Overview of the GE Indicators framework
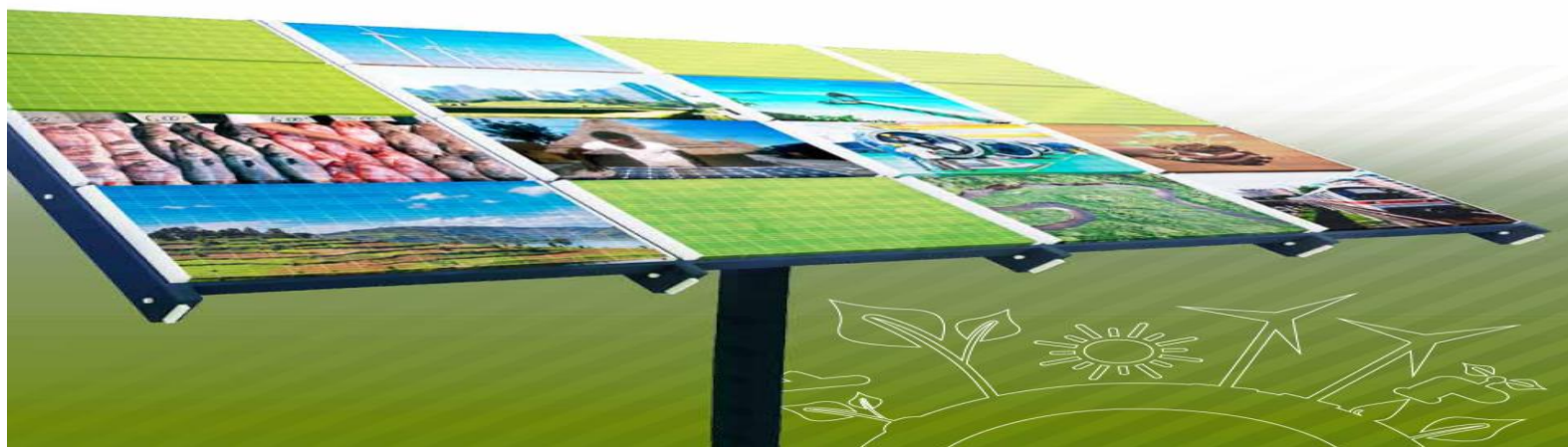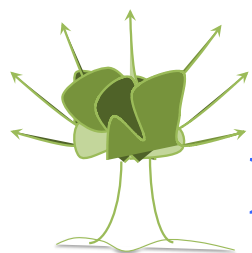
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1. Introduction

The Green Economy is an **action oriented** approach (a vehicle) to support reaching **sustainable development**.

Success is based on :

- Inclusiveness (UNCED, 1992), to avoid treating the three pillars of sustainable development as isolated parts of the system.

- Customization (UNEP, 2011) green economy strategies need to be conceived, designed and implemented taking into account the local socio-economic and environmental context.

United Nations Conference on Environment and Development (UNCED). *Agenda 21*, as adopted by the Plenary in Rio de Janeiro, on 14 June 1992.
United Nations Environment Programme (UNEP) (2011). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*, Nairobi: UNEP.

Green Growth Knowledge Platform (GGKP)

Moving towards a Common Approach on Green Growth Indicators

Green Growth Knowledge Platform Scoping Paper
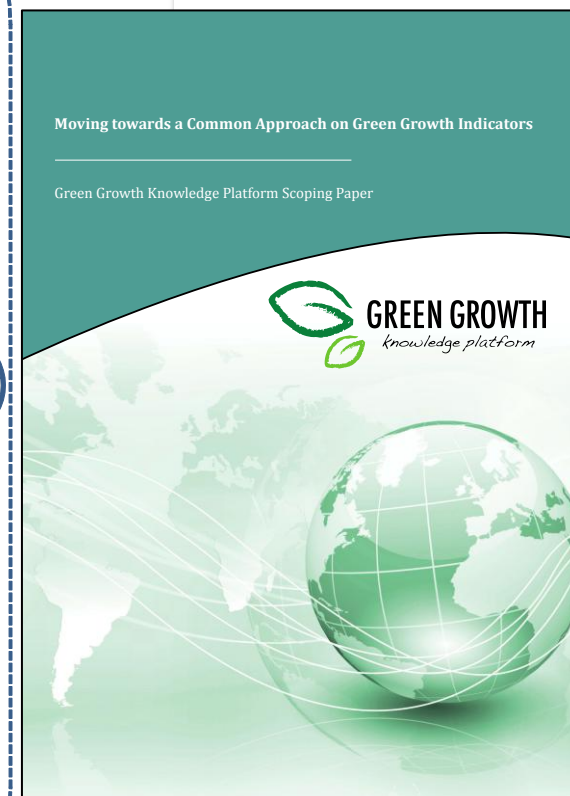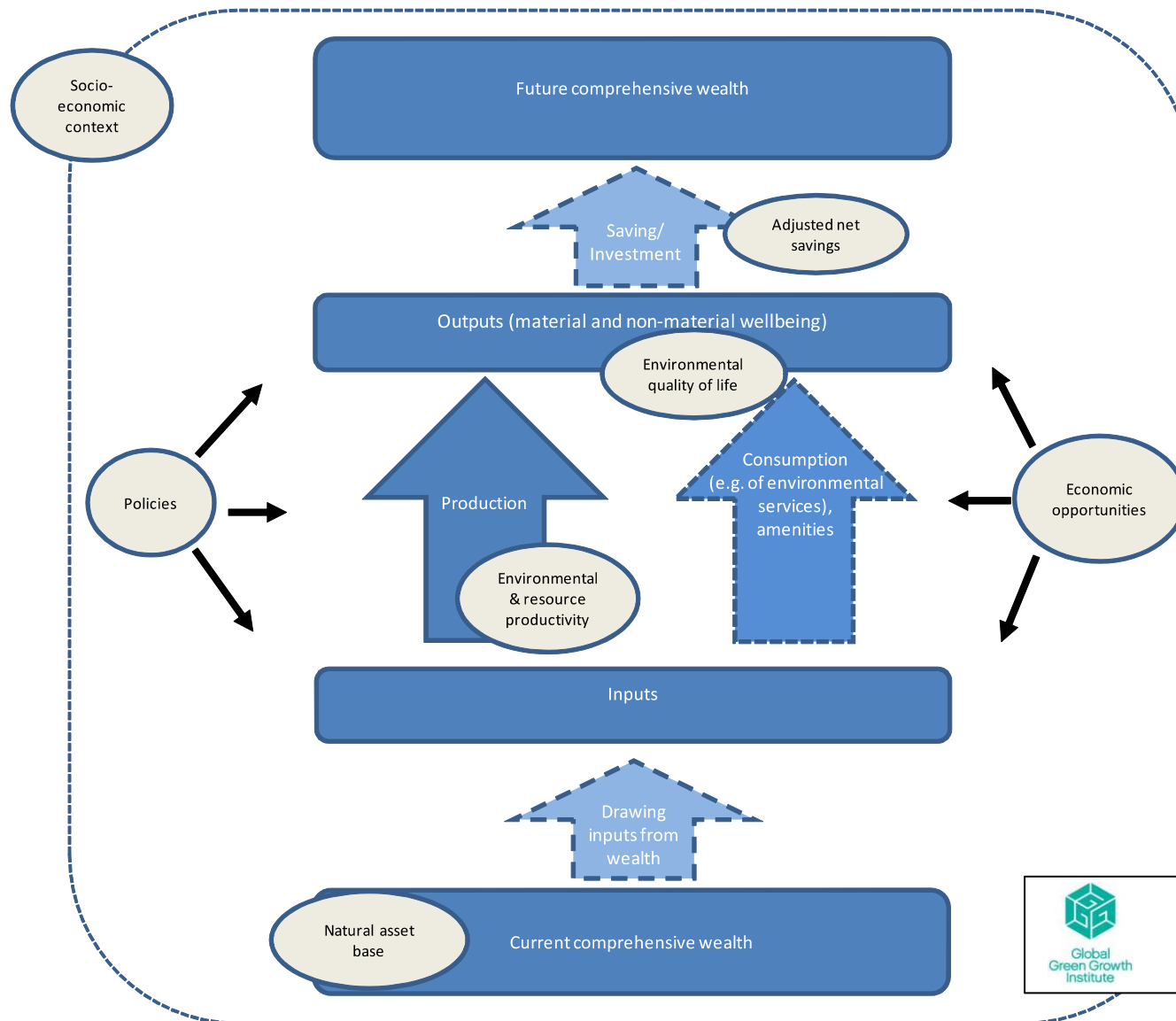
2. Indicators

GE to be measured in a comprehensive manner:

– The state of a green economy and how it is reached;

– The way a green economy is applied in policymaking.

Groups of indicators:

a. **Issue Identification and Agenda Setting**

– Environmental issues and targets

b. **Policy Formulation**

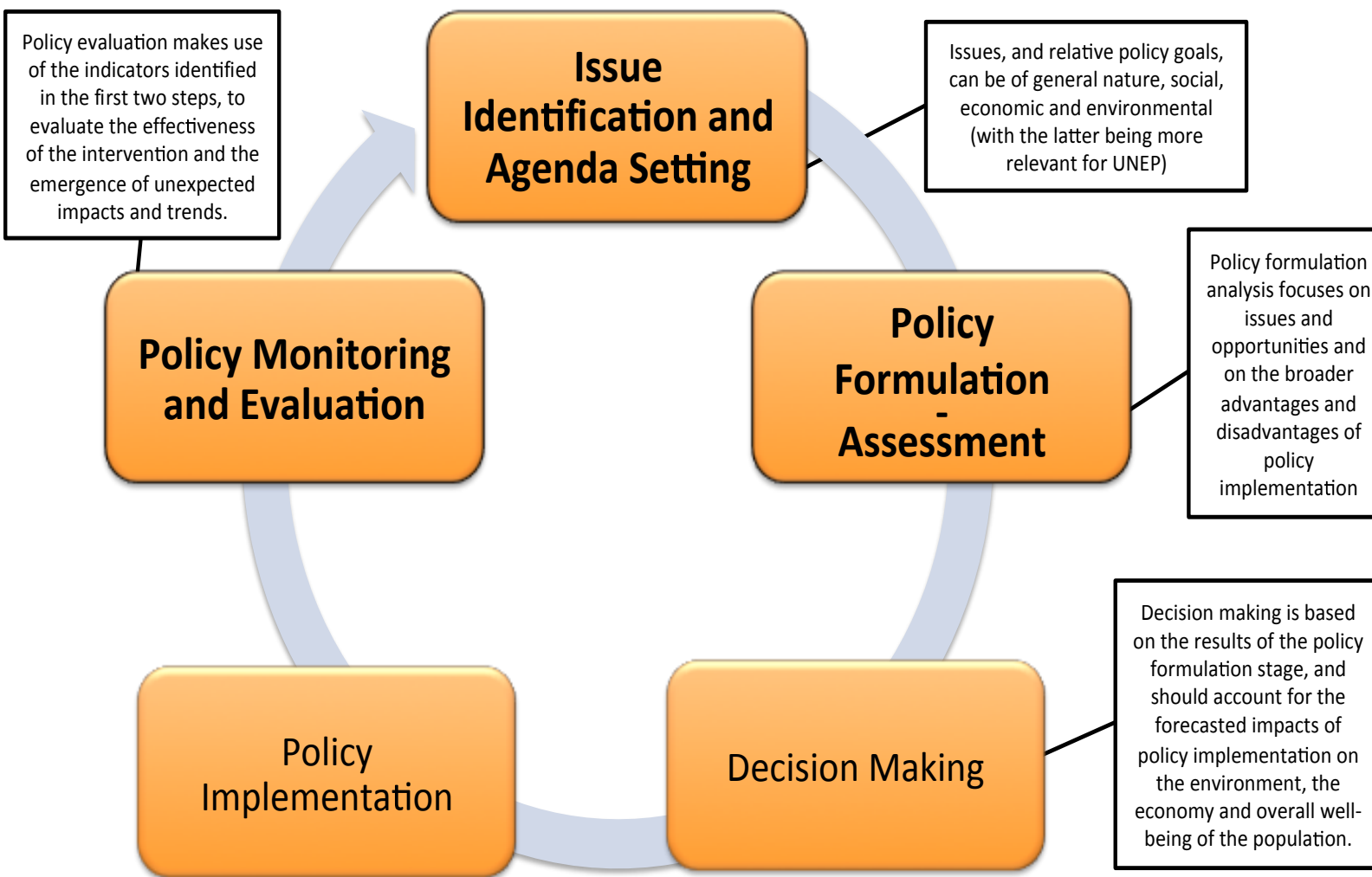– Policy interventions

c. **Policy Assessment**

– Policy costs and effectiveness, impact on well-being

d. **Policy Monitoring and Evaluation**

– Effectiveness, impacts on well-being and equity

2. Indicators

Policy evaluation makes use of the indicators identified in the first two steps, to evaluate the effectiveness of the intervention and the emergence of unexpected impacts and trends.

Issue Identification and Agenda Setting

Issues, and relative policy goals, can be of general nature, social, economic and environmental (with the latter being more relevant for UNEP)

Policy Monitoring and Evaluation

Policy Formulation - Assessment

Policy formulation analysis focuses on issues and opportunities and on the broader advantages and disadvantages of policy implementation

Policy Implementation

Decision Making

Decision making is based on the results of the policy formulation stage, and should account for the forecasted impacts of policy implementation on the environment, the economy and overall well-being of the population.

2a. Indicators for Issue Identification

Indicators for issue identification are instruments that help decision makers identify and prioritize problems and set the agenda for policy interventions.

Four main steps:
- Identify potentially worrying trends;
- Assess the issue and how it relates to the natural environment;
- Analyze more fully the underlying causes of the issue;
- Analyze more fully how the issue impacts society, the economy and the environment.

2a. Indicators for Issue Identification

ISSUES	EXAMPLES
Climate Change	• Carbon emissions (ton/year) • Renewable energy (share of power supply) (%) • Energy consumption per capita (Btu/person)
Ecosystem Management	• Forestland (ha) • Water stress (%) • Land and marine conservation area (ha)
Resource Efficiency	• Energy productivity (Btu/$) • Material productivity (ton/$) • Water productivity (m^3/$) • CO_2 productivity (ton/$)
Chemicals and Waste Management	• Waste collection (%) • Waste recycling and reuse (%) • Waste generation (ton/year) or landfill area (ha)

2b. Indicators for Policy Formulation

Indicators that allow to evaluate the adequacy of the interventions analyzed, taking into account their repercussions on the key actors in the economy and impacts across sectors.

Two main steps:
- Identify policy objectives;
- Identify intervention options.

This chapter as well as the following ones will differentiate the effects of interventions into (i) outputs; (ii) outcomes; and (iii) impacts.

2b. Indicators for Policy Formulation

POLICY	EXAMPLES
Green Investment	• R&D Investment (% of GDP) • EGSS Investment ($/year)
Fiscal Reform	• Fossil fuel, water and fishery subsidies ($ or %) • Fossil fuel taxation ($ or %) • Renewable energy incentive ($ or %)
Pricing	• Carbon price ($/ton) • Value of ecosystem services (e.g. water provision)
Green Procurement	• Expenditure in sustainable procurement ($/year and %) • CO_2 and material productivity of government operations (ton/$)
Green job skill training	• Training expenditure ($/year and % of GDP) • Number of people trained (person/year)

2c. Indicators for Policy Assessment

Indicators that support the estimation and evaluation of policy impacts across sectors, with a more marked focus on indicators for socio-economic impacts and well-being.

Three main steps:

- Estimate policy impacts in relation to the environmental issue;
- Analyze policy impacts across sectors;
- Analyze impacts on the overall well-being of the population.

2c. Indicators for Policy Assessment

WELL-BEING & EQUITY	EXAMPLES
Employment	• Construction (person, %) • Operation and management (person, %) • Income generated ($/year) • Gini coefficient
EGSS performance	• Value added ($/year) • Employment (jobs) • CO_2 and material productivity (e.g. $/ton)
Total Wealth	• Value of natural resource stocks ($) • Net annual value addition/removal ($/year) • Literacy rate (%)
Access to Resources	• Access to modern energy (%) • Access to water (%) • Access to sanitation (%) • Access to health care (%)
Health	• Level of harmful chemicals in drinking water (g/litre) • Number of people hospitalized due to air pollution (person) • Road traffic fatalities per 100,000 inhabitants (transport related)

2d. Indicators for Policy Monitoring and Evaluation

Indicators for policy monitoring and evaluation support the assessment of the performance of the intervention implemented.

Three main steps to measure:
- Policy impacts in relation to the environmental issue *(indicators for issue identification)*;
- Policy performance *(indicators for policy formulation)*;
- Impacts across sectors and on the overall well-being of the population *(indicators for policy assessment)*.

Feedback is welcome!
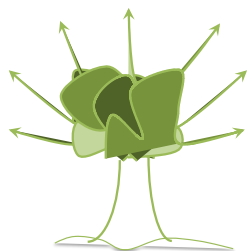
Thank you

www.unep.org/greeneconomy

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