



Towards a sustainable bioeconomy strategy - an overview

Anne Bogdanski, FAO

SCAR Workshop "Implementation of the European strategy for the bioeconomy" - How to set up a National Bioeconomy Strategy
20th May 2019, PORTUGAL, Carcavelos

Outline

- FAO's work on Bioeconomy
- What is a Bioeconomy Strategy?
- Guidelines for Sustainable Bioeconomy

1. FAO's Work on Bioeconomy

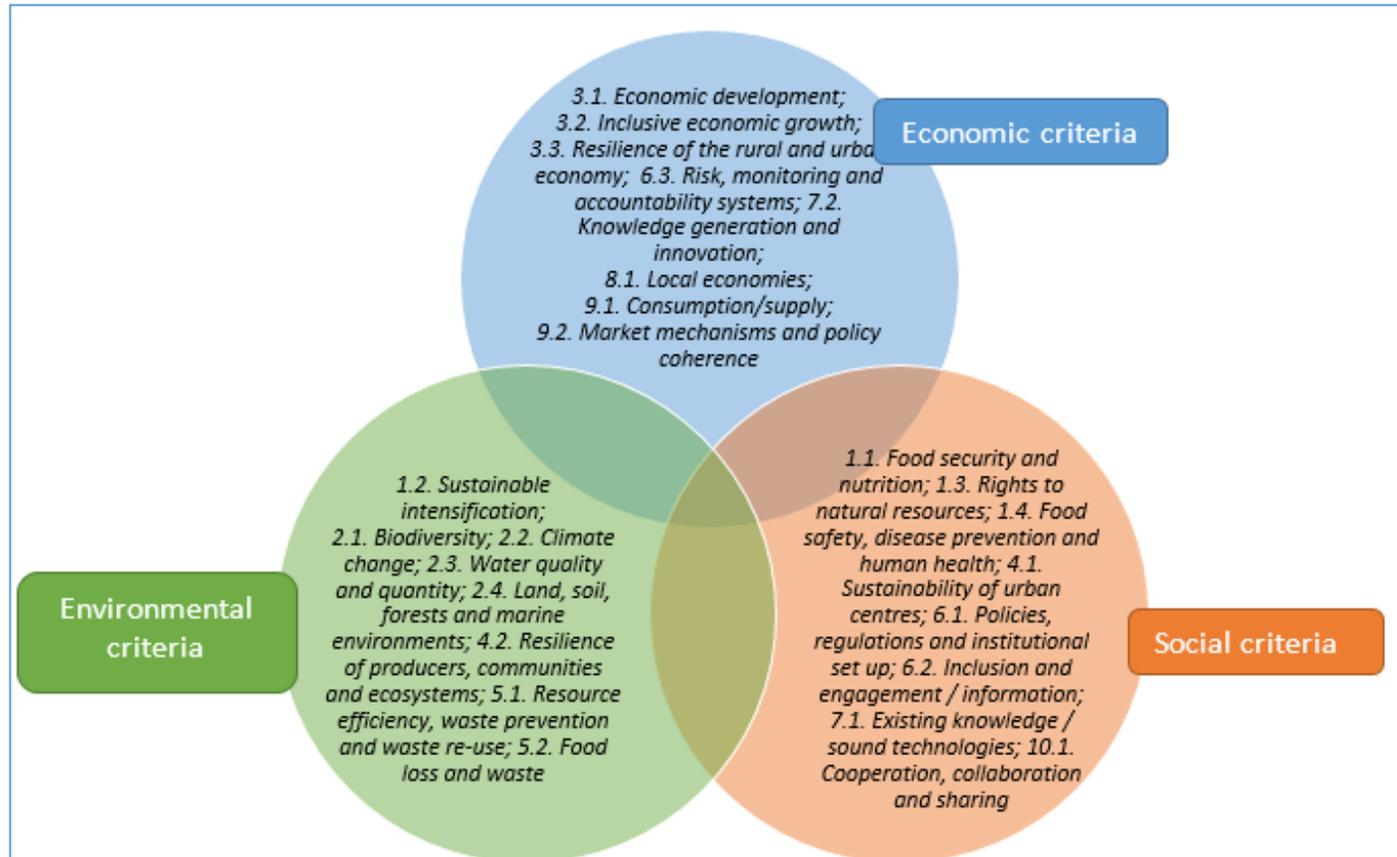
- FAO has been working for many years on food and non-food **biomass products** (including sustainable bioenergy) and biotechnology
- FAO received a mandate to coordinate international work on '**food first**' **sustainable bioeconomy** by 62 Ministers at the Global Forum for Food and Agriculture (GFFA) meeting in Berlin in 2015
- FAO has received support from the Government of Germany to develop **guidelines on sustainable bioeconomy development** (Phase 1: 2016; Phase 2: 2017- 2020).
- FAO has recently embarked on a study regarding the links between **bioeconomy, the microbiome and malnutrition**, incl. obesity and non-communicable diseases

The International Sustainable Bioeconomy Working Group

- **13 country representatives** and affiliated institutions (Argentina, Brazil, Canada, China, Germany, with the German Bioeconomy Council, Finland, Italy, Malaysia, Namibia, The Netherlands, South Africa, Uruguay, and USA)
- **2 regional governing bodies** and affiliated institutions (European Commission, with the Bio-Based Industries Joint Undertaking, Nordic Council of Ministers)
- **2 NGOs** (WWF, TSC)
- **3 private sector entities** (BIC, WBCSD, DSM)
- **3 research institutions** (FARA, SEI, CIAT)
- **4 inter-governmental organizations** (OECD, UN-ECLAC, UNEP and FAO)



Principles and Criteria for Sustainable Bioeconomy



- In 2016, the ISBWG agreed on a set of **10 aspirational Principles and Criteria**.
- They cover all three sustainability dimensions: **economic, social and environmental**
- The Principles and Criteria **are points of reference** for the Sustainable Guidelines project, in the support of developing sustainable bioeconomy strategies.

PROJECT OVERVIEW:

SUSTAINABLE BIOECONOMY GUIDELINES

- **PROJECT GOAL**

- ✓ to assist countries in developing and implementing sustainable bioeconomy strategies

- **KEY AUDIENCE**

- ✓ primarily, policymakers who seek to develop bioeconomy strategies
- ✓ as this cannot be done in isolation, FAOs' work on sustainable bioeconomy guidelines also addresses producers, manufacturers and consumers of biomass and bioproducts.

- **PARTNERS**

- ✓ Supported by the International Sustainable Bioeconomy Working Group on Sustainable Bioeconomy
- ✓ Funded by BMEL - German Ministry for Food and Agriculture

- **TIMEFRAME**

- ✓ April 2017 – August 2021

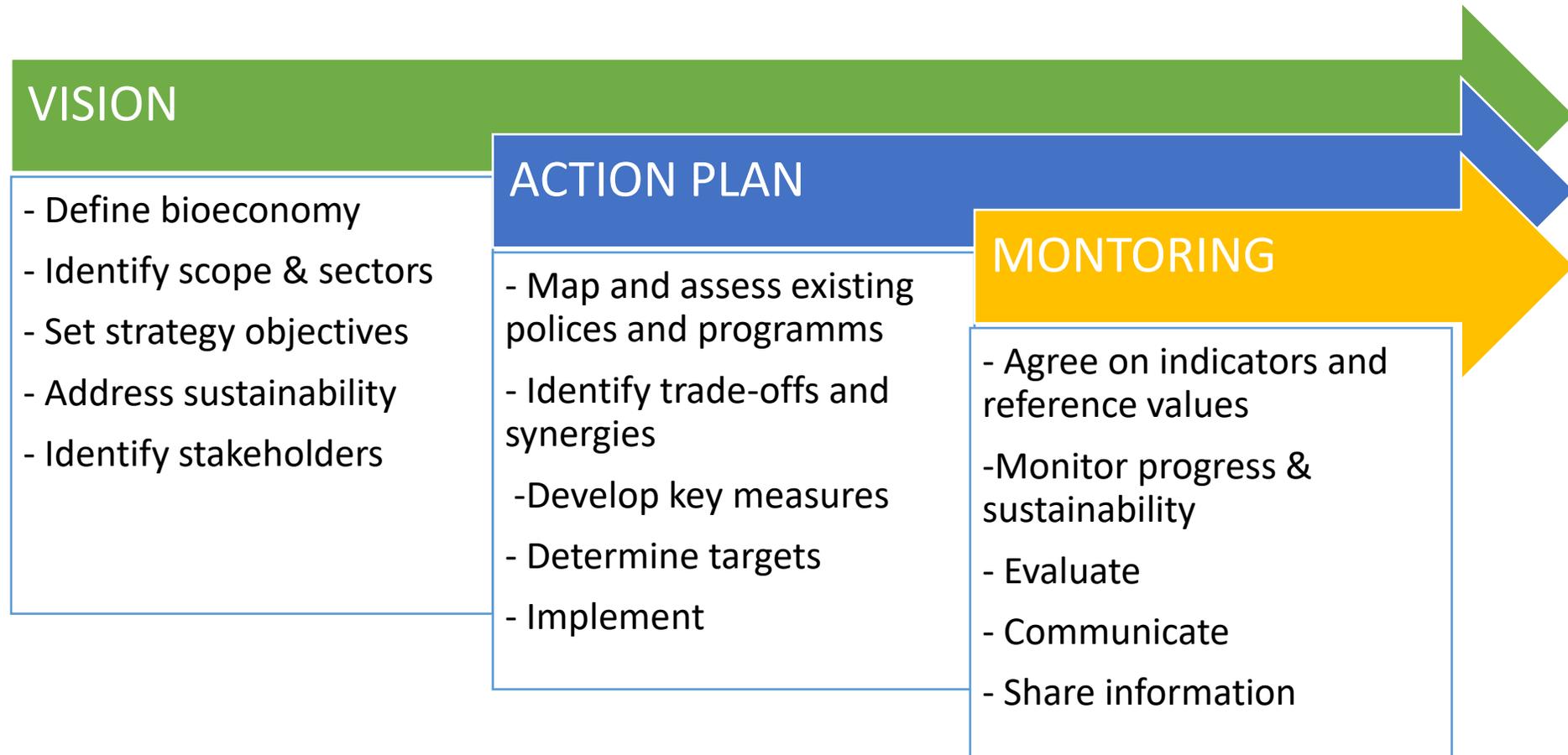
2. What is a bioeconomy strategy?



GLOBAL OVERVIEW – BIOECONOMY STRATEGIES



Common elements of a bioeconomy strategy



An aerial photograph of a forest, showing a dense canopy of trees. A large, dark tree trunk is visible in the foreground, extending from the bottom center towards the right. The overall color palette is dominated by various shades of green and brown, with a slightly desaturated, naturalistic feel. The text is overlaid on the lower portion of the image.

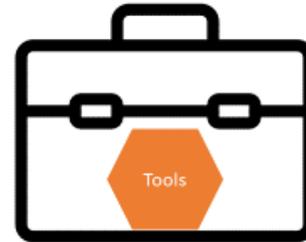
3. GUIDELINES FOR SUSTAINABLE BIOECONOMY

Guidelines for sustainable bioeconomy

WHAT



HOW



Aim:

✓ to assist countries in developing and implementing sustainable bioeconomy strategies

WHAT

VISION

ACTION PLAN

MONITORING

Case studies & Lessons Learnt

How Sustainability is addressed in strategies

Good practices

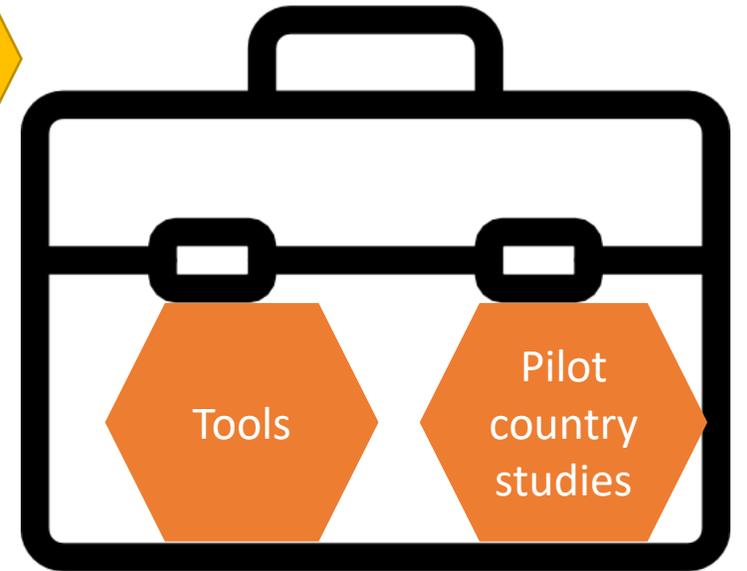
Policies

Indicators

Links to SDGs

HOW

PROJECT COMPONENTS



Tools

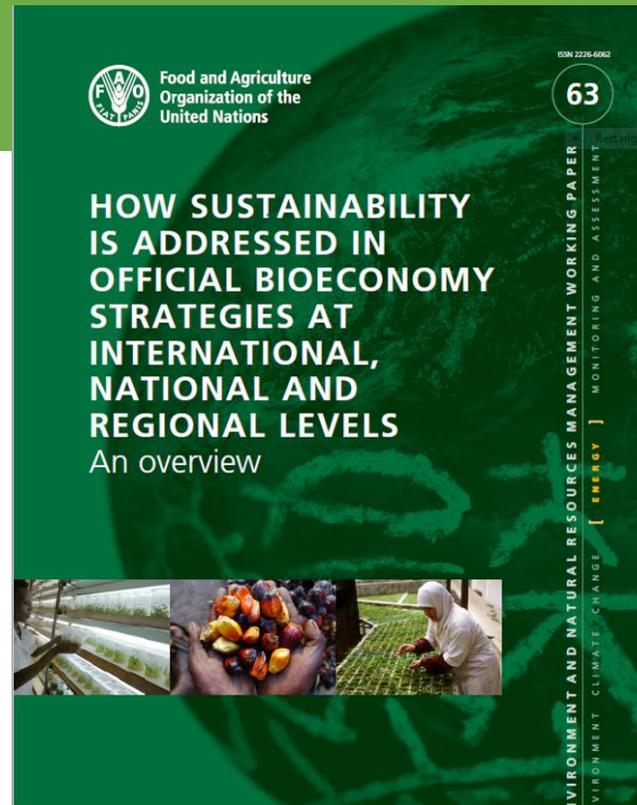
Pilot country studies



Developing the VISION

VISION

- Define bioeconomy
- Identify scope & sectors
- Set strategy objectives
- Identify stakeholders
- Address sustainability



<http://www.fao.org/3/a-i5998e.pdf>



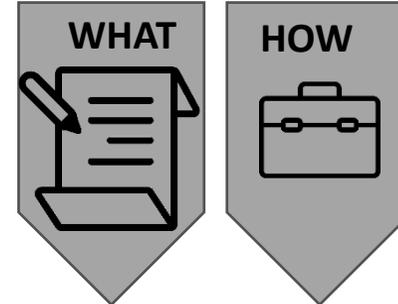
<http://www.fao.org/documents/card/en/c/ca4352en>

The Sustainable Development Goals of the UN (SDGs) present an action plan for sustainability

Where does bioeconomy stand in this framework?



Developing an ACTION PLAN



ACTION PLAN

- Map and assess existing policies and programmes
- Develop key measures
- Determine targets
- Implement



FAO en Uruguay



Trazando caminos a la bioecono



Foto: @FAO / Marina González

17/04/2019 Uruguay sostenible basada e

Varios ministerios y e liderado por Aleman Agricultura (FAO), par ese fin.

En paralelo, en el m: directrices globales que puedan establecerse en cuanto :

En ese marco, se realizó, en la sede del Ministerio de G taller para recoger insumos y aportes de técnicos y actor la estrategia de bioeconomía sostenible de Uruguay.

“El objetivo es que esta hoja de ruta abra la puerta a un cooperan de cara al establecimiento de directrices sobre el taller.

La bioeconomía fue definida como prioritaria por la Ofici

Se trata de contribuir al desarrollo a largo plazo del pa apunten a la innovación y a la incorporación de tecnolo enfoque de bioeconomía es una forma novedosa de abo

El MGAP empezó a trabajar estos temas en cooperación firmó un Acuerdo de Entendimiento entre las dos carter



Google Custom Search

About FAO | In Action | Countries | Themes | Media | Publications | Statistics | Partnerships

English

Energy



Uruguay identifies cross-ministerial collaboration as key in its National Bioeconomy Strategy



07/05/2019

An inception workshop to develop Uruguay's National Bioeconomy Strategy took place in Montevideo on 4 April 2019.

The multi-stakeholder group of participants represented several government ministries interested in both the National Bioeconomy Strategy and the development of the country's circular economy.

The aim of the workshop was to discuss strategy objectives for Uruguay's nascent bioeconomy strategy and to carry out a needs assessment so participants could work on a roadmap combining the two complementary processes.

“We made very good progress and we have identified an exciting set of activities for the next months and years” said Walter Oyhantcabal from the the Ministry of Livestock, Agriculture and Fisheries.

Strengthening cross-ministerial collaboration

The preliminary results from the needs assessment showed that strengthening cross-ministerial collaboration and aligning common sectoral aims was a top priority. This will start with an exercise to map all existing bioeconomy-relevant policies across Uruguay's policy landscape. FAO will support the assessment of these policies based on their ability to incentivize or disincentivize bioeconomy implementation.

Other objectives to be included in the strategy include securing and creating employment and value added and conservation and efficient use of ecosystem services.

Learning from practice

Bioeconomy in Uruguay embraces primary production, the creation of new organic matter by plants and other organisms, human and animal health, bio-based product manufacturing, biofuels and biomaterials, and biochemistry.

Prior to the workshop the participants were taken to two innovative circular bioeconomy projects, jointly implemented by three Ministries - the Ministry of Livestock, Agriculture and Fisheries, the Ministry of Energy, Industry and Mining, and the Ministry of Environment. The aim of these initiatives is to run activities valorizing residues and testing alternative technologies co-financed by the private sector.

The first project used liquid sewage from a family farm to generate electricity through a process of anaerobic digestion and to create biofertilizer, ensuring sustainable pasture management.

The milking sessions are scheduled enabling the farm to use a smart tariff with the national electricity company, while also ensuring that what the cows

Developing a MONITORING SYSTEM



MONITORING

- Agree on indicators and reference values
- Monitor progress & sustainability
- Evaluate
- Communicate
- Share information

Definitions and indicator typologies

Derivation of impact categories from P&Cs

Review of existing indicators

Existing monitoring approaches at territorial and product level

Extraction of indicators

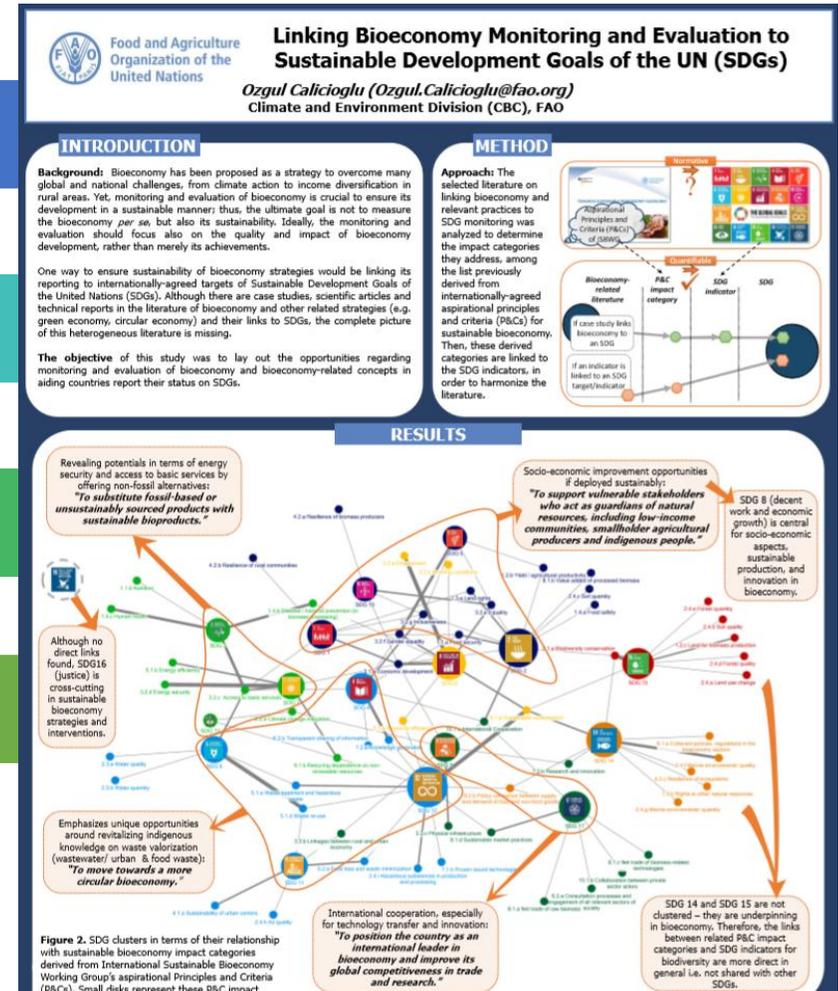
List of indicators at territorial and product level

Discussions

Gaps/shortfall for some sustainability categories and bioeconomy sectors

Conclusions/ Way forward

Stepwise approach to indicator selection



Thank you

Olivier Dubois
Energy Team Leader



Anne Bogdanski
Natural Resources Officer



Stefania Bracco
Consultant



Marta Gómez San Juan
Consultant



Ozgul Calicioglu
Consultant



Food and Agriculture
Organization of the
United Nations



Federal Ministry
of Food
and Agriculture

Contact: Annekatriin.Bogdanski@fao.org

Web: <http://www.fao.org/energy/bioeconomy/en/>