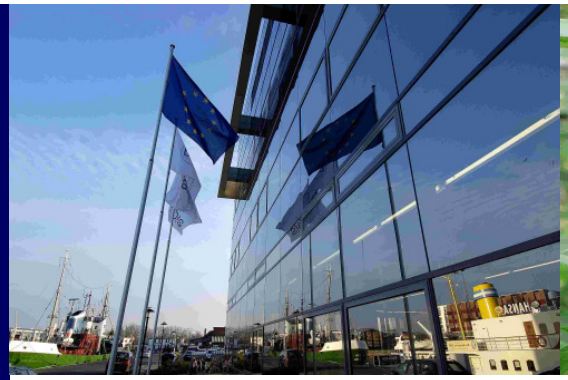

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Produktion nachwachsender Rohstoffe aus Abwasser

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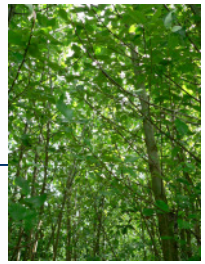
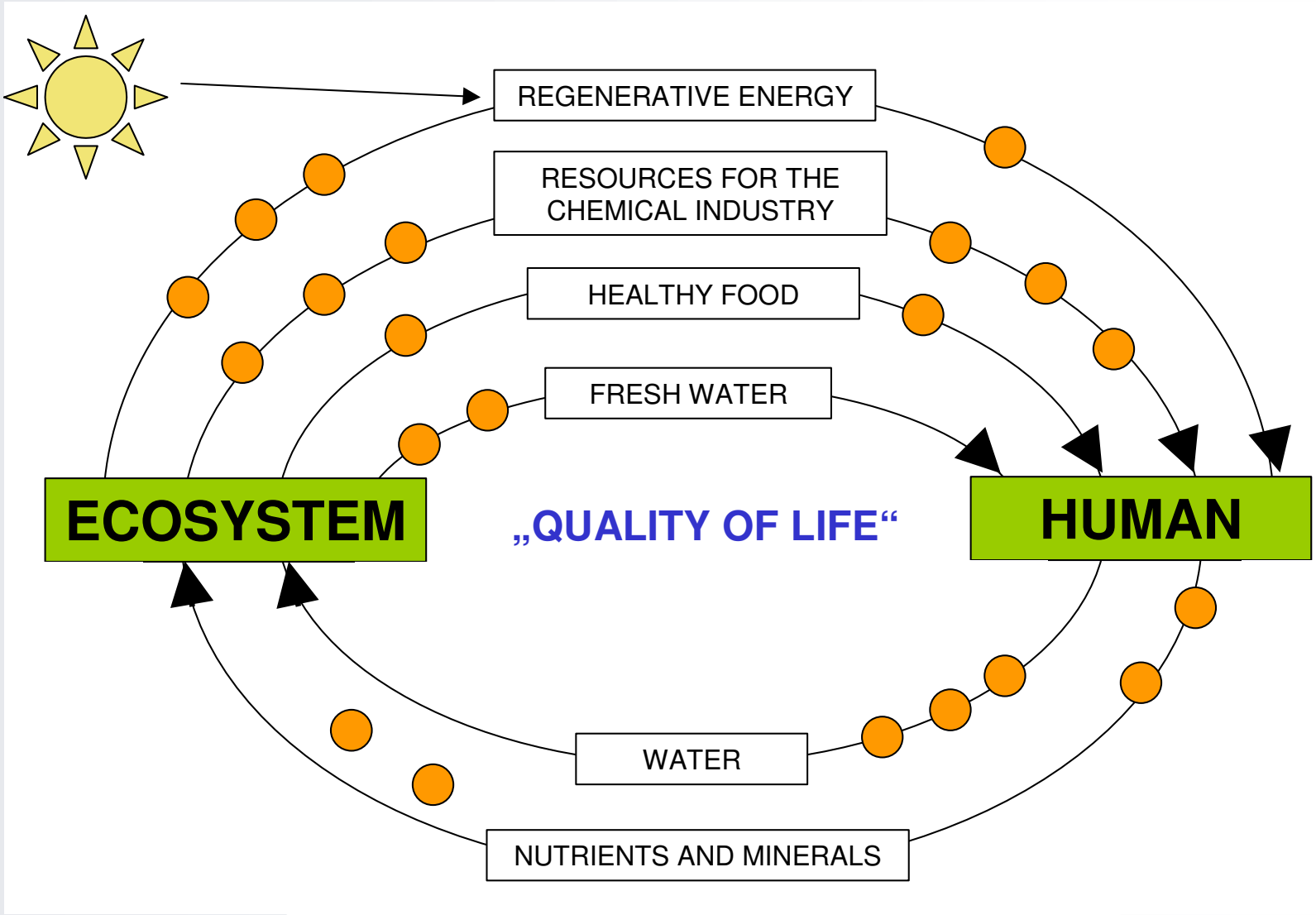
Structure

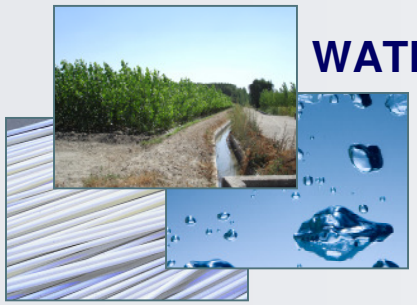


1. TTZ Introduction
2. Present situation: Waste water/ lack of biomass
3. Solutions
4. Introduction to SRP‘s
5. Examples
6. Solutions for developing countries

Re-linking natural and human processes



Water, Energy, Landscape



WATER: TREATMENT & REUSE

LANDSCAPE: EFFICIENT LANDUSE MODULES

INTEGRATED WATERSHED MANAGMENT

RENEWABLE ENERGY SOURCES

ENERGY EFFICIENCY

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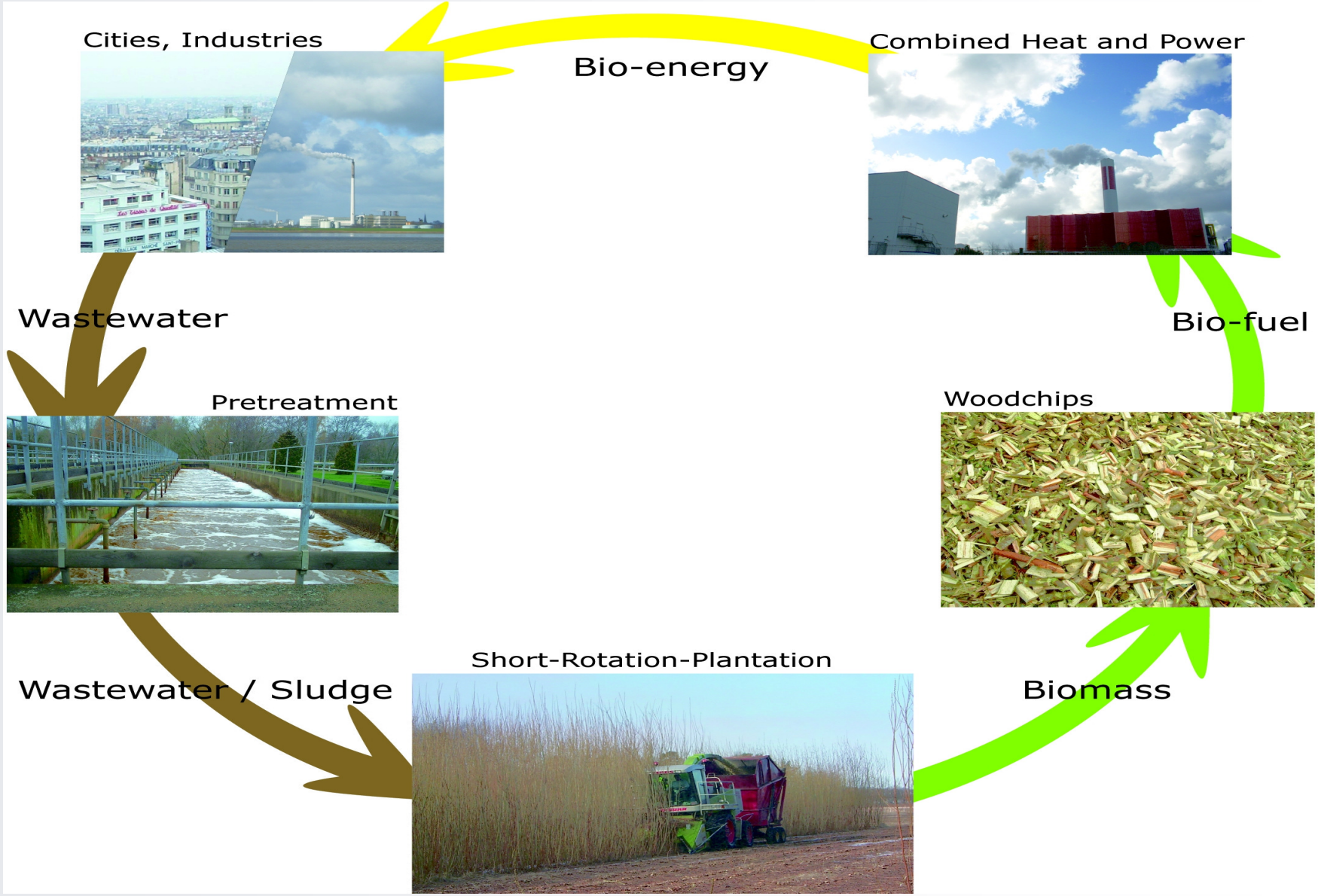
SHORT-ROTATION-PLANTATIONS



SHORT-ROTATION-PLANTATIONS

From Waste to Energy

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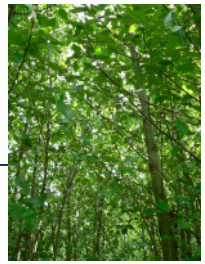
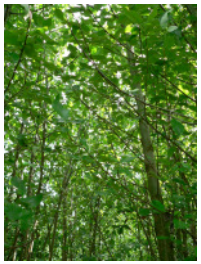
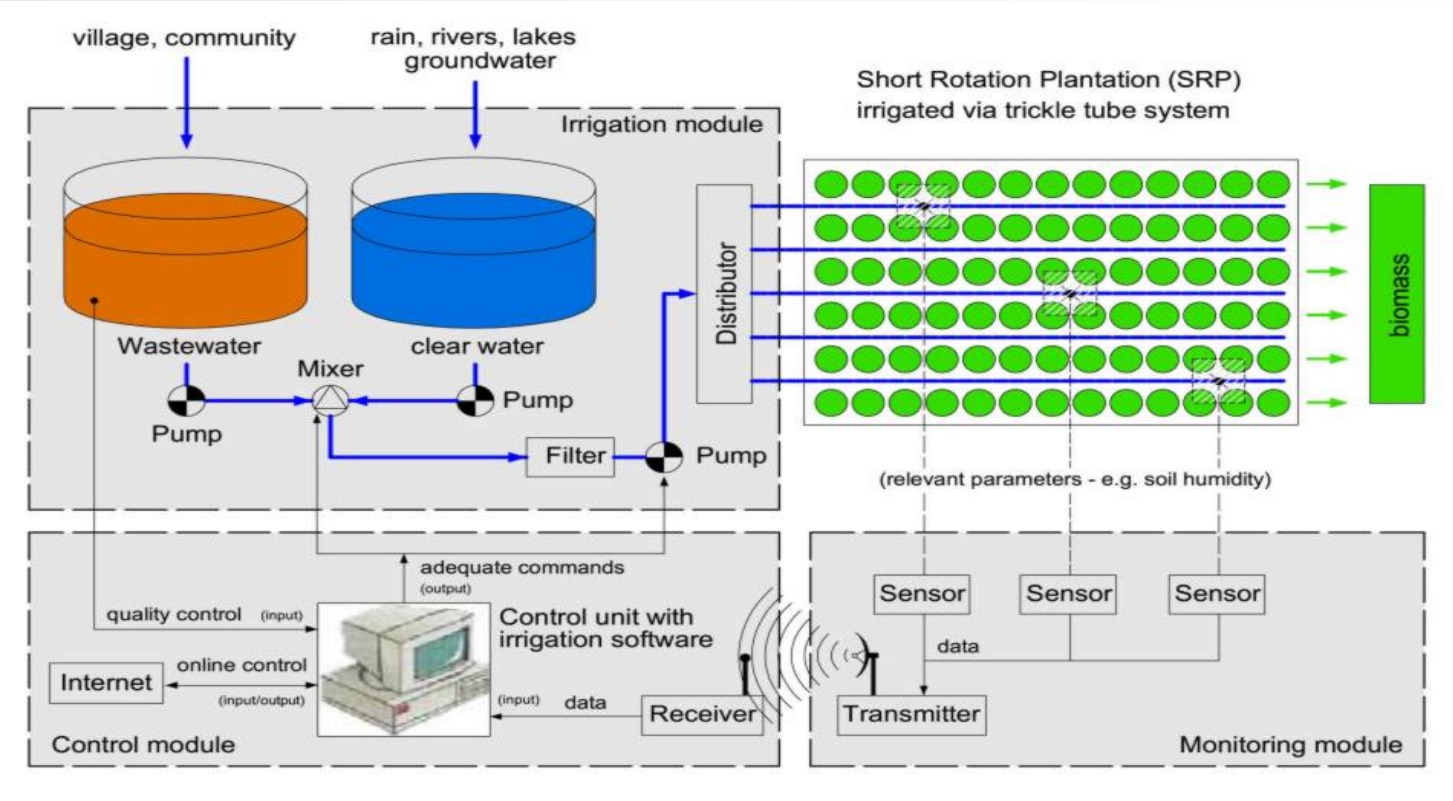
SHORT-ROTATION-PLANTATIONS



SHORT-ROTATION-PLANTATIONS



WACOSYS: Monitoring Control System for Wastewater irrigated Energy Plantations



Source: TTZ 2005

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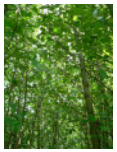
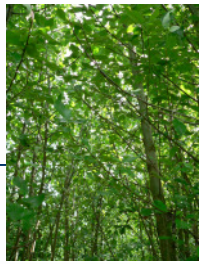
SHORT-ROTATION-PLANTATIONS



SHORT-ROTATION-PLANTATIONS



Collective Research Project "BIOPROS"

„Solutions for the safe application of wastewater and sludge for high efficient biomass production in Short-Rotation-Plantations"

- 3 years research project
- 25 partners from 11 European countries (incl. Bulgaria)

Main objectives:

- To enable an efficiency increase in SRP biomass production up to 3 times by reusing wastewater and sewage sludge for irrigation and fertilisation
- To enable the safe and efficient application of wastewater and sewage sludge in SRPs
- To promote SRP biomass production throughout Europe by transferring the generated know-how to potential SRP end-users and market actors

SHORT-ROTATION-PLANTATIONS

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SHORT-ROTATION-PLANTATIONS

INWAB: Integrated Approach for Sustainable Wastewater Management and Biomass Production in Bangladesh

SHORT-ROTATION-PLANTATIONS

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Land Amelioration and Desertification Alleviation

LADAS: Land Amelioration and Desertification Alleviation by Short-Rotation-Plant Using Saline/Brackish Water

Objectives: To stop the trend of land degradation and desertification process and create income opportunities for local farmers

CONSTRUCTED WETLAND SYSTEM

PLASTER+: Innovative production of

high quality indoor earth plaster by adding cattail fibre

<u>Objective:</u> Economic valorization of constructed wetlands as important landscape modules for flood prevention

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SUSTAINABLE AQUACULTURE

SustainAqua: Integrated approach for a sustainable and healthy freshwater aquaculture

Objectives:

- Diversification of economical valuable products (e.g. diversification of fish species, innovative by-products Improvement of product quality (taste and compounds),
- Improvement of the production process efficiency and profitability.

Fig. 1: Aquaculture Rameil. Source: www.aquacultur.de