



CORFU2022

15-18 JUNE

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9th International Conference

on

**Sustainable Solid Waste
Management**

Steps towards circularity in hotel operation

KARAKASNÉ DR MORVAY KLÁRA

BUDAPEST BUSINESS SCHOOL

HUNGARY



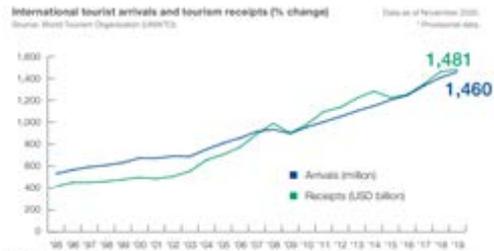
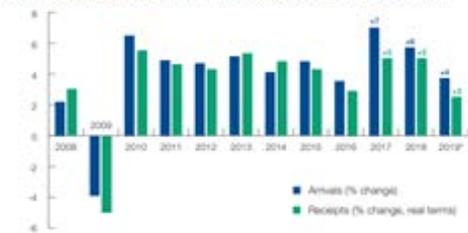
BGE

IMPORTANCE OF TOURISM

<https://www.e-unwto.org/doi/pdf/10.18111/9789284422456>

2019 – 10th consecutive year of sustained growth

Tourism has seen continued expansion over time, despite occasional shocks, underlining the sector's strength and resilience



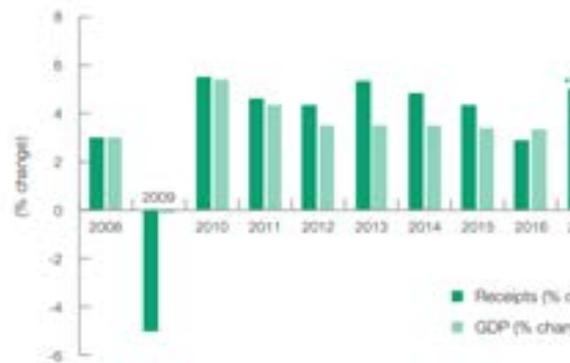
International tourist arrivals (million) and tourism receipts (USD billion) (Data as of November 2020, Source: World Tourism Organization (UNWTO), Provisional data)



Map of international tourist arrivals (million) and tourism receipts (USD billion) (Data as of November 2020, Source: World Tourism Organization (UNWTO), Provisional data)



Between 2009 and 2019, real growth in international receipts (54%) exceeded growth in world GDP (44%)



International tourism receipts and world GDP (real change, %) (Source: World Tourism Organization (UNWTO) and International Monetary Fund (IMF), Provisional data)

Export revenues from tourism

Total exports from international tourism reached USD 1.7 trillion in 2019

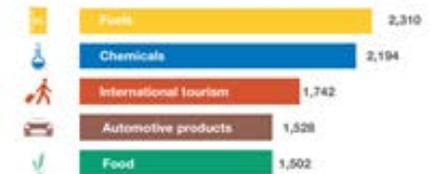
- Export earnings from international tourism (travel and passenger transport) are an important source of foreign revenues for many destinations around the world, helping to create jobs, promote entrepreneurship and develop local economies.
- Tourism is a key component of **export diversification** both for emerging and advanced economies, with a strong capacity to reduce trade deficits and to compensate for weaker export revenues from other goods and services.
- For many small developing countries, including most Small Island Developing States, tourism is a major source of foreign-currency income, which can represent up to 90% of total exports.

Tourism generates USD 5 billion a day in exports



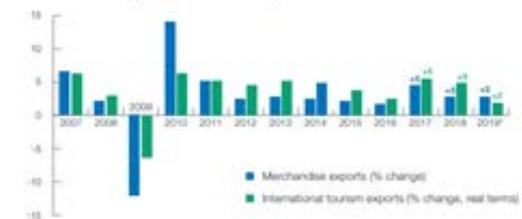
Note: Export revenues from international tourism are composed of "travel" receipts in destinations and "passenger transport" receipts, both credit items in the Balance of Payments of countries. (Source: World Tourism Organization (UNWTO) and World Trade Organization (WTO), Provisional data)

Tourism is the world's third largest export category after fuels and chemicals, and ahead of automotive products and food (2019)



Export earnings by product category, 2019 (USD billion) (Source: World Tourism Organization (UNWTO) and World Trade Organization (WTO), Provisional data)

Export revenues from international tourism have grown faster than merchandise exports almost every year since 2010



Export revenues from international tourism and merchandise exports (% change) (Source: World Tourism Organization (UNWTO) and World Trade Organization (WTO), Data as of November 2020, Provisional data)



Sustainability and competitiveness go hand in hand as destinations and businesses can become more competitive through the efficient use of resources, the promotion of biodiversity conservation and actions to tackle climate change.

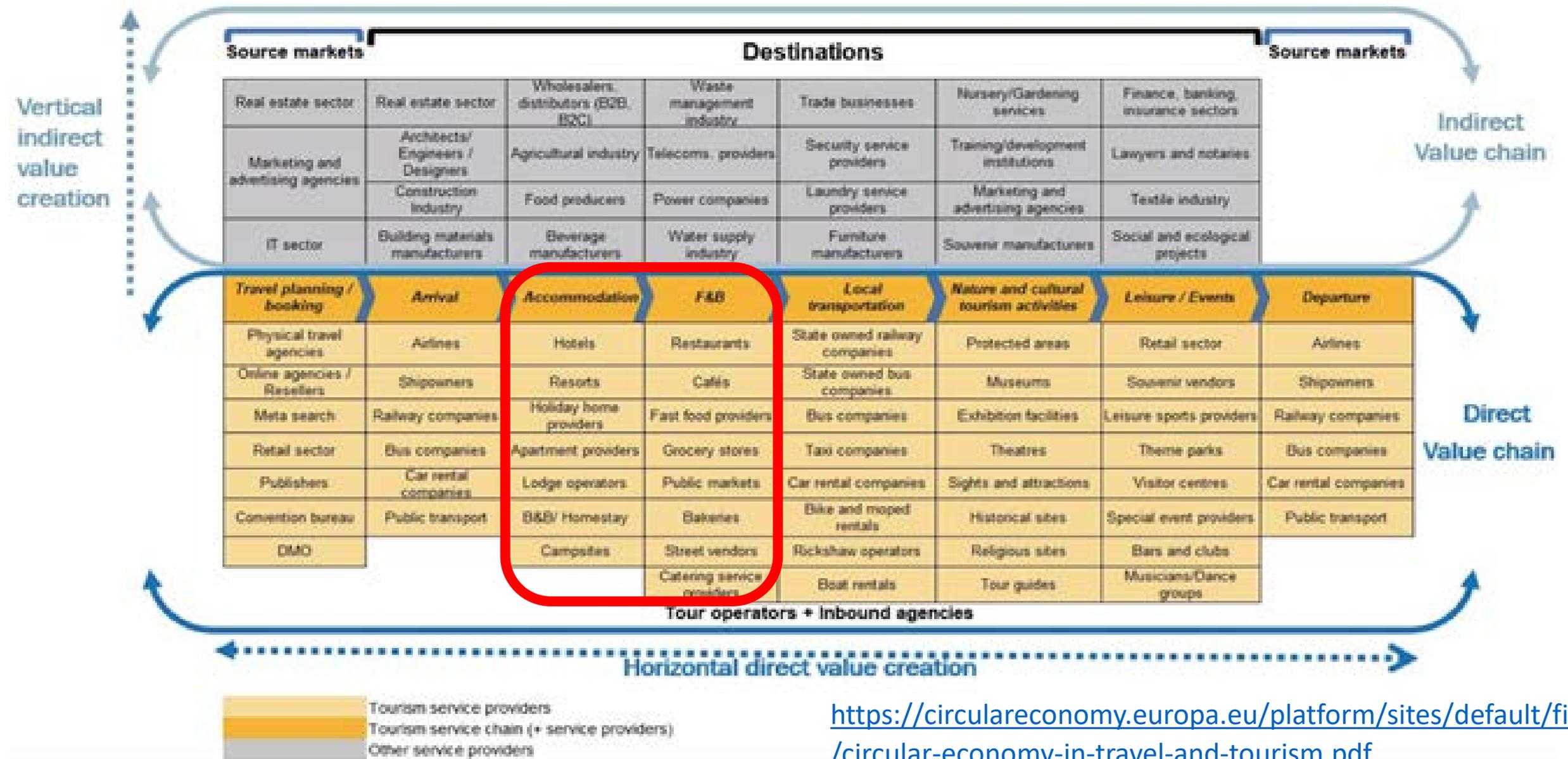
Sustainability, a key part of tourism policies in 101 UNWTO Member States surveyed



Consumer travel trends

- **Travel 'to change'**
Live like a local, quest for authenticity and transformation.
- **Travel 'to show'**
'Instagramable' moments, experiences and destinations.
- **Pursuit of a healthy life**
Walking, wellness and sports tourism.
- **Rise of the 'access' economy.**
- **Solo travel & multigenerational travel**
as a result of aging population and single households.
- **Rising awareness on sustainability**
zero plastic and climate change.

TOURISM INDUSTRY VALUE CHAINS



SUSTAINABLE HOTELS – OPTIONS FOR CIRCULARITY?



BASIC PRINCIPLES OF CIRCULAR ECONOMY



Eliminate waste and pollution

Waste as a design flaw



Circulate materials

Extracted resources maintain their value for as long as possible



Regenerate nature

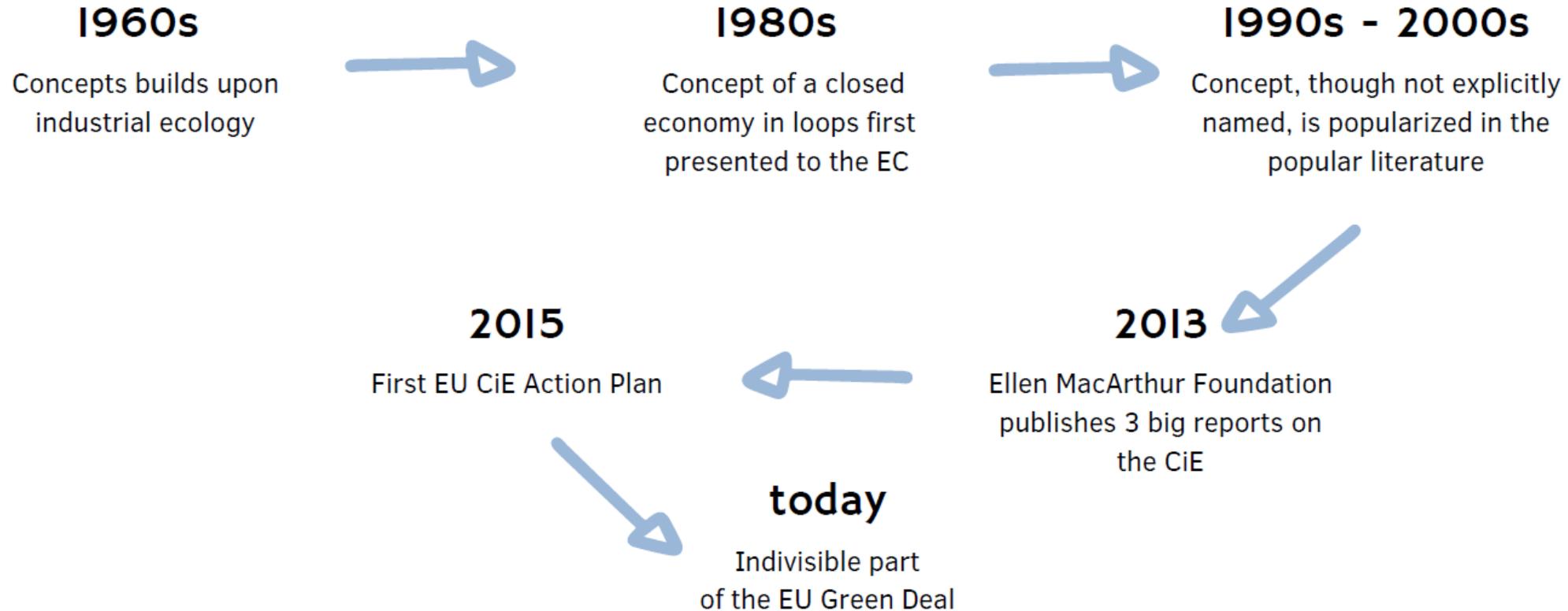
Returning biological nutrients whenever possible

In a circular economy, manufacturers recover used products, components and materials, to reuse them for new products. This recovery and reuse decreases the need for raw materials. When done right, circularity represents a significant business opportunity, capturing the value embedded in used products.

Linear vs. Circular economy

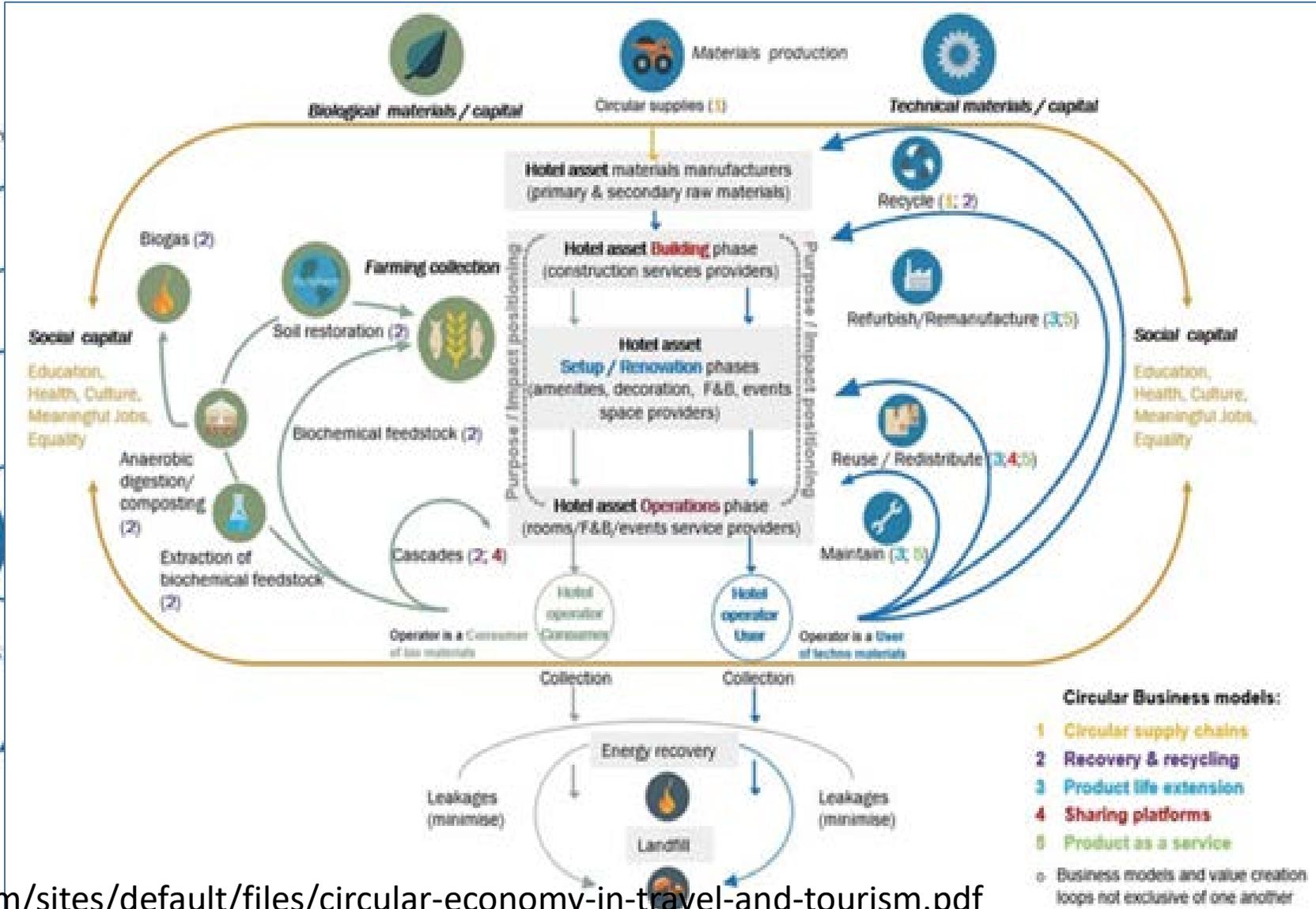
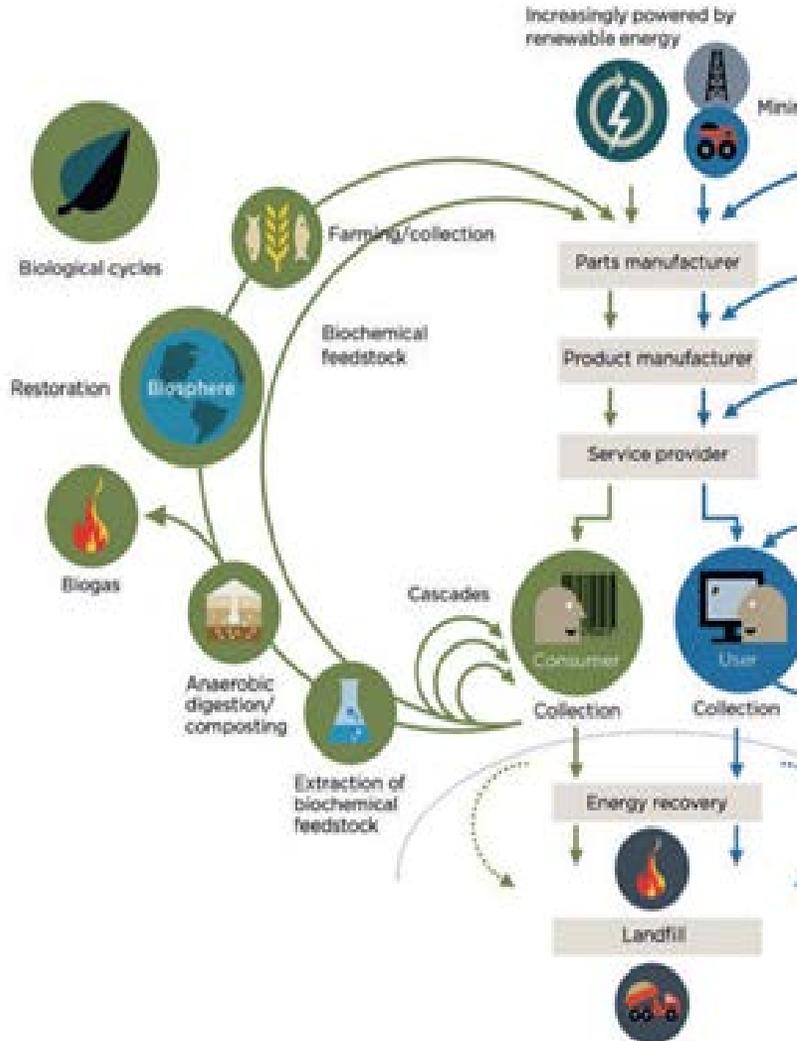


Circular Economy - short timeline

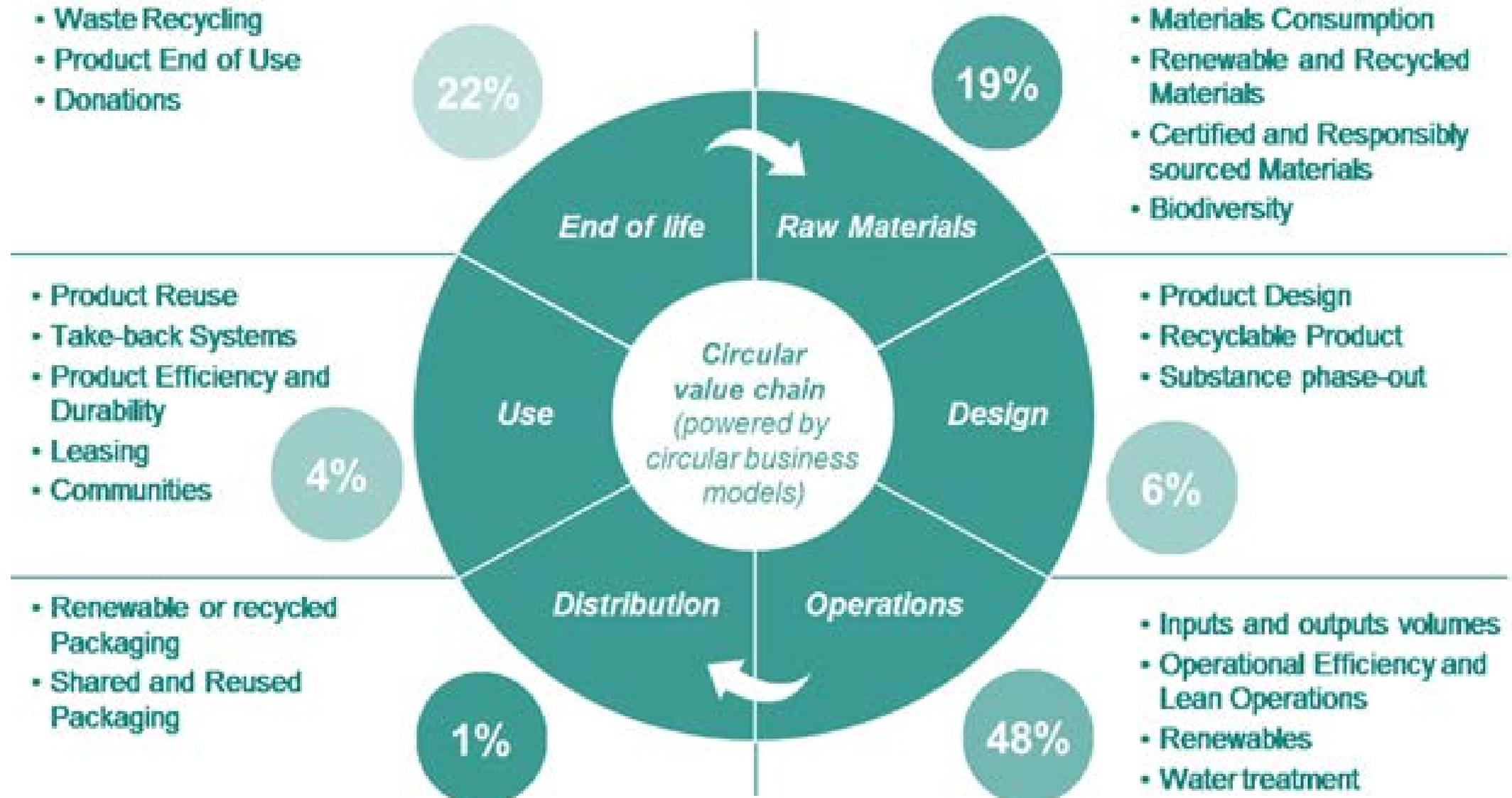


BUTTERFLY DIAGRAM

(Ellen MacArthur Foundation, 2013)



CIRCULAR METRICS ALONG THE LIFE CYCLE



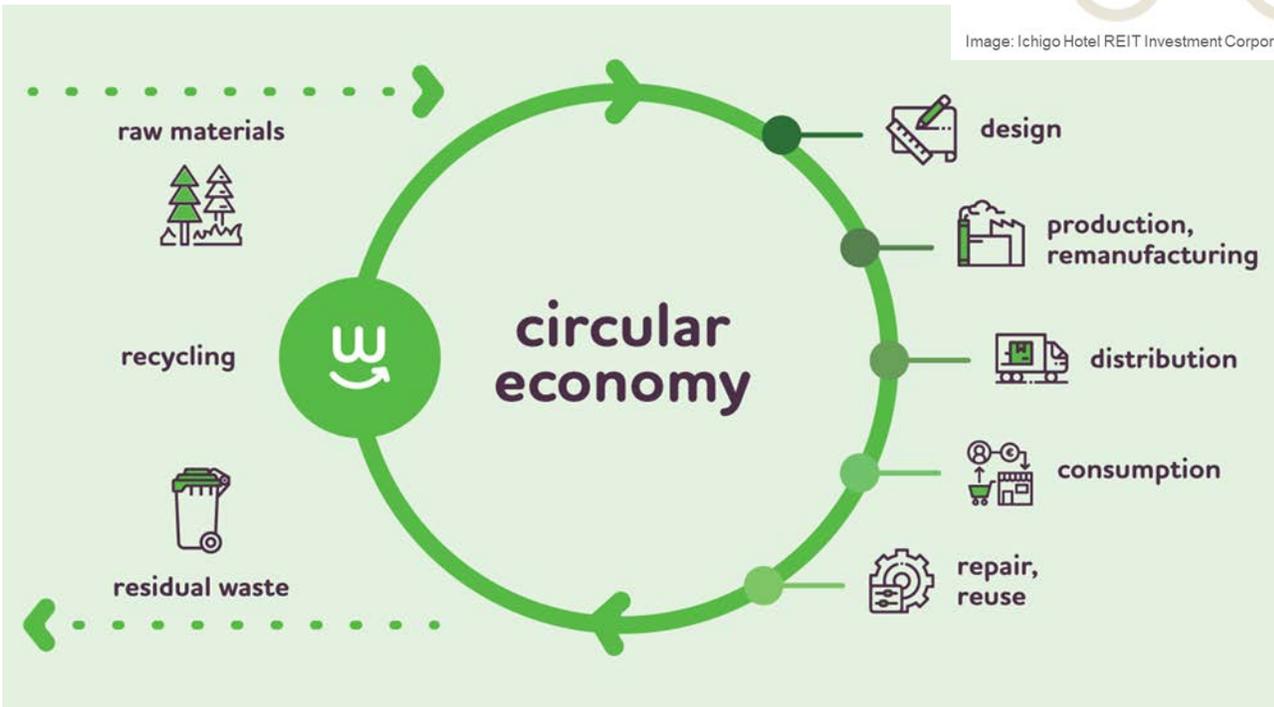
POTENTIAL CIRCULAR ACTIVITIES IN HOTELS

Sustainable buildings
 Passive houses
 Adaptive re-use
 (Green hotel 2x expensive)
 Durability

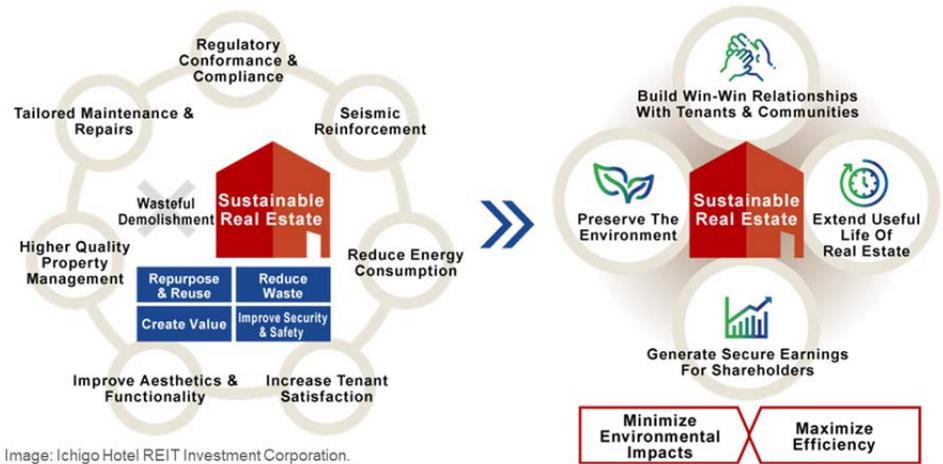
Recycled materials
 Leasing
 Sharing economy
 Home-grown

Donation
 Composting
 Water treatment
 Grey water

Selecting waste
 Hazardous waste
 Food waste



ESG-Compliant Hotel Real Estate



Sourcing locally
 Sustainable procurement
 Local suppliers – less transport, less carbon emission, SMEs

Less energy, renewable
 Less water consumption
 Less paper and plastic

Furniture
 Textile
 Maintenance

GUIDELINES FOR CIRCULAR PRODUCTION AND CONSUMPTION



Reduce



Recycle



Reuse



Restore



Remanufacture

MATERIALS AND RESOURCES



ALLOCATION OF ASSETS

Constructions:

- Materials (building and installations)

Technical installations:

- Energy

Water network:

- Water
- Energy



SUPPLIES

Supplies:

- Water
- Energy

Food supplies:

- Food
- Drink

Fabrication:

- Textiles

Cosmetics / toiletries:

- Gels and soap
- Toiletries

Chemical products:

- Detergents
- Paints
- Fertilizers
- Swimming pools chemicals



PROVISION OF SERVICES

Stationery and Communication:

- Leaflets and menu cards
- Signs and signage
- Digital storage
- Paper, envelopes, bags, etc

Furnishings and equipment:

- Furniture (interior/exterior)
- Electronic equipment and parts
- Electrical appliances
- Fixtures and fittings
- Tableware
- Tools for maintenance (gardens, swimming pools, etc.)
- Sports equipment

Vehicles:

- Cars
- Minibuses
- Scooters
- Bikes and skates
- Buggies

Accommodation:

- Water and energy
- Textiles
- Gels, soap and bathroom products
- Detergents and paints
- Leaflets, signage and paper
- Furniture, fixtures and fittings
- Vehicles

Restoration:

- Water and energy
- Food and drink
- Textiles
- Detergents and paints
- Menu cards, signs and signage
- Electrical appliances and tableware

Leisure:

- Water and energy
- Textiles
- Gels, soap and bathroom products
- Fertilizers and chemicals for swimming pools
- Furniture and sports equipment
- Vehicles

Commerce:

- Water and energy
- Detergents and paints
- Paper, envelopes, bags, etc.
- Furniture and equipment

LINES OF ACTION TO ENSURE THE INTEGRATION OF CIRCULAR STRATEGY

* This refers to the materials and resources which are more widely used for this activity, addressing their use and functionality.

POTENTIAL METRICS IN HOTELS

Guidelines for circular production and consumption	Key indicators (KPIs)
 Reduce	<p>12.2.1. The energy consumption from renewable sources in total and per stay. Per type: (i) Solar; (ii) Wind; (iii) Biomass.</p> <p>12.2.2. The water consumption in total and per stay from: (i) Self-sufficiency; (ii) Purification and recovery of grey waters; (iii) Third party supply.</p> <p>12.2.3. The number of measures designed to minimise the presence of contaminating substances in the supply of: (i) Textile products; (ii) Chemical products; (iii) Cosmetic products and toiletries; (iv) Stationery, signage and communications; (v) Electronic equipment and components.</p> <p>12.2.4. The number of zero food miles. The percentage of local suppliers.</p> <p>12.2.5. The percentage of products on the shopping list per type and packaging: (i) Loose; (ii) Single-use; (iii) Reusable containers; (iv) Single-use containers.</p> <p>12.2.6. The percentage of furniture and equipment supplies classified as rented.</p>
 Recycle	<p>12.2.7. The annual quantity of purified water per establishment.</p> <p>12.2.8. The minimum percentage of recycled materials contained in the textile products on the company's list of supplies.</p>
 Reuse	<p>12.2.9. The percentage of purchases of furnishings and equipment with components subject to the universality criteria.</p>
 Restore	<p>12.2.10. The number of repairs required before moving on to renovating the furnishings of equipment.</p>
 Remanufacture	<p>12.2.11. The level of importance given to the criterion for the supply of furnishings and equipment: (i) Energy efficiency; (ii) The guarantee expiry date; (iii) Post sales maintenance; (iv) Use of recycled materials; (v) Acquisition by renting; (vi) The universality of the components; (vii) Feasibility of assembly/disassembly.</p>

THANK YOU FOR YOUR KIND ATTENTION!

