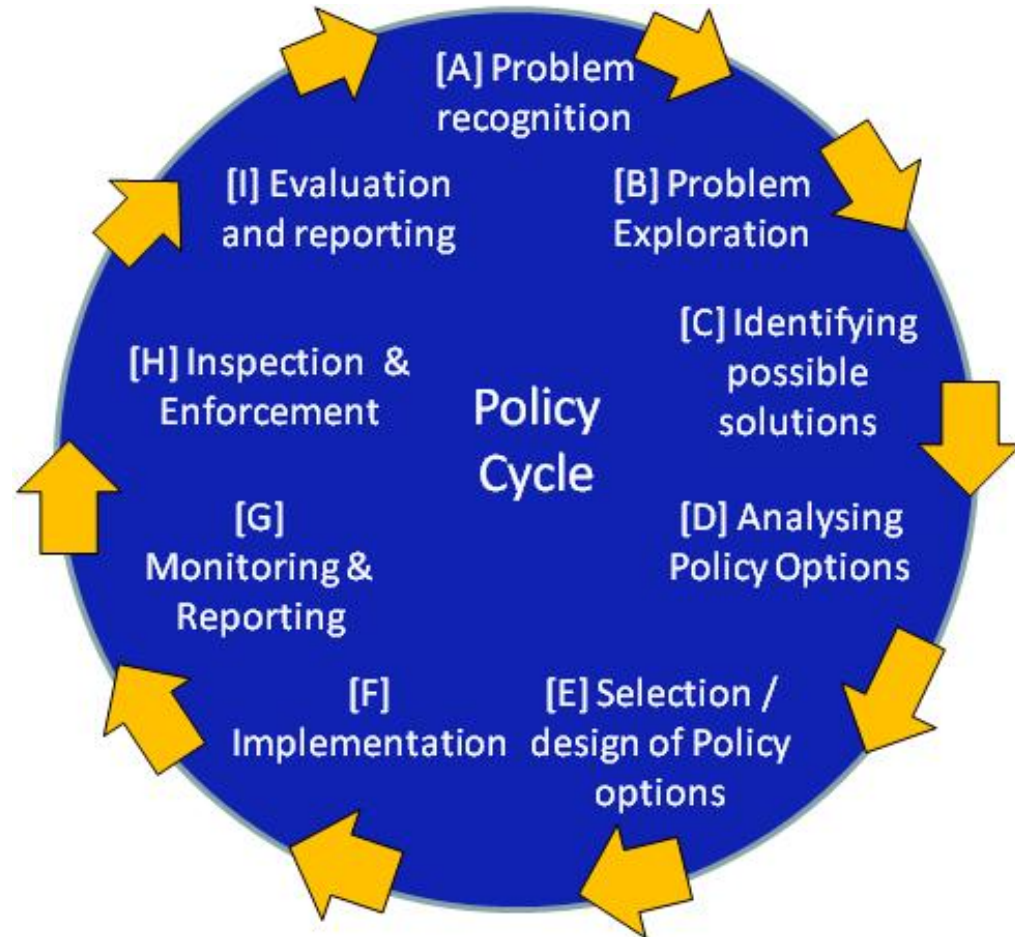


# Step 2. Adapting the policy cycle

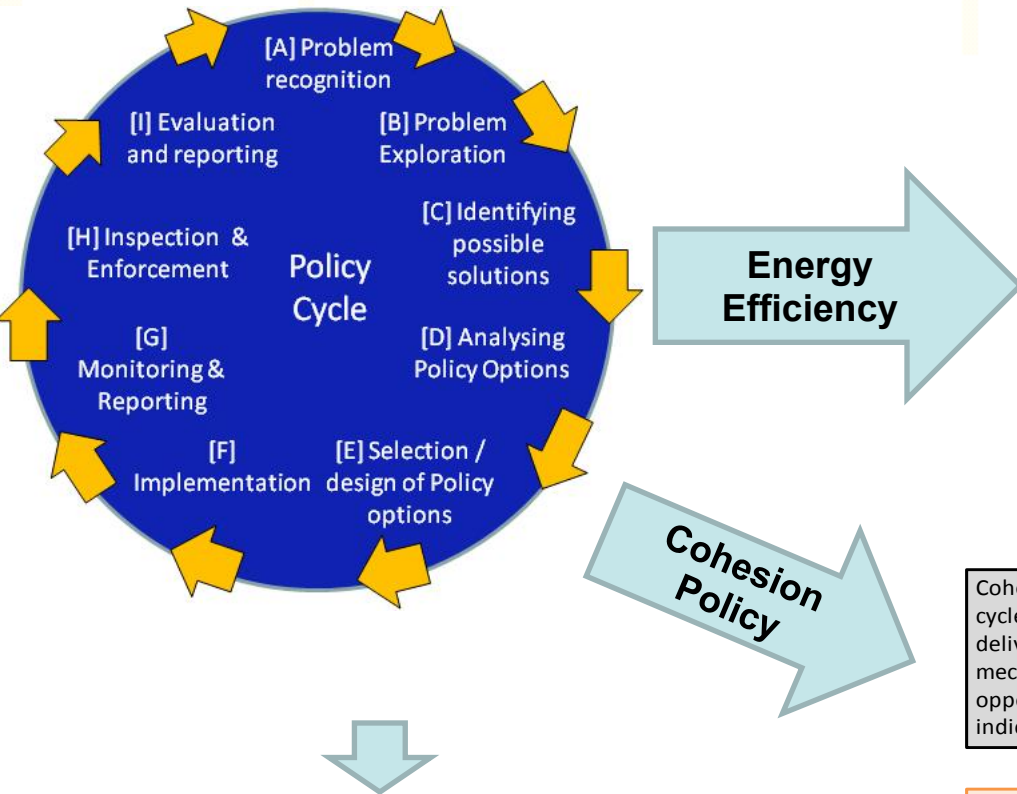


## ❖ AIM:

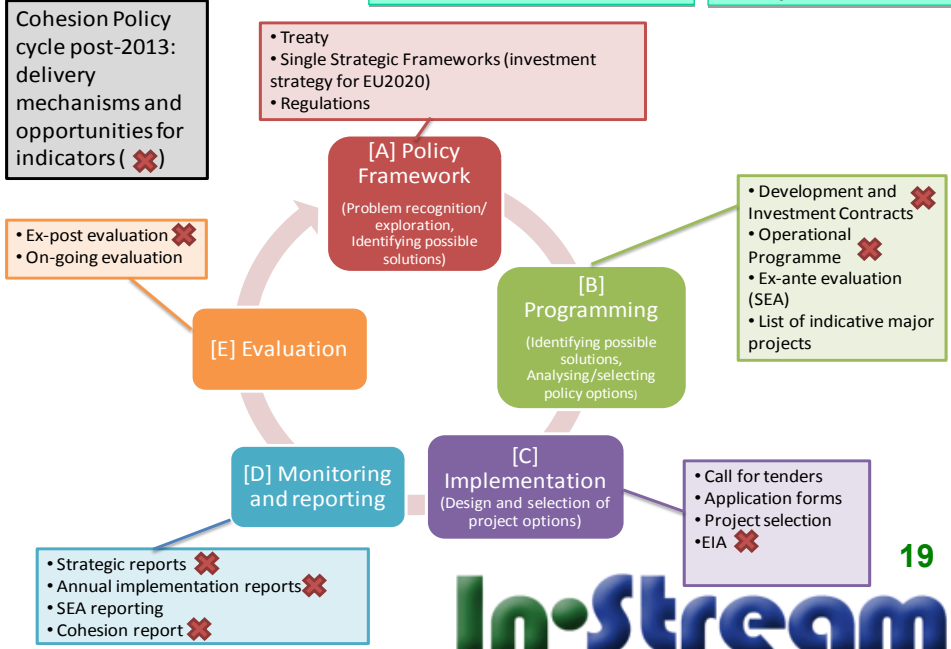
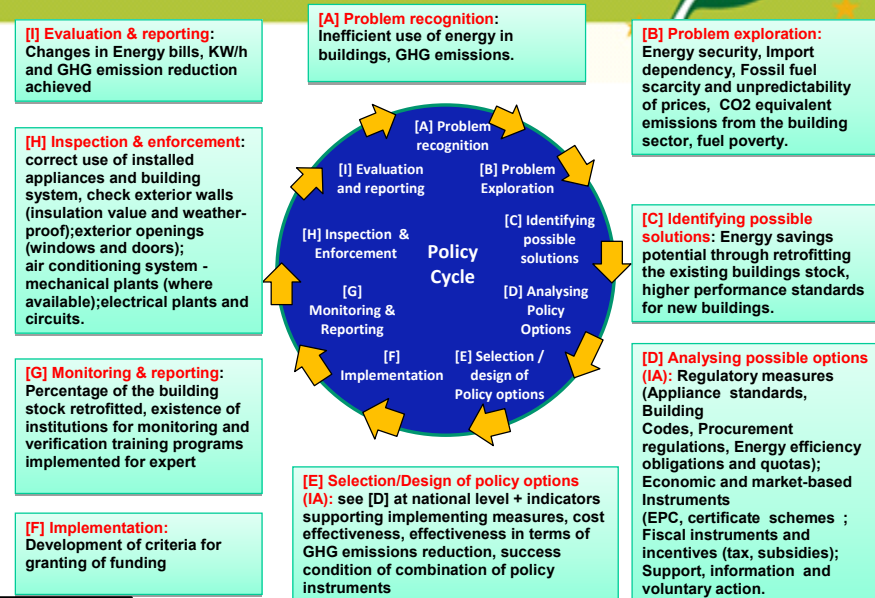
- **Structuring thinking on indicators** around a context specific policy cycle (ie adapted to given policy area)
- **Identification of key indicators** which could be/have been used to inform decisions in a given policy area



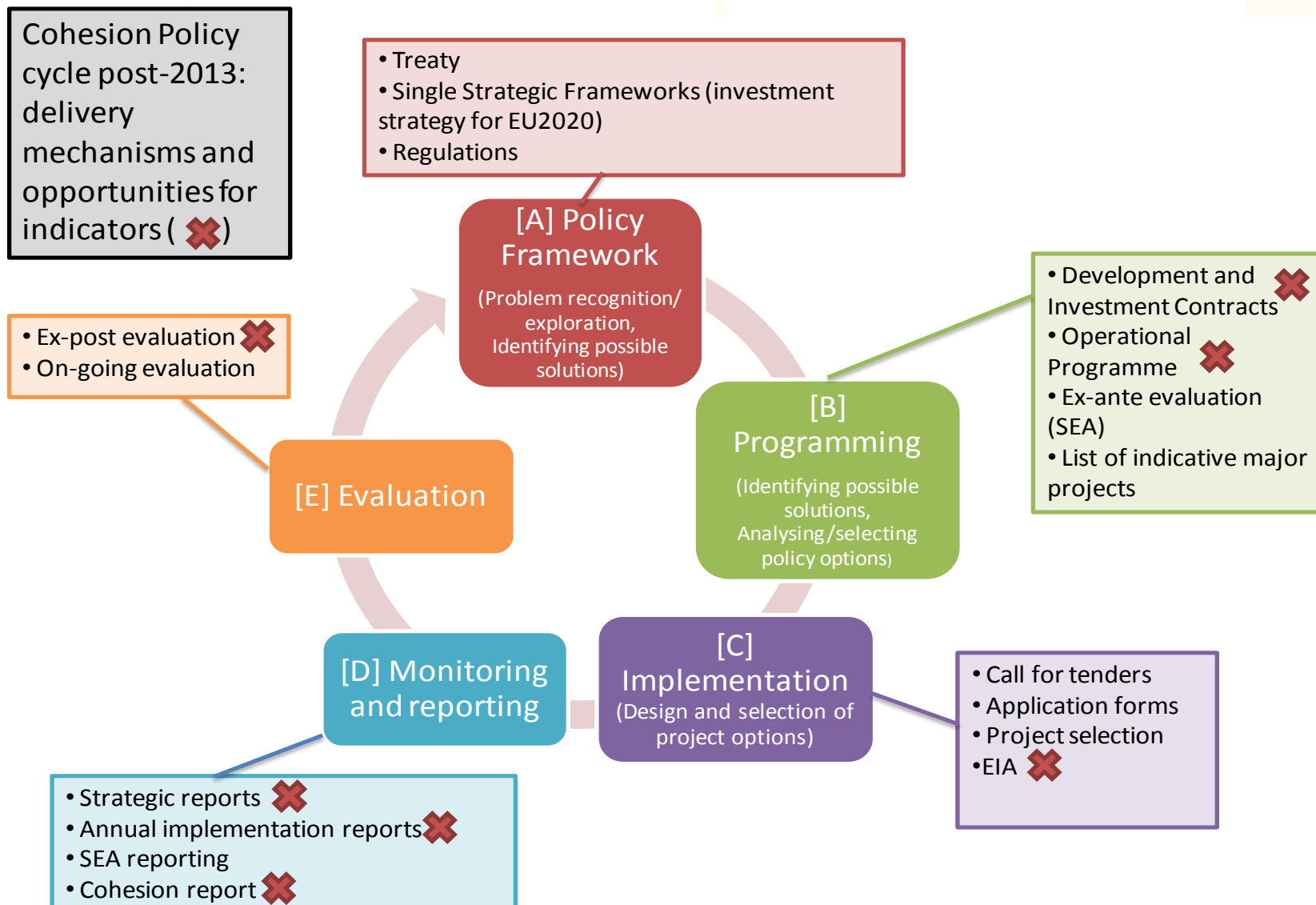
# Adapting the generic policy cycle



**Fisheries, Agriculture, resource efficiency...etc**



# Policy cycle for cohesion policy



# Policy cycle for energy efficiency



**[I] Evaluation & reporting:**  
Changes in Energy bills, KW/h and GHG emission reduction achieved

**[H] Inspection & enforcement:**  
correct use of installed appliances and building system, check exterior walls (insulation value and weather-proof); exterior openings (windows and doors); air conditioning system - mechanical plants (where available); electrical plants and circuits.

**[G] Monitoring & reporting:**  
Percentage of the building stock retrofitted, existence of institutions for monitoring and verification training programs implemented for expert

**[F] Implementation:**  
Development of criteria for granting of funding

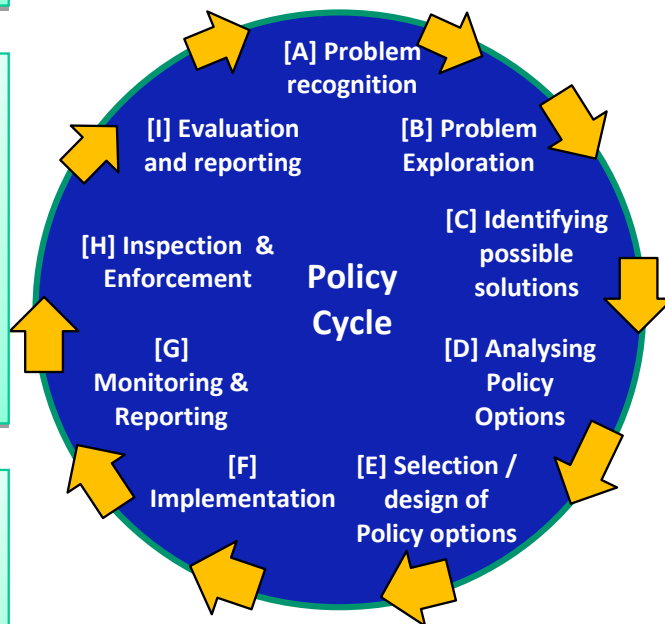
**[A] Problem recognition:**  
Inefficient use of energy in buildings, GHG emissions.

**[B] Problem exploration:**  
Energy security, Import dependency, Fossil fuel scarcity and unpredictability of prices, CO2 equivalent emissions from the building sector, fuel poverty.

**[C] Identifying possible solutions:**  
Energy savings potential through retrofitting the existing buildings stock, higher performance standards for new buildings.

**[D] Analysing possible options (IA):**  
Regulatory measures (Appliance standards, Building Codes, Procurement regulations, Energy efficiency obligations and quotas); Economic and market-based Instruments (EPC, certificate schemes ; Fiscal instruments and incentives (tax, subsidies); Support, information and voluntary action.

**[E] Selection/Design of policy options (IA):**  
see [D] at national level + indicators supporting implementing measures, cost effectiveness, effectiveness in terms of GHG emissions reduction, success condition of combination of policy instruments



# Step 3. Mapping opportunities



## ❖ Ensuring policy relevance by taking into account policy context:

- Identify opportunities to improve use of indicators in policy-making
- Identify particular needs for additional/alternative indicators in view of policy priorities

## ❖ Involving end-users to ensure formulation of informed conclusions:

- On level of integration through the use of indicators
- On the scope for the use of indicators in different policy areas
- On persisting indicator gaps & possible candidates for filling these gaps

# Mapping opportunities: involving stakeholders through questionnaires



- ❖ Interview questionnaire was specifically designed to gather information on:
    - Where **existing indicators** could be **used better** (different point in policy cycle, greater importance given to the evidence) or **improved** (better methodology, better data)
    - Which **new indicators** could complement the current list of **In-stream indicators** known to be used in the different policy areas
    - Where **composite indicators** could have a role to play
- => It also investigates the need for **ESS indicators**, use of indicators to **identify critical thresholds and resource limits**

# Few insight into findings



**Insights from consultation, selected points emerging re indicators in cohesion policy (CP) and energy efficiency (EE), climate change (CC):**

**CP:** GDP, employment and competitiveness => top 3 influential indicators in the field

**CP:** Heavy focus on 'output' indicators (as opposed to outcome and impact indicators)

**EE:** improve explanatory power of energy intensity by increasing sectoral detail

**EE:** Import/export of renewable energy need to be better accounted for, flows help identify actual consumption by countries

**CC:** better exploit GHG emission by different sectors data for targeting priority sectors (sector specific baseline and targets).



❖ **Finalisation of report ‘Opportunities for a better use of indicators in policy-making - identified needs and policy recommendations’**

⇒ **integrate input from the Berlin workshop, prepare for publication on In-Stream website**

⇒ **key messages and recommendations to be included in the final report for policy-makers**



## **IV. Introduction to the brainstorming session**

# Aim of the brainstorm



To collect views, information, best practices and lessons on the use of sustainability indicators for green growth policy, in particular for:

- ❖ Emission trading
- ❖ Cohesion funds
- ❖ Energy Efficiency

# Structure of the brainstorm



- ❖ 3 groups – each helped by a coordinator and a minute taker
- ❖ Each group to discuss one policy
- ❖ Identify role and potential for sustainability indicators, through;
  - Policy cycle exercise
  - Answering key questions



## ❖ Emission trading

Facilitator: Benjamin Görlach; support: Holger Gerdes

## ❖ Cohesion policy

Facilitator: Samuela Bassi; support: Leonardo Mazza

## ❖ Energy efficiency in buildings

Facilitator: Lucas Porsch; support: Elisa Portale

# Indicators list



CATEGORY	INDICATOR
ECONOMICS	GROSS DOMESTIC PRODUCT (GDP) PER CAPITA
ENVIRONMENT/ ECONOMICS	ADJUSTED NET SAVINGS (OR GENUINE SAVINGS)
	SYSTEM OF INTEGRATED ENVIRONMENTAL AND ECONOMIC ACCOUNTING (SEEA)
SOCIAL	HAPPY PLANET INDEX (HPI)
	NATIONAL ACCOUNTS OF WELLBEING (NAW)
	HUMAN DEVELOPMENT INDEX (HDI)
	DISABILITY ADJUSTED LIFE YEARS (DALY)
	INEQUALITY INDEX - E.G. GINI COEFFICIENT
	EMPLOYMENT/UNEMPLOYMENT
ENVIRONMENT/ BIODIVERSITY	RED LIST INDEX FOR EUROPEAN SPECIES
	CONSERVATION STATUS OF SPECIES OF EUROPEAN INTEREST
	CONSERVATION STATUS OF HABITATS OF EUROPEAN INTEREST
	MARINE TROPHIC INDEX
	POTENTIALLY DISAPPEARED FRACTION (PDF)
	LAND AND ECOSYSTEM ACCOUNTING (LEAC)
	ECOLOGICAL FOOTPRINT
	ABUNDANCE AND DISTRIBUTION OF SELECTED SPECIES A) BIRDS; B) BUTTERFLIES
RESOURCE USE	HUMAN APPROPRIATION OF NET PRIMARY PRODUCTIVITY (HANPP)
	ENVIRONMENTALLY WEIGHTED MATERIAL CONSUMPTION (EMC)
C L I M A T E CHANGE	ENERGY INTENSITY OF GDP
	GHG EMISSIONS
	GHG INTENSITY OF GDP
WASTE	GENERATION OF INDUSTRIAL AND MUNICIPAL SOLID WASTE & MUNICIPAL WASTE GENERATION
	GENERATION OF HAZARDOUS WASTES
	MANAGEMENT OF RADIOACTIVE WASTE
HOUSING COSTS	HOUSING COST SHARE OF AVAILABLE INCOME
	SHARE OF HOUSING COSTS ON GDP
OTHERS	<i>PLEASE SUGGEST OTHER INDICATORS OF PARTICULAR RELEVANCE</i>

All groups to receive (same) list

A selection from In-Stream indicators

Several domains: environment, economic, social

Others can be taken into account

# Policy cycle exercise



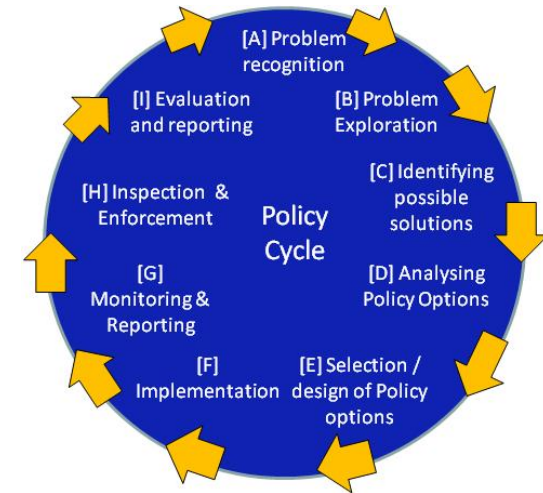
Select 5 - 10 indicators (including but not only from the list provided) considered particularly useful in the group's policy area

Write them in 5-10 post-its (more if the same indicator fits in more than one policy step)

Associate them with one or more step(s) in the policy cycle –stick to the drawing provided

In the post its also note, for each indicator selected:

- Why** this indicator is valuable
- Why** it should be used at that/these stage(s) of the cycle
- How** the indicator should/could be used.
- If the indicator is easy to **communicate** (media take up) (about 10-15 min)



*The group* will discuss/summarise key ideas put forward in the post-its (about 20 minutes).

# Key questions



**Questions to be discussed by the whole group (about 20-30 min)**

- ❖ **What are the obstacles/limitations/gaps** for using sustainability indicators in this policy area?
- ❖ **What sustainability indicator is currently not readily available for use/did not reach its full potential** in this policy areas and why?



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Thank you

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