

**CaBeC** 

***Cascading Benefits...***

...of **Coffee**

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# ***Valcofex***

# ***Valorization Coffee Extraction***

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# Valcofex

- ❖ *Environmentally friendly processing*
  - *Cascade extraction*
  - *Near- Zero minimal waste*
  - *Scalable biorefinery*

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# Valcofex

## Objectives

Coffee waste valorization

Local, regional and international development

Integrated Biorefineries

Sustainable bioprocesses and markets

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# ***Valcofex***

## ***Products for a cleaner future***



# Valuable added products and building blocks:

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*Lipids*  
*Fatty acids*  
*Phytosterols*  
*Diterpenes*  
*Phytohormones*  
*Saccharides*  
*Fibers*

The background of the slide features a close-up, slightly blurred image of coffee beans in various shades of red, orange, and green. In the upper left corner, there is a branch with small, round, reddish-orange fruits, possibly coffee cherries, hanging from it.

## ***Market Figures for raw materials:***

### ***❖ SCG (Spent coffee grains)\****

***6 -12 million tons/year Worldwide***

***100 -200 ktons/year Belgium***

***\*based on local and industrial usages***

### ***❖ Close to 100% value added extractables ca.15% for Cosmetics alone***



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**HUMANS**  
as the PRIORITY

WHO CAN UNDERSTAND the LEVELS of the CHALLENGE?

MIKHAIL GORBACHEV

# the CLIMATE CHALLENGE

EXAMPLES <sup>in</sup> ACTION EXIST!

CLEAN ENERGY  
FUTURE is NOW

COPENHAGEN  
- A STATEMENT  
OF DIFFERENCES,  
NO RESOLUTION

**'NATUR**  
**LEFT BEH**

## ENVIRONMENT & POLITICS

## CONFLICT BETWEEN MAN & NATURE

HISTORY DOES NOT FORGIVE THOSE WHO DELAY

NOT ON THE POLITICAL AGENDA

MULTI-DIMENSIONAL  
SOLUTION

MY STORY

IS ANY INTERVENTION TOO LATE?

# How Do RE ESTABLISH the BALANCE

**G-8, 20, ?...**  
**NOT GETTING IT DONE**

UP TO GOV'T  
to SET the STANDARDS... BUT

GRAPHICS BY THE VALVE WEB.ORG

SINCE 1900

EXPONENTIAL CONSUMPTION  
DISEASE

## POPULATION

## WATER CONSUMPTION

GDP

STION - ECOLOGICAL  
MIGRATION - ECOLOGICAL  
CON  
PR

## TREMENDOUS ECONOMIC GROWTH

## CONSERVATION & PRESERVATION

# SUSTAINABLE DEVELOPMENT

IS THE RESPONSIBILITY OF EVERYONE.

REQUIRES A GLOBAL RESPONSE,

2 can PREVAIL

## DEATH of ECOSYSTEMS

# HAND in HAND

id starts  
with COOPERATION

# Lifecycle based Circular Economies

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# Bio-refineries

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# *Healthcare, Cosmetics, Bio-building blocks*



# CaBeC PARTNERS





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# Milestones

- **2014: Cabec incorporation**
- **2014-2015: Raw material screening/selection**
  - ✓ **Process optimization**
  - ✓ **Supply, production and logistics**
- **2015-2018 Quality Control**
  - ✓ **HACCP and Traceability**
  - ✓ **Cosmetic line validation**
  - ✓ **Scaled-up Logistics planning**
- **2019 Product line launch**

# ❖ ***Commercial development needs:***

- ***International and National B to B***
- ***Branding and distribution***
- ***R&D in-house and partner***
- ***Outsourcing***
- ***Raw material collect and logistics***
- ***Pilot plant to Industrial scale***
- ***Integrated Biorefinery***

Thanks!

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