



**Ingo Ploger**

## ***1. Encontro de Bioeconomia e Sociobiodiversidade na Amazonia***

***articulando iniciativas para o fortalecimento das cadeias produtivas***

***Universidade do Estado da Amazonia***

***Bioeconomy & Sustainability new patterns for Cooperation***

**Ingo Plöger**

**ABAG Associação Brasileira do Agronegocio**

***12 e 13 Novembro 2019 Manaus, Amazonia***

*German Brazilian Initiative in Agribusiness and Innovation*



**Ingo Ploger**

*4. Bioeconomy and Sustainability*

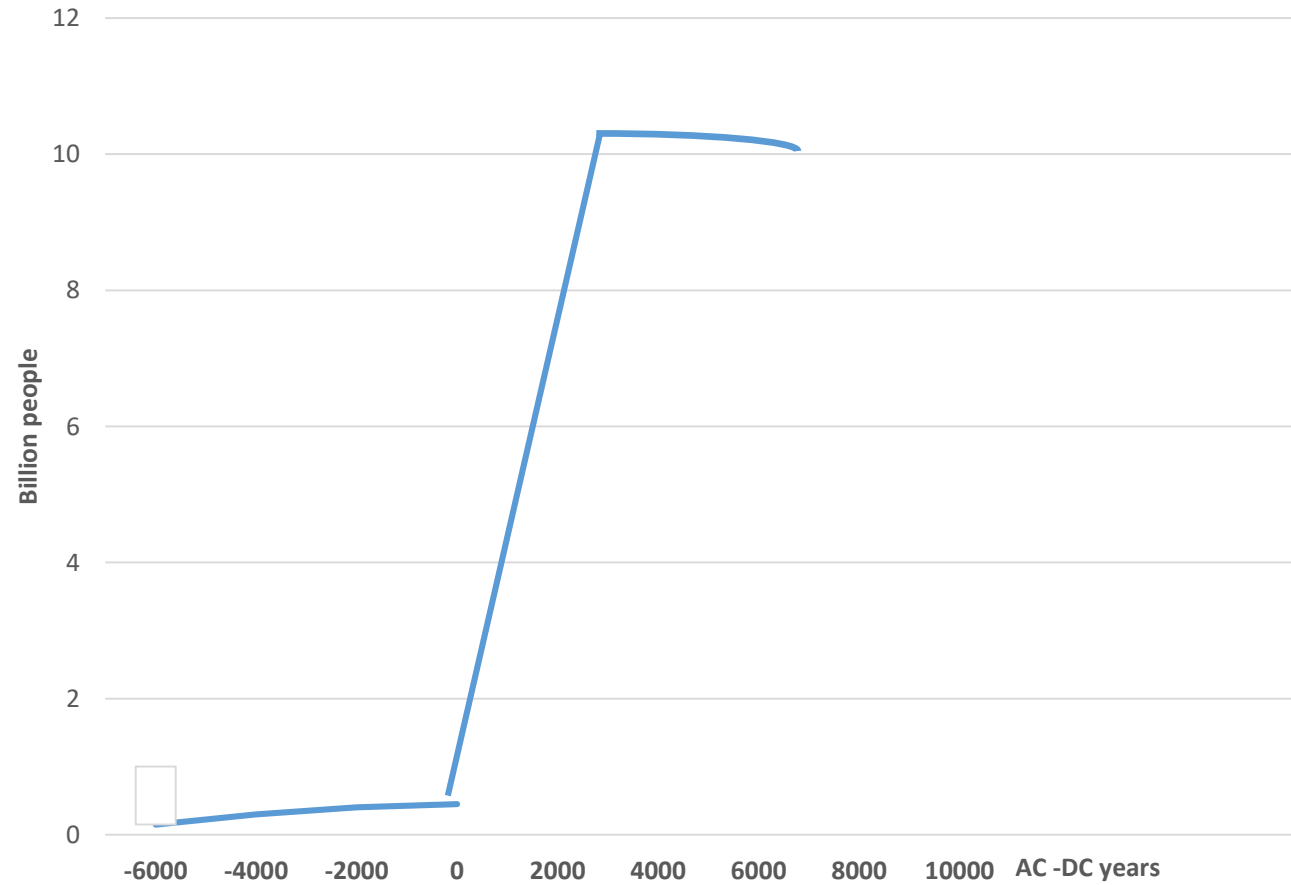
*Bioeconomy & Sustainability new patterns for Cooperation*

**Ingo Plöger ABAG**

*September 15<sup>th</sup>., Natal, Brazil*

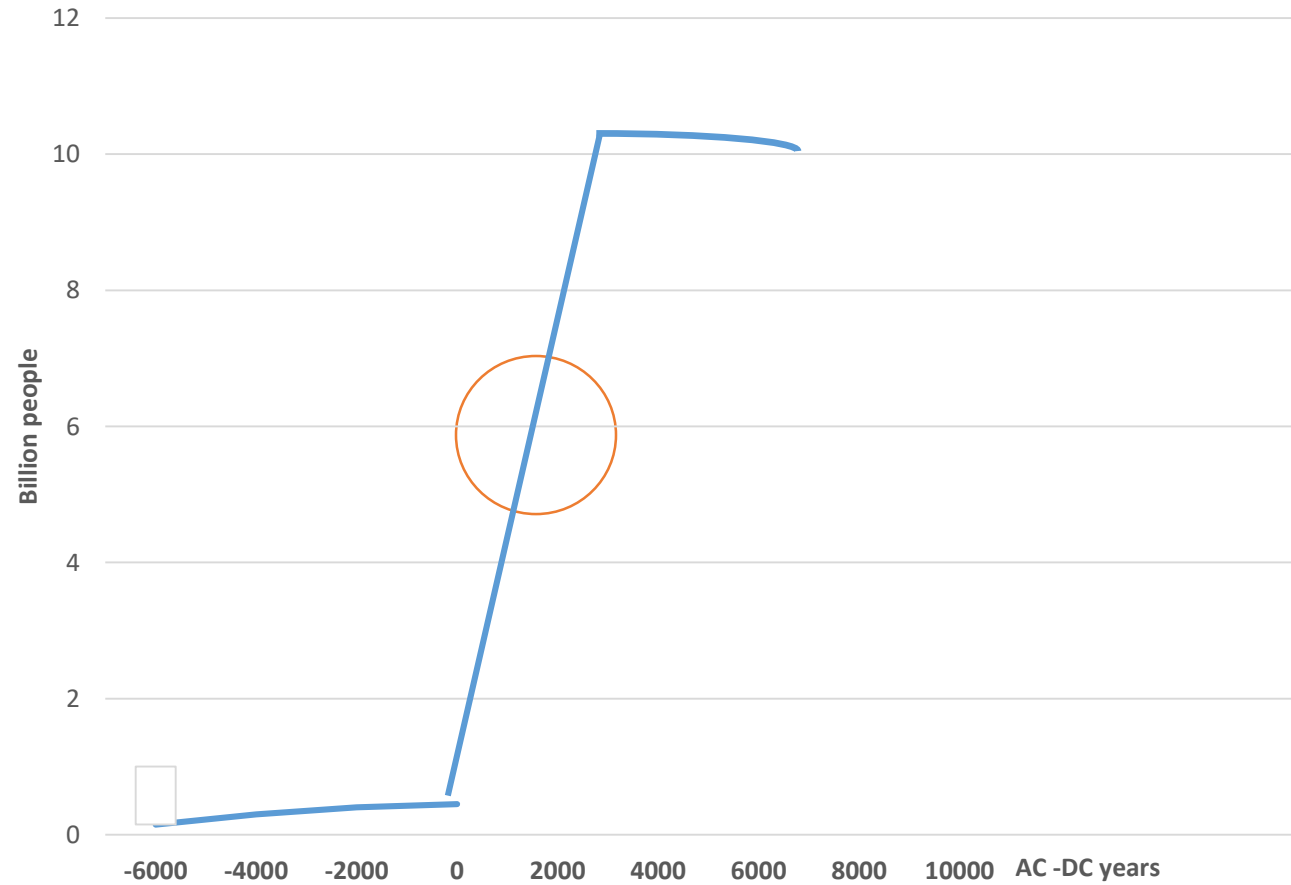
# Giga trends - Human Population Growth

6000 AC to 6000 DC



# Giga trends - Human Population Growth

6000 AC to 6000 DC



# Megatrends Impacts on Latin America



## How to describe our development in the world ?

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*The way we always do...*

*Comparing the GDP in the traditional model*

*Services- Industry – Agriculture or private + public expenditures+ investments*

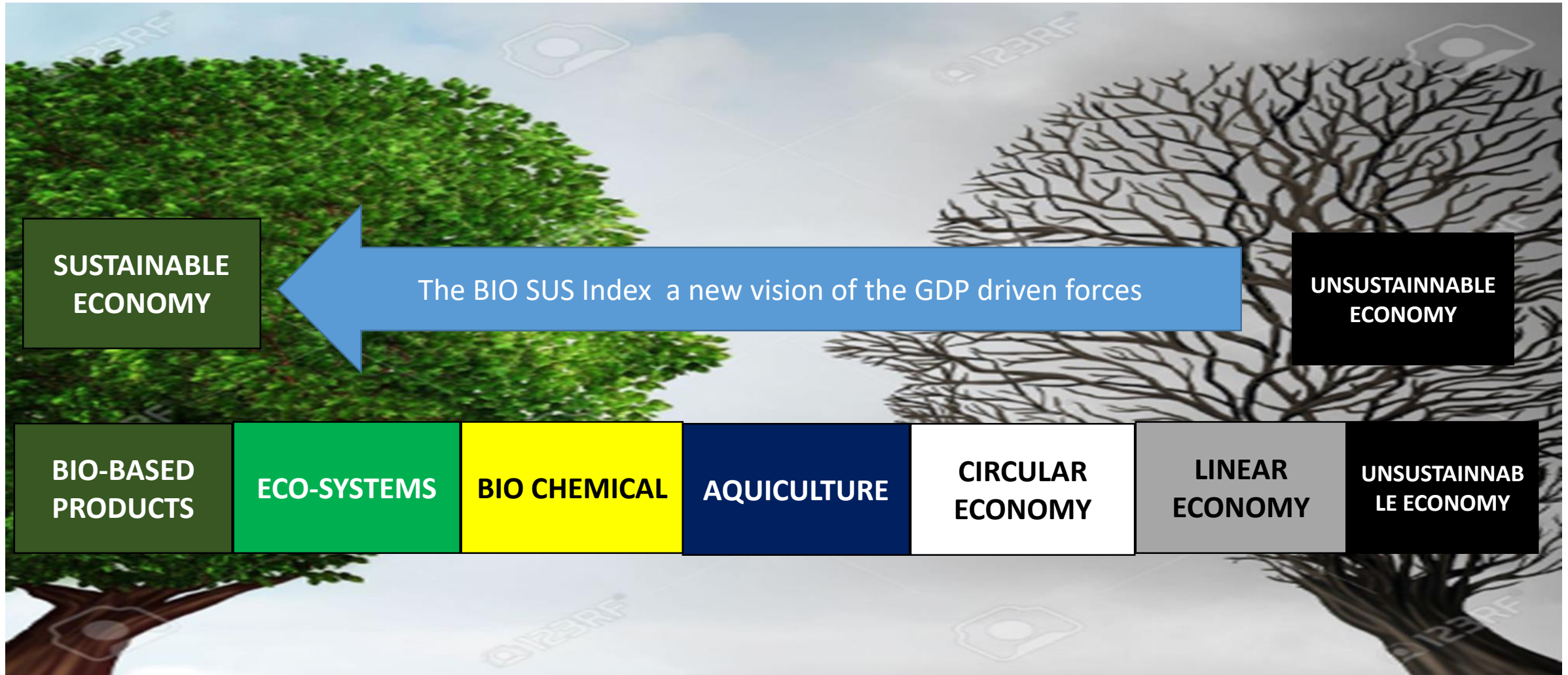
*This explanation is not good enough to explain the new tendencies*

*The PREFERENCE of our world consumer should be our guideline*

*The world consumer gives higher preference for  
Sustainable Bioproducts*

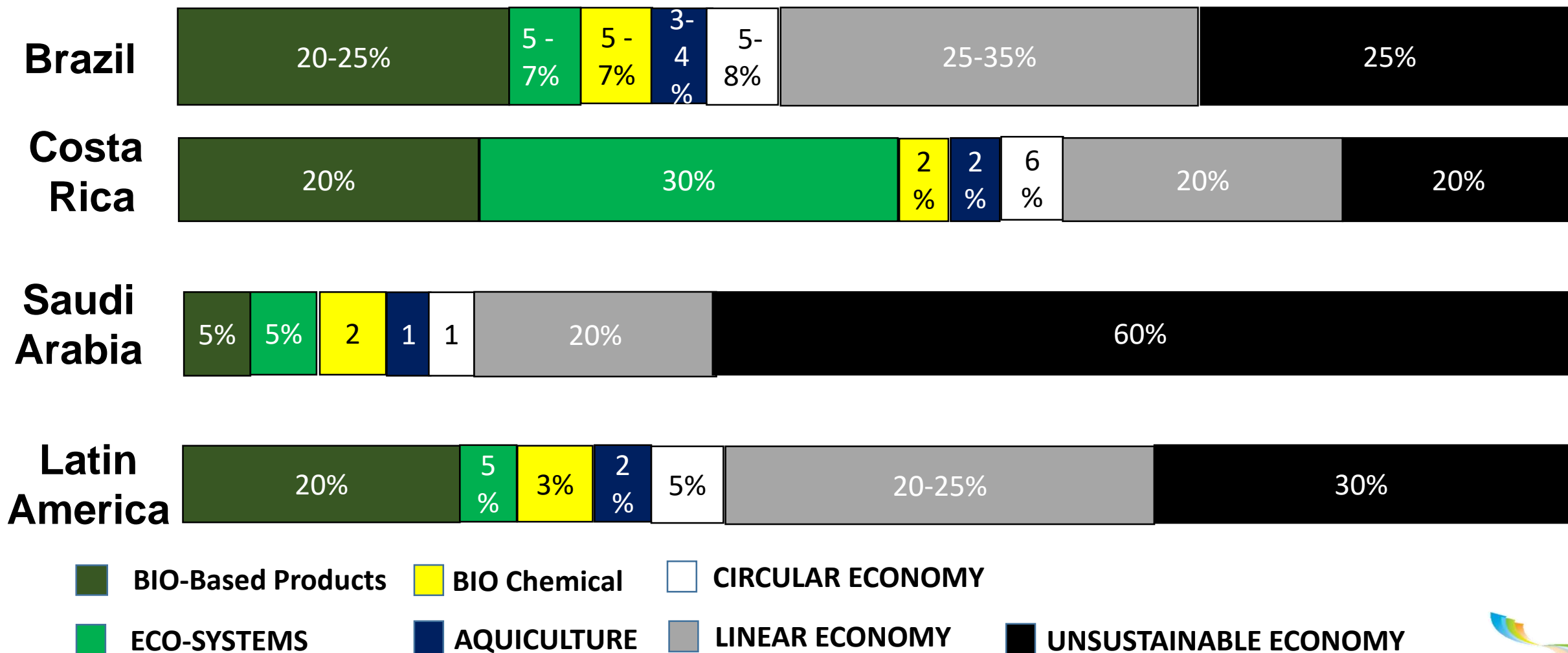
*How we can describe this preference in GDP's??*

# The different components to reach from now to a Sustainable Bioeconomy



Source: IPDES BIO SUS Index

# Different BIOSUS INDEX per Country in % of the GDP



Source: IPDES



## **Sustainable Bioeconomy Approach for a new Economy ?**

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***Germany* has one of the most complete approach of Bioeconomy and launches the German Bioeconomy Council who organize the Global Bioeconomy Summit**

***Brazil* has one of the most diversified Bioeconomy in large scale, with interesting data performance.**

***Germany* and *Brazil* can lead a worldwide debate in the most influence institutions to measure**

***BioSus* GDP's**

**Academia-Institutions- Governments**

# World past and future growth

- <https://www.youtube.com/watch?v=YJz7LVVI8c>
- <https://ourworldindata.org/grapher/world-population-since-10000-bce-ourworldindata-series>
- <https://ourworldindata.org/uploads/2019/06/2019-Revision---World-Population-Growth-1700-2100.png>
- <https://ourworldindata.org/grapher/historical-and-projected-population-by-region>
- [https://www.youtube.com/watch?v=PUwmA3Q0\\_OE](https://www.youtube.com/watch?v=PUwmA3Q0_OE)
- <https://www.youtube.com/watch?v=khFjdmp9sZk>



*German Brazilian Initiative in Agribusiness and Innovation*



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***4. Bioeconomy and Sustainability***

***Bioeconomy & Sustainability new patterns for Cooperation***

**Ingo Plöger ABAG**

**Complete approach**

*September 15<sup>th</sup>., Natal, Brazil*

# How we can analyze the world?

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*The way we always do...*

**OR**

*Maybe in a **CREATIVE** way*

# How we can analyze the world?

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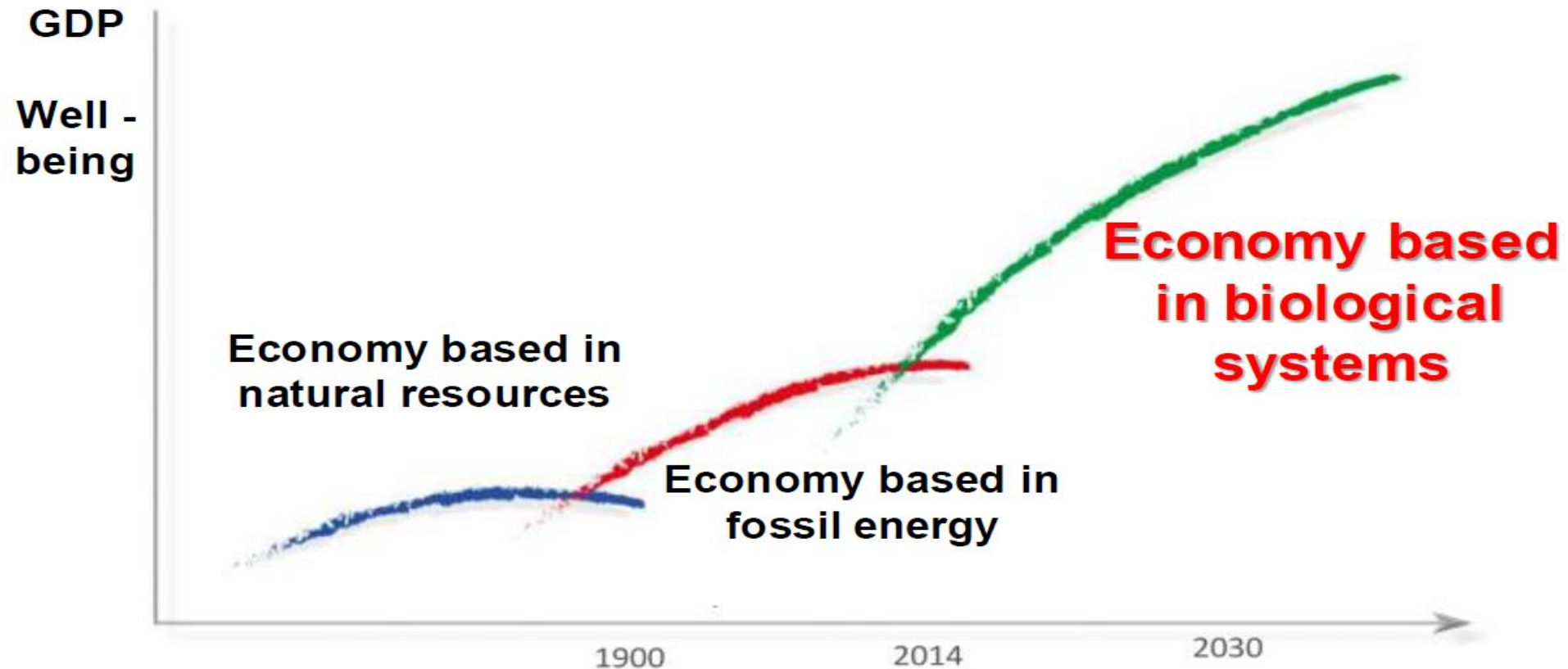
*The way we always do...*

**OR**

*Maybe in a CREATIVE way*

*Looking to the Future*

# Emerging Sustainable Bioeconomy



Source: Embrapa

***are strong PREFERENCES  
of the CONSUMER  
CHANGING the FUTURE Landscape  
PLUS  
HUGE STRUCTURE CHANGES***



# GLOBAL MEGATRENDS what the CONSUMER PREFER ?

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They care about the state of the planet...

**89%** care personally about protecting the planet

They are trying to be more sustainable...

**92%** claim to be trying to live more sustainably

They accept their duty of care for the next generation...

**57%** know it's important to preserve the planet for future generations

They want to choose sustainable products...

**83%** would always pick the brand which had a better record of sustainability

They are not opposed to paying more for sustainability...

**70%** they protect the environment or don't infringe on human rights

They don't think sustainable equals luxury...

**58%** think sustainable products come across less as luxury and more "hippy"

They think that companies need to take responsibility...

**90%** of the planet and its people

...and they feel responsible

**79%** are increasingly conscious of their personal impact on the planet

...but there is always room for improvement

**54%** think they could probably do more

...and think brands should too

**86%** think that companies/brands that continue to deplete finite resources are stealing from the future

...but they don't know which ones are actually sustainable

**86%** believe there's not enough information on products for consumers to assess how sustainable they are

...but they are not happy about it either

**77%** say they should not have to pay more for sustainable products and services

...but tides could be turning

**31%** equate sustainable with quality

...otherwise there should be consequences





**91%** think companies/brands that pollute the environment should be fined






Source: *The new Sustainability - Regeneration*

# GLOBAL MEGATRENDS CONSUMER PREFERENCE

## UN SUSTAINABILITY DE VELOPMENT GOALS

FIGURE 5: Consumer ranking of which UN Sustainable Development Goals are most important for companies to work towards, all countries

Rank			UN goal
#1		Ensure responsible consumption and production (including recycling)	12
#2		Build resilient infrastructure, inclusive and sustainable industrialization and foster innovation	9
#3		Protect, restore and promote life on land (protecting plant and animal life/biodiversity)	15
#4		Good health and wellbeing (including air quality)	3
#5		Make cities and communities inclusive, safe, resilient and sustainable	11

Rank			UN goal
#6		Ensure availability of clean water and sanitation	6
#7		Combat climate change and its impact	13
#8		No poverty	1
#9		Ensure access to affordable and clean energy	7
#10		Promote decent work and economic growth	8

Source: The new Sustainability - Regeneration

# Megatrends Impacts on Latin America



# How we can analyze this changing world?

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*The way we always do...*

**OR**

*Maybe in a **CREATIVE** way*

*Looking to the Future*

## How we can analyze this changing world?

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***The most common way is looking growth through GDP***

***The way we always do...***

## How we can analyze this changing world?

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***The most common way is looking growth through GDP***

***The way we always do...***

$$\mathbf{GDP = \sum Agriculture + \sum Industry + \sum Services}$$

$$\mathbf{GDP = \sum Public\ Exp. + \sum Private\ Exp. + \sum Investments}$$

# How we can analyze this changing world?

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*The most common way is looking growth through GDP*

*The way we always do...*

*GDP=*

*$\sum \text{Agriculture} + \sum \text{Industry} + \sum \text{Services}$*

*GDP=*

*$\sum \text{Public Exp.} + \sum \text{Private Exp.} + \sum \text{Investments}$*

***Maybe in a more CREATIVE way***

***Looking to what the CONSUMER will prefer***

# The Consumer want to live in a better World – more safe and sustainable-

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Source: Ipdes



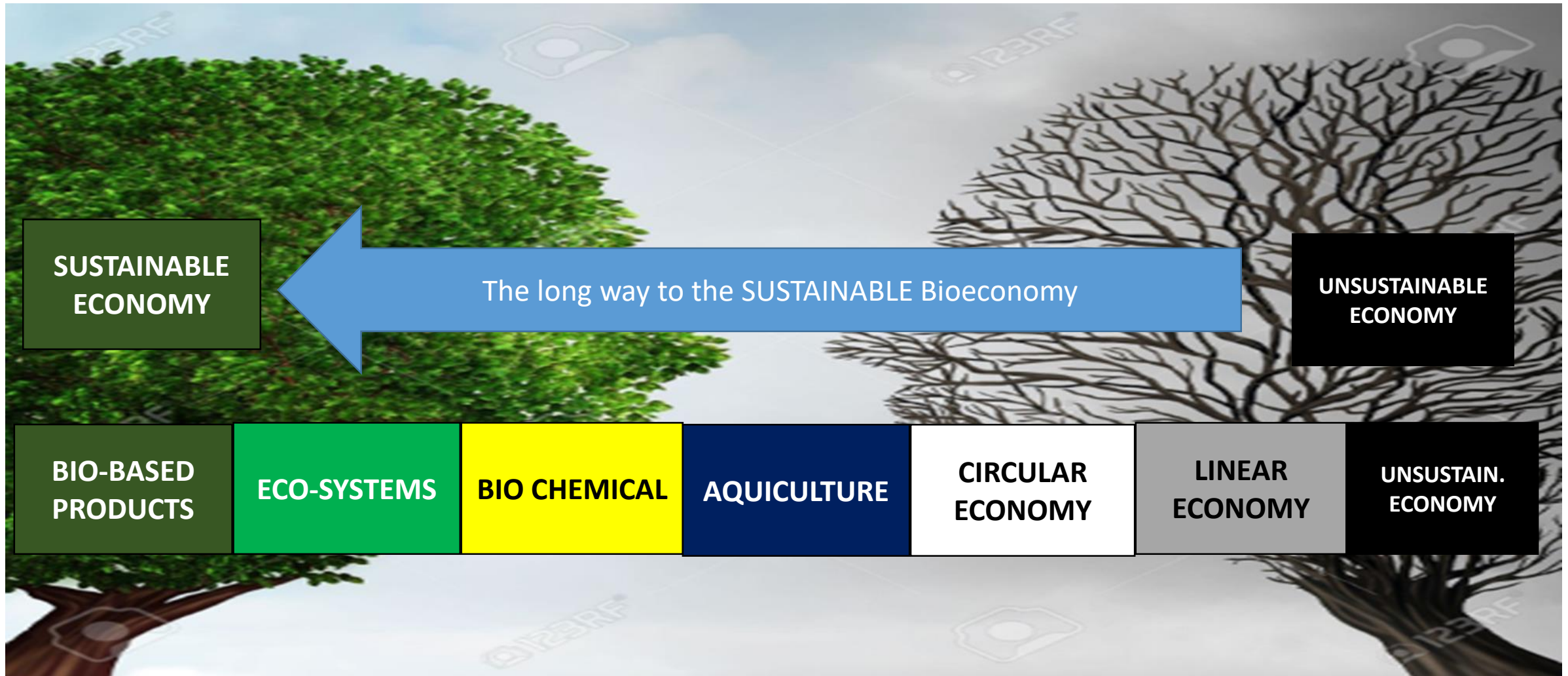
# The Consumer and the Citizen will change to a more Sustainable World

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Source: Ipdes

# FROM the OLD ECONOMY to a new one - the Sustainable BIOECONOMY -



Source: IPDES BIO SUS Index

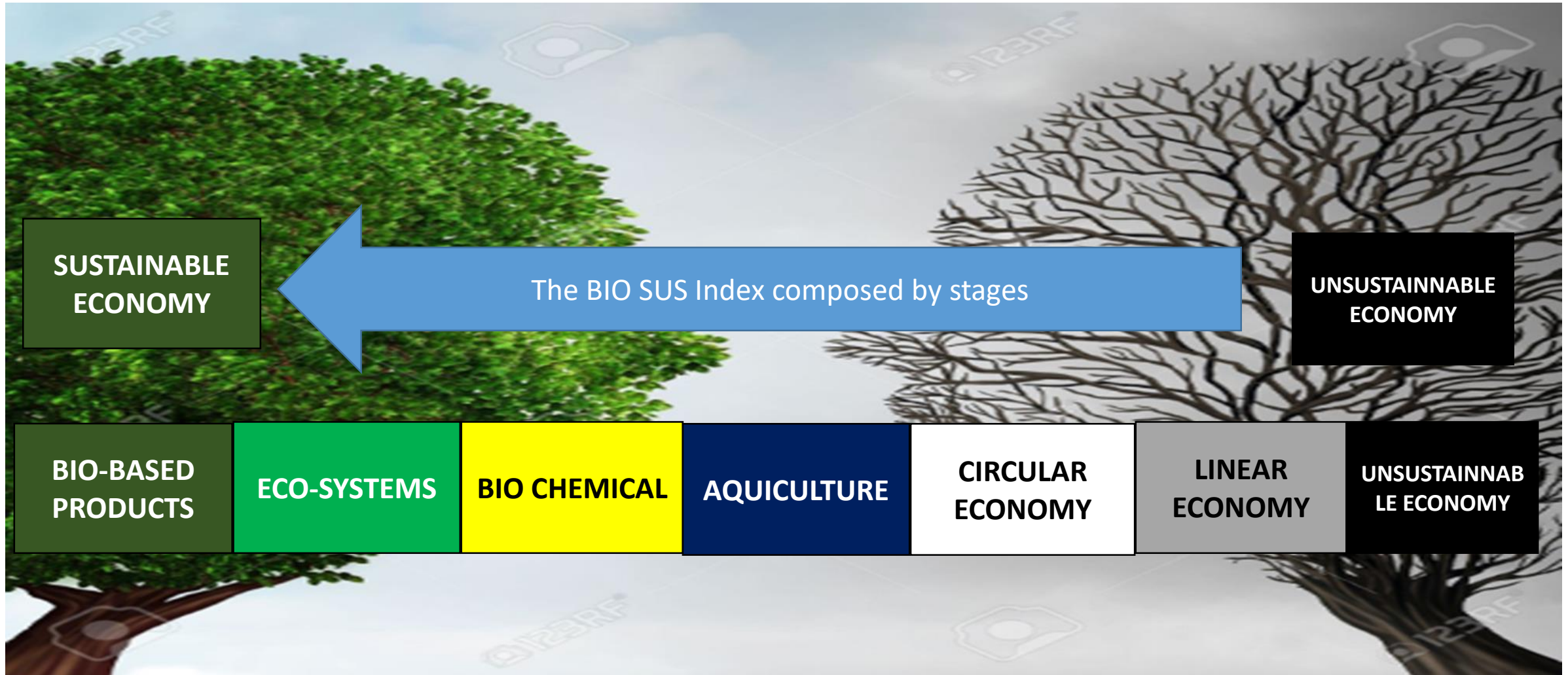


# The different components to reach from now to a Sustainable Bioeconomy



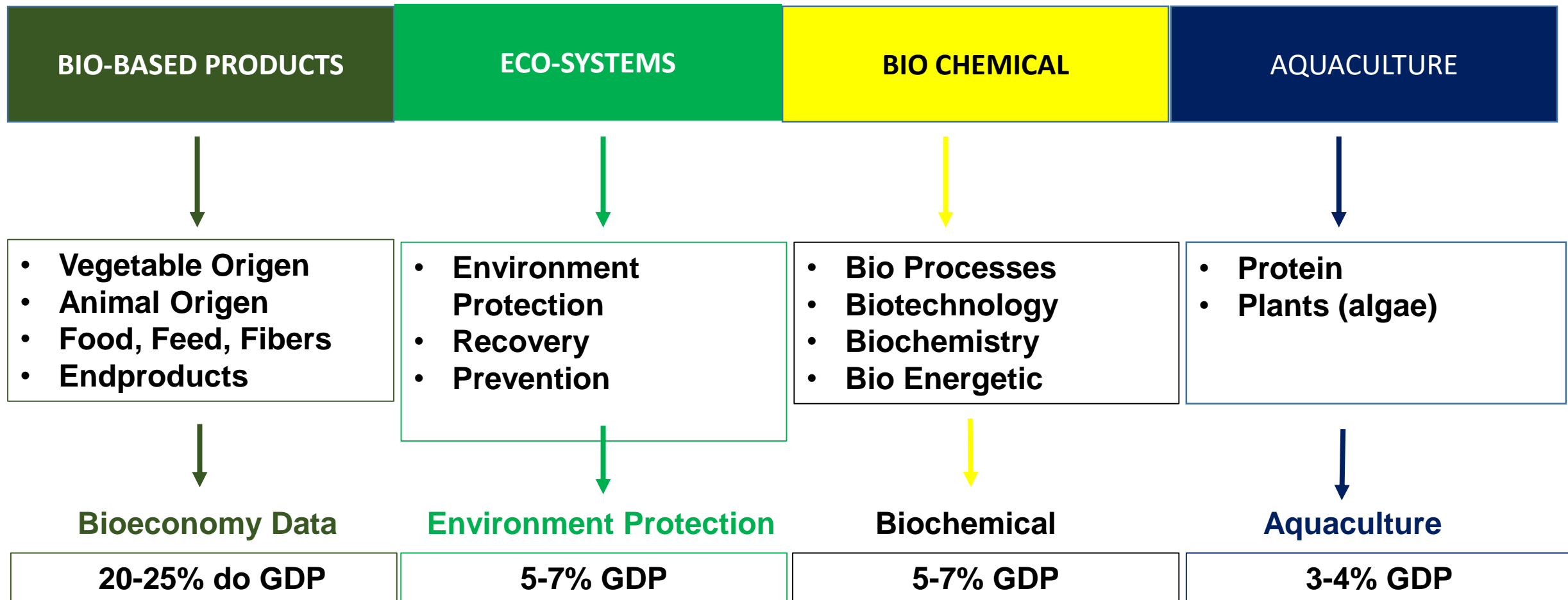
Source: IPDES BIO SUS Index

# BIOSUS Index a new vision to measure the GDP in different stages



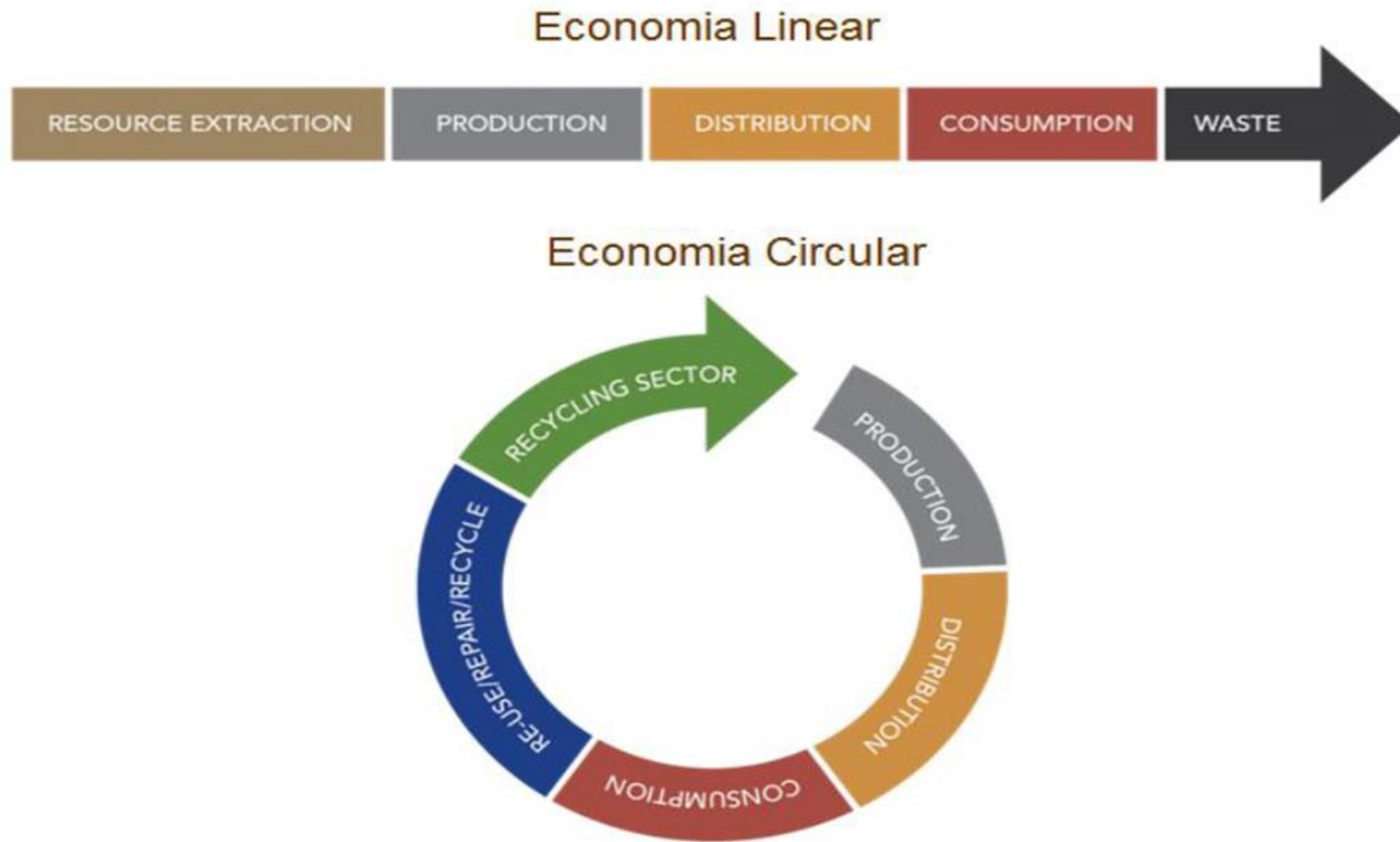
Source: IPDES BIOSUS Index

# Example of BRAZIL Sustainable BIOECONOMY



Source: Ipdes

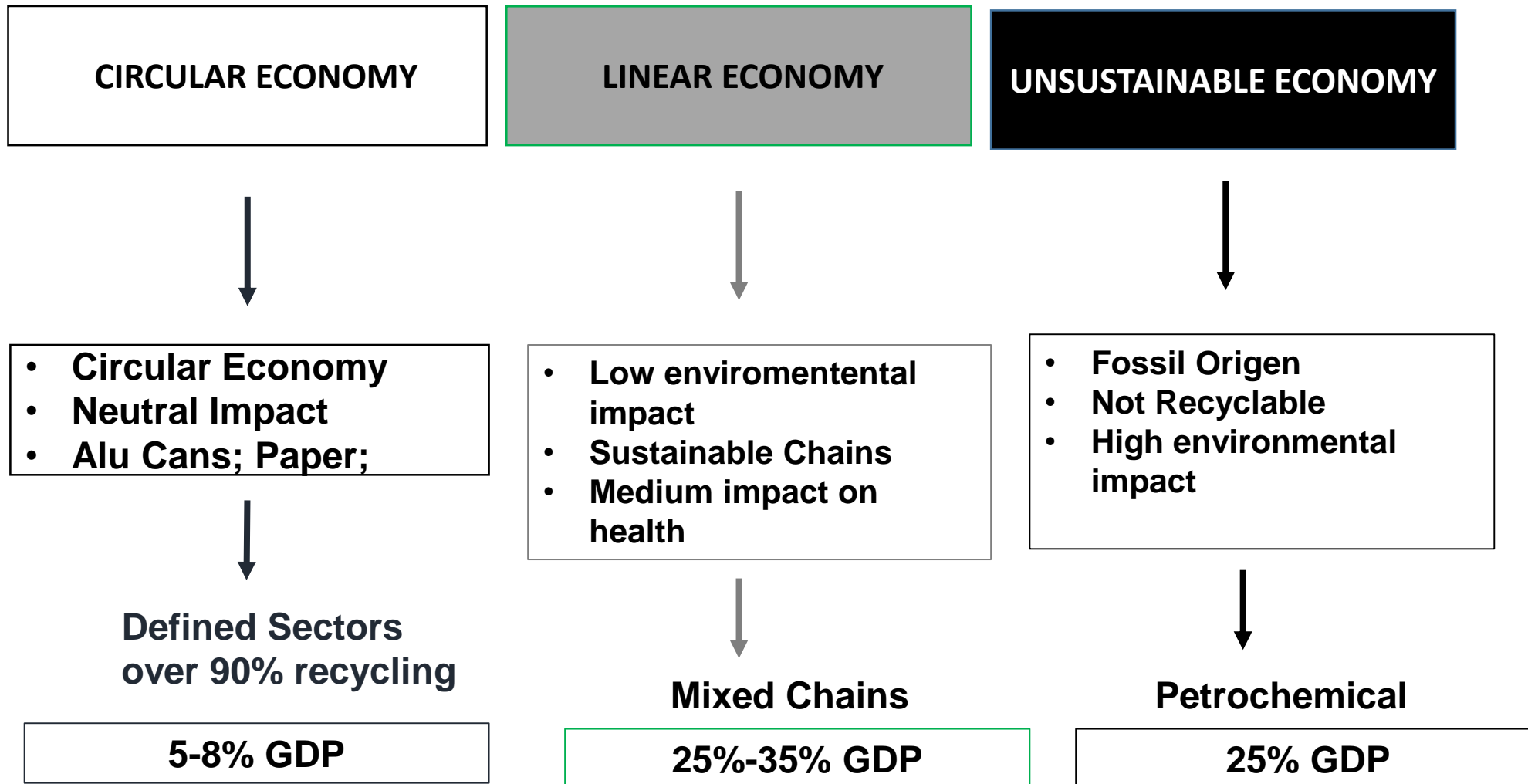
## Bioeconomy: from linear to circular



Source: Embrapa

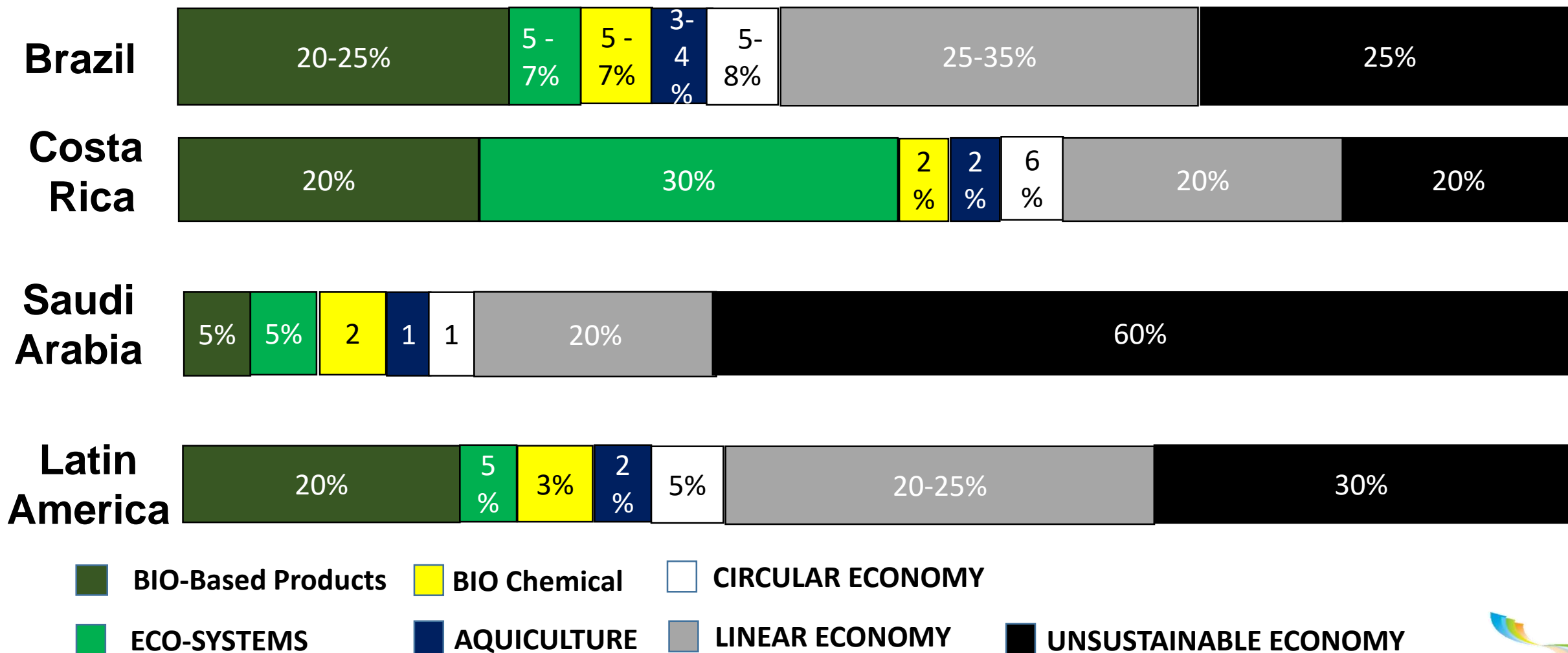


# BIOECONOMIA X SUSTENTABILIDADE



Source: Ipdes

# Different BIOSUS INDEX per Country in % of the GDP



Source: IPDES



# SUSTAINABLE BIOECONOMY the Challenge for Latin America

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- Latin America has a good BIOSUS Index
- Worldwide Consumer Preference going toward BIO SUS
- NEW Approach in policies that enhance behaviour and preferences for BIO SUS
- BIO SUS Policies in Latin America are NOT consistent to the trend
- Products that are BIO SUS should have preferences by investments
- BIO SUS products and services should have better taxes than others
- Managing together Mindset for Latin America Reputation on BIO SUS
- EXPERIENCE SHARING (Green Rio)
- Latin America needs more dialogue despite the current political and economic differences



# BIOECONOMY POLICIES

## Bioeconomy Policies around the World





## ***SUSTAINABLE BIOECONOMY CHALLENGE:***

- 1. Promoting Sustainable Consumption and Investments decision***
- 2. Ensuring Policy coherence in the Countries***
- 3. Promoting Convergent Regional and Global Policies***
- 4. Promoting better Quality of Life, food security, inclusion, biodiversity, health and aging agenda***
- 5. Sharing Innovation, encouraging Science and Technology***
- 6. Developing Forums and Platforms with relevant actors, for the open society dialog***
- 7. Enhancing SME, individuals, organizations, funding's, to scale business in the societies.***

**But... we have to convince... stakeholders...**

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***That the Sustainable Bioeconomy approach is more than a fashion... is more than a small tendency of environmental idealists ...***

***Showing impressive BIG numbers***

***to convince that the new economy will follow the consumer preference***

## **Sustainable Bioeconomy Approach for a new Economy ?**

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# **Sustainable Bioeconomy Approach for a new Economy ?**

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***Choosing some Universities in Germany and in Brazil  
who want's to cooperate in a BioSus approach***

***Developing methodology, data, and comparative studies***

***Participating in Congresses, Forum, Seminars for an open debate***

***Supporting Financial Institutions,  
in evaluation and in assessments of megatrends***

**“WE HAVE A CHOICE** to  
make during our *brief, brief* visit  
to this **BEAUTIFUL BLUE**  
and **GREEN LIVING PLANET:**  
**TO HURT IT** or to **HELP IT.**  
For you,———**IT’S YOUR CALL.”**

- Ray Anderson  
Former CEO, Interface, 1934-2011



**Ingo Ploger**

***Thank you,***

***Vielen Dank,***

***Muito obrigado***