

Advancing circularity solutions in tourism and construction

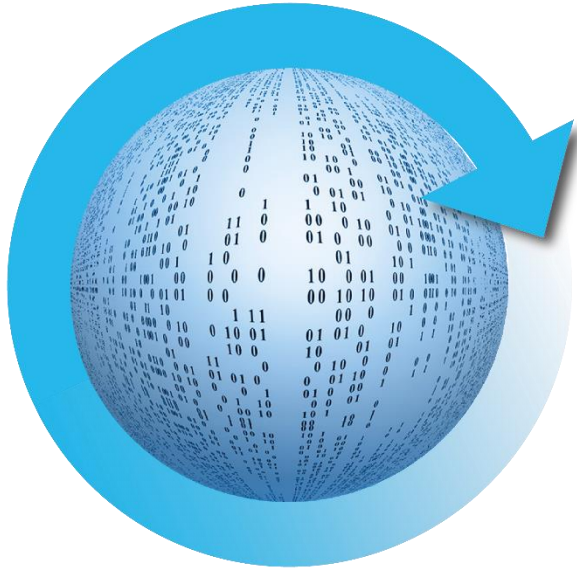
Parallel Session 4, Room Martes-Myotis

Speakers:

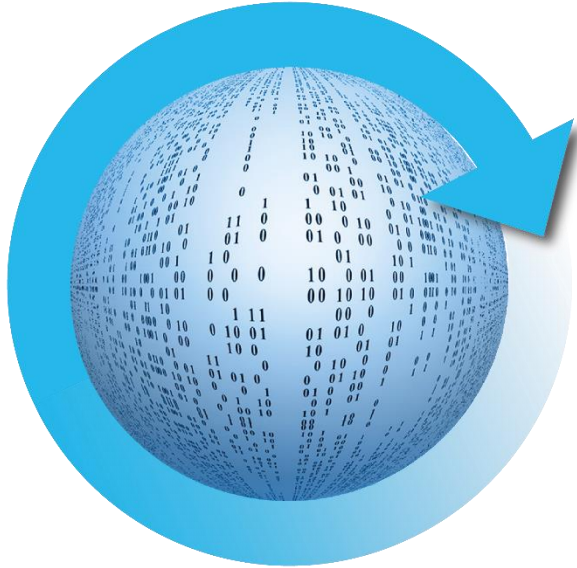
- Katherine Adams, BRE Group
- Hubert Vendeville, Betterfly Tourism
- Eduardo Santander, European Travel Commission (ETC)
- Kristine Dorosko, DG Environment, European Commission

Moderator:

- Dr Dirk Glaesser, World Tourism Organisation (UNWTO)



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Circular construction practices in large sports events: London Olympic Games

Katherine Adams

Principal Consultant and PhD Researcher

BRE



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The London 2012 Olympics

- 2.5 km² site in East London; intended to catalyse regeneration
- Only five permanent venues were constructed
- Other buildings included the Athletes Village which became a residential quarter of Stratford City and the Olympic Press and Broadcast Centres were adapted to become office spaces.
- In addition to the design and construction of the Games, there was consideration the post-Games legacy.
- Renamed 'The Queen Elizabeth Olympic Park' and in 2012, the London Legacy Development Corporation was given responsibility for the redevelopment of the Park



Objectives and targets

The mission: “deliver venues, facilities and infrastructure and transport on time and in a way that maximises the delivery of a sustainable legacy within the available budget”.

- 90% re-used or recycled demolition waste by weight
- 90% re-used or recycled construction waste by weight
- 20% of materials to be from a re-used or recycled source by value
- 25% recycled aggregate by weight
- Across all of the elements of the Park, care will be taken to optimise the provision of permanent elements for legacy and temporary elements for Games time.
- To minimise any waste during the conversion from Games to the legacy phase, all temporary venues and structures will be designed with re-use and recycling in mind.



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The process

Sustainable Development Principles



London 2012 Sustainable Policy



Sustainable Development Strategy (targets)



Delivery partner responsible for meeting targets



Design Out Waste; Demolition and Site Clearance
Materials Management Plan; Construction Waste
Management Plan, Temporary Materials Guidelines



Source: Greater London Authority



Results

- 98.5% (427,531 tonnes) reuse and recycling rate 425,000 tonnes of waste diverted from landfill
- Over 20,000 lorry movements saved
- Over 1.5 million cubic metres of soil cleaned onsite and reused
- Approximately 170,000 tonnes, equivalent to nearly 22% of aggregates from recycled and secondary sources
- 20,000 tonnes of new materials saved
- 339,590 'overlay' assets reused – 14,911 tonnes



Circularity Building Examples

- The McDonalds restaurant onsite was a modular construction, enabling it to be dismantled for reuse following the games.
- The International Broadcast Centre was designed with a flexible internal layout to assist with a range of post-Games uses and bolted connections were used; the mechanical and electrical services were also easily accessible
- The 17,500 spectator swimming facility was reduced to 2,500 capacity by the dismantling of two bolted steel wings.
- The Basketball Arena was a temporary structure, commissioned on a take-back basis and after the Games it was dismantled and returned to the contractor
- More than 3,000 seats from the Basketball Arena have been reused at the nearby Lee Valley Hockey and Tennis Centre.



Lessons Learnt: buildings

- Design with the next use in mind (if known)
 - Expensive conversion of the Athletics stadium to a football stadium
 - Design as a football stadium and then retrofit for the Olympics
- Smaller, more flexible venues and facilities are certainly easier to repurpose.
- Cost of dismantling, transporting and rebuilding facilities is problematic
- Temporary buildings need to be temporary
- Locate venues in the heart of a big city
 - Create spaces that can be easily reused by businesses and others



Lessons learnt: waste

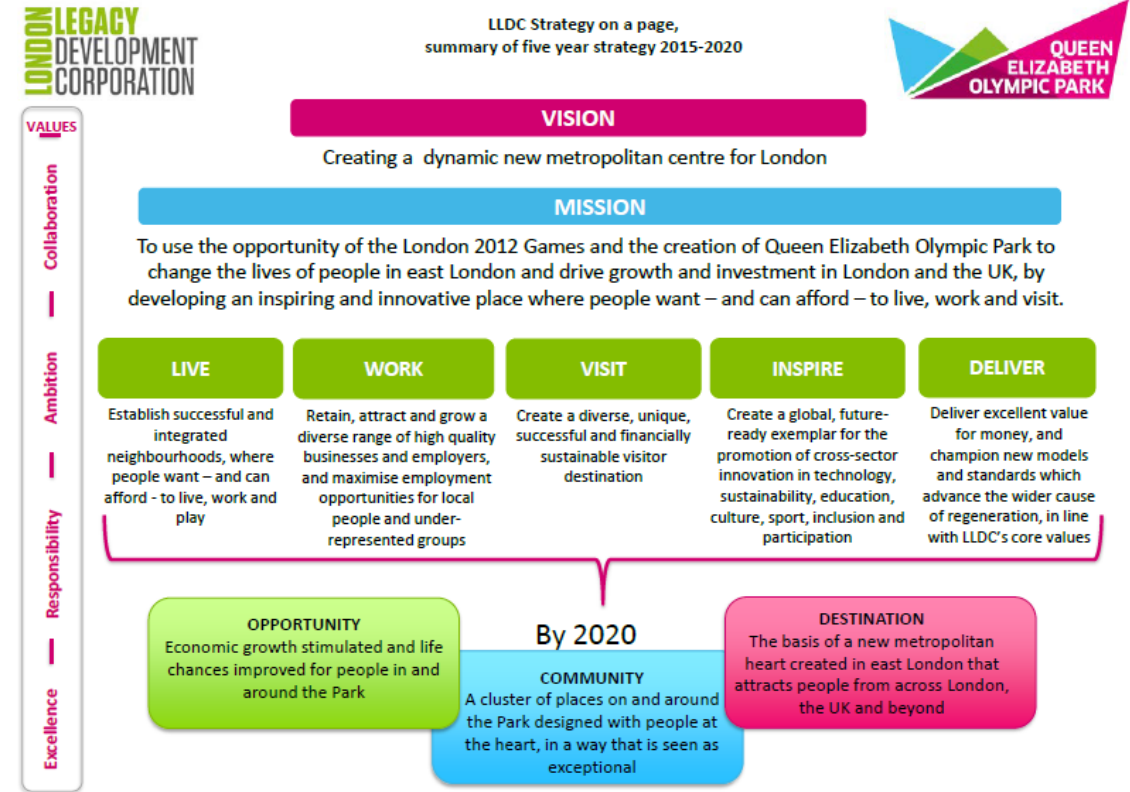
- During demolition phase, the pre-demolition audits could have been more extensive
- Further projects should aim to reach higher levels of reclamation and re-use of demolition and construction waste rather than focusing on diverting waste from landfill
- Targets should be defined to deliver at the highest levels of the waste hierarchy and optimise resource efficiency.
- Some of the markets, like reuse and recovery ones, need to become more established to incentivise the construction industry to expend resources on developing and implementing more waste strategies.



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The legacy

- More than 16 million visits to the Park
- Covers 560 acres, 6.5km of waterways, 30 acres of woods, hedgerow and wildlife habitat and 4,300 new trees.
- There are 26 permanent artworks and 2.5km of temporary artworks on hoardings
- All eight permanent venues have a secure legacy
- More than 5,000 people worked on the transformation
- It is expected that there will be 40,000 jobs created by 2025
- Planning permission for over 4,000 homes

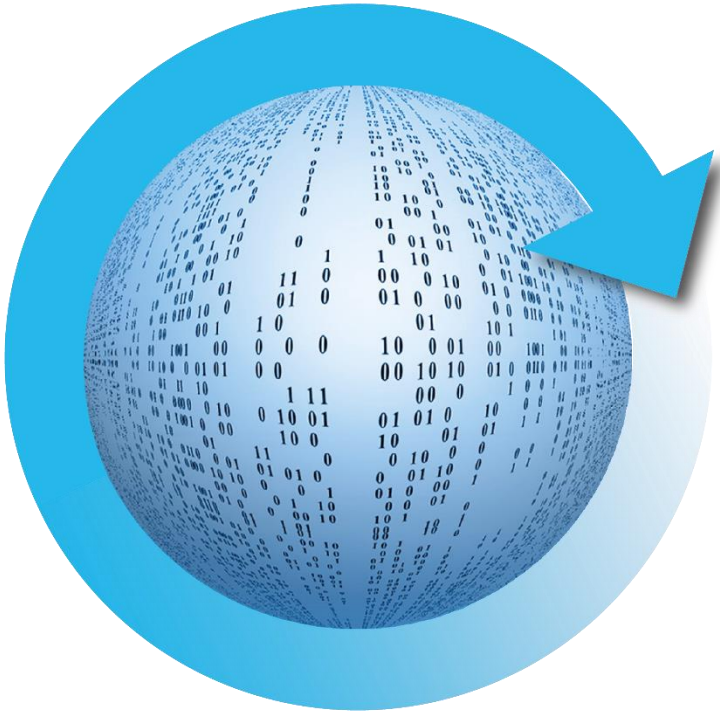


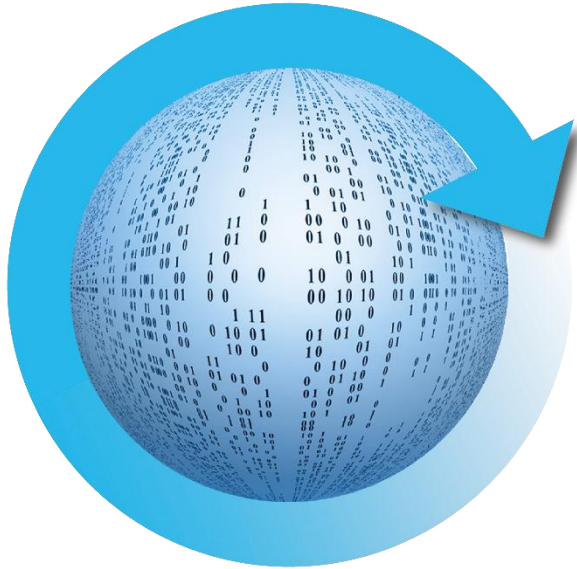
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Thank you!

Katherine Adams

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Circular economy applied to hotel industry: Environmental Footprint

Hubert Vendeville
CEO
Betterfly Tourism



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The 3 main principles of life cycle assessment



1. Multi steps approach

2. Multi components

3. Multi indicators

How to measure and reduce impacts of hotels regarding LCA principles?

The mission: elaborate scientific methodology and display

Accessible and affordable

Attractive for hoteliers (SME)

Easy to understand for all

Measuring progresses over time

*... 6 years of experimentation and meetings
in 3 countries (France, Morocco, Seychelles)*

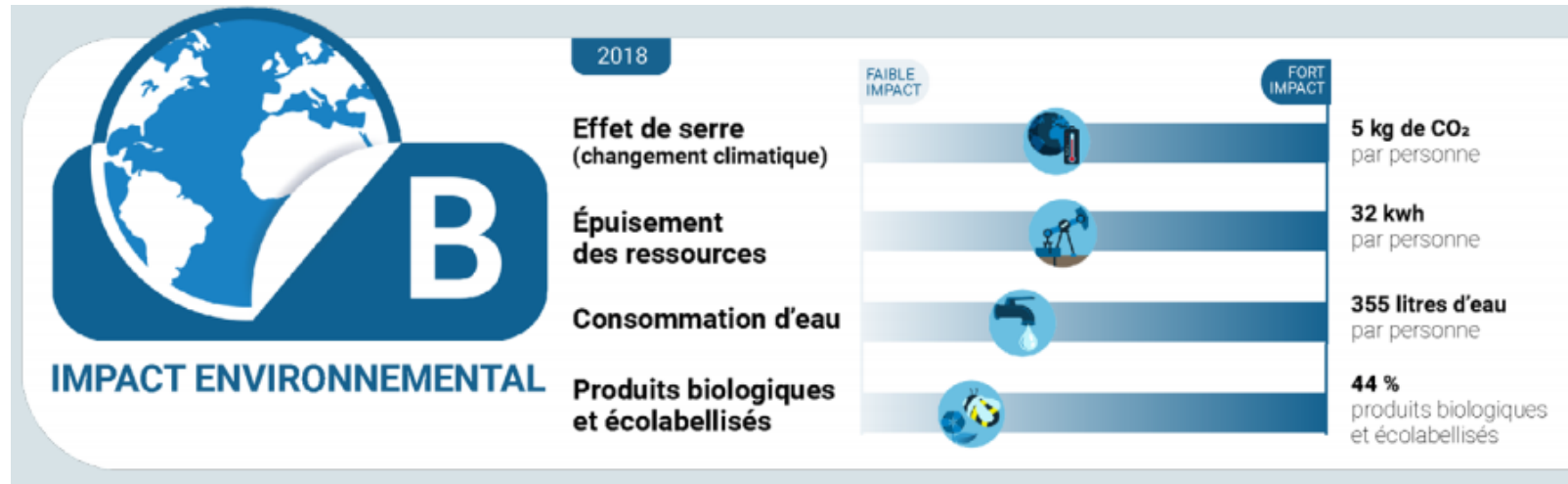


Environmental footprint for hotels

Corporate identify:

- ✓ Blue planet/blue lettering
- ✓ No red colour/ No guilty feeling
- ✓ Icon

Outstanding year



Main indicators :

- ✓ Communicating - on the value
- ✓ Positioning - a scale of values
- ✓ Low/High impact criteria

Lettering for classification

Text (complete format like A4 format):

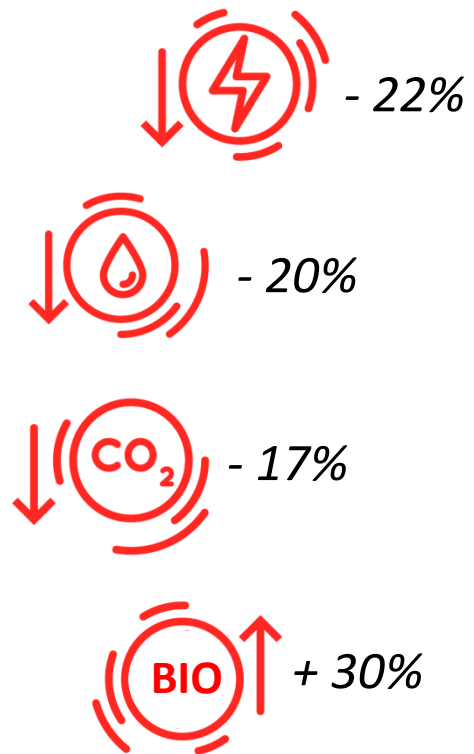
- ✓ Story telling : To illustrate the hotel's approach and implemented action plan
- ✓ Explanation: methodology and additional indicators
- ✓ Awareness of guests, good practices



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Lessons Learnt: results toward deployment?

1. Optimization



↓ € 7%

*Operating costs :
between
0,5 € to 2 €
Per overnight stay !*

2. Next step Innovation

*Objective: divide by 2, 3 or 4
impacts or be positive ?*

*Need for innovations in buildings,
textile, water treatment, energy use
and production*



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Lessons Learnt: results toward deployment?

3. Communicate to the client

Next steps:

Communication on Online Travel Agencies websites

+

Volunteer legislation

=

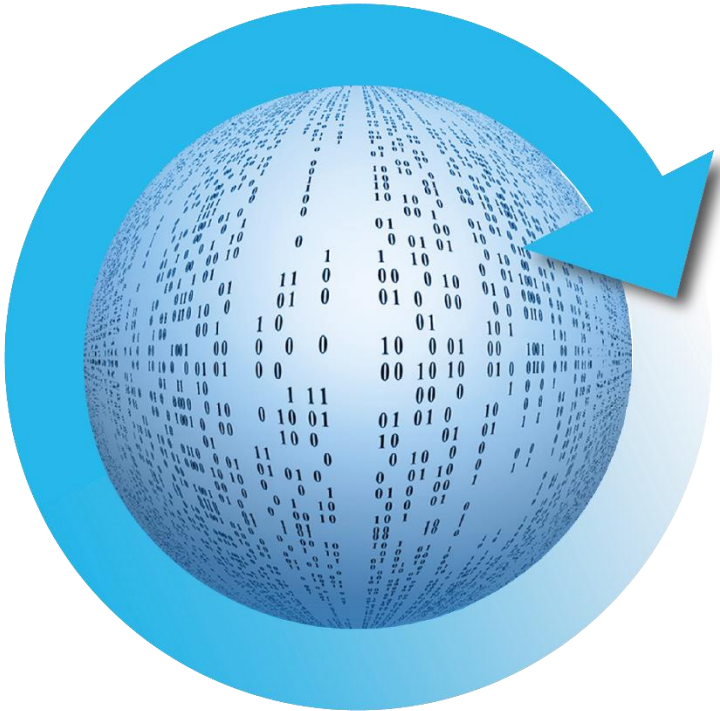
Massification



Thank you!

Hubert VENDEVILLE

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TOURISM & CONSTRUCTION: CIRCULAR ECONOMY SOLUTIONS FOR SDG12

Eduardo Santander
Executive Director

**EUROPEAN
TRAVEL
COMMISSION**

EUROPEAN TRAVEL COMMISSION

SINCE 1948



○ MISSION

Strengthen the sustainable development of Europe as a tourist destination and to increase competitiveness, through knowledge gathering and sharing amongst members and lobbying as well as by establishing a professional marketing platform for the successful promotion of member countries in overseas markets.

○ MANDATE

ETC is responsible for the promotion of Europe as a travel destination.

○ MEMBERS

33 National Tourism Organisations and
10 private organisations (associates)

EUROPEAN
TRAVEL
COMMISSION

Europe: a sustainable destination



Tourism is a major contributor to GDP and employment growth



accommodation
transportation
restaurants
tour operators

spill-over
effect



local communities
cultural heritage
new source of revenue and
employment

Advancing a socially responsible European tourism sector



**accessible
tourism**



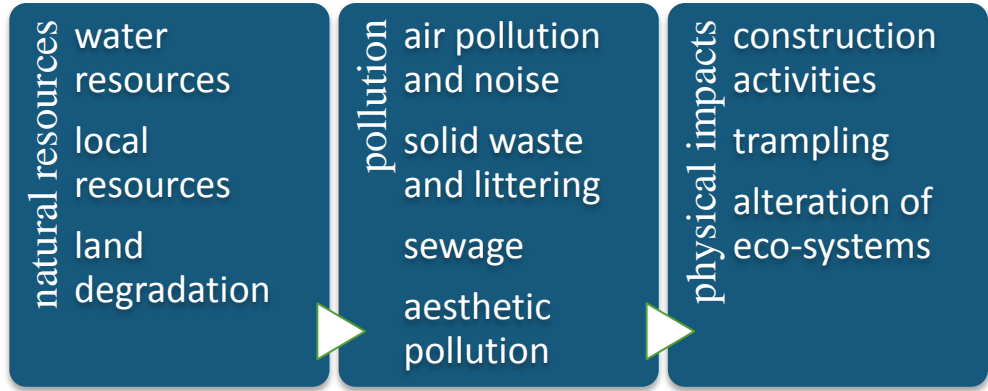
**senior
travel**



Benefiting the
visitor and the
host community

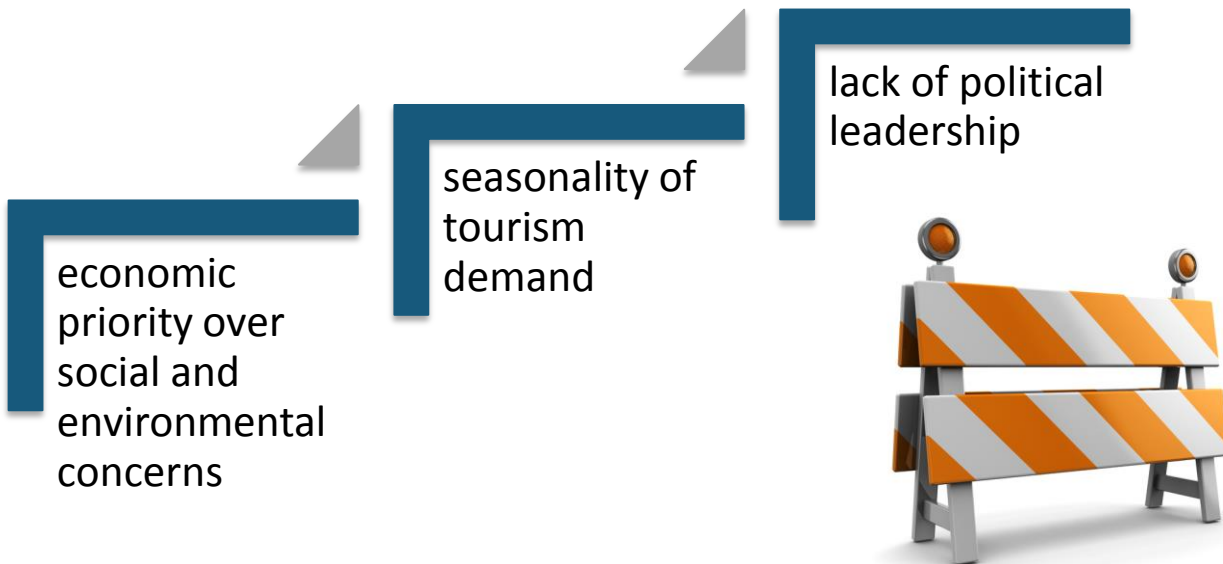
**socio-
economic
segments**

Mitigating the ecological footprint



Source: United Nations Environmental Programme

Barriers to sustainable development



Aims of sustainable tourism

maintain a high level of tourist satisfaction

ensure a meaningful experience to the tourists

raise the awareness about sustainability issues

promote sustainable tourism practices



Source: World Tourism Organization (UNWTO)

Circular economy in tourism

ACCOMMODATION

- BUILDING AND CONSTRUCTION
- REFURBISHING AND DECORATING
- CIRCULAR HOTEL OPERATIONS
- CIRCULAR PRACTICES: MANAGEMENT, STAFF AND GUEST INTERACTION

FOOD SERVICES IN HOTEL RESTAURANTS

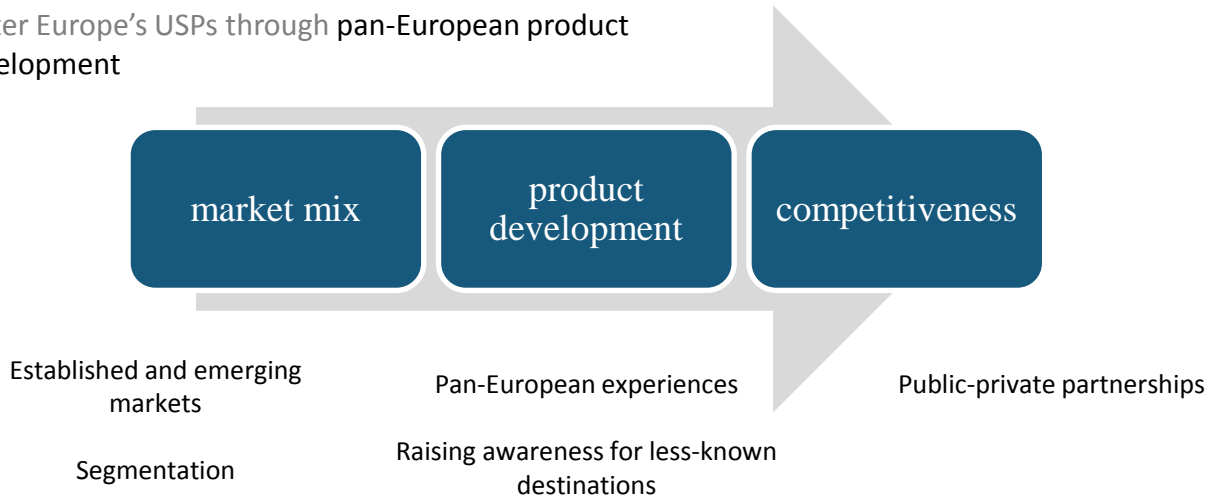
- MATERIAL FLOWS IN HOTEL RESTAURANTS
- FOOD WASTE – BIOLOGICAL MATERIAL FLOWS RELATED TO FOOD AND BEVERAGES
- OTHER MATERIAL FLOWS IN THE HOTEL RESTAURANT SECTOR

THE SPA & WELLNESS INDUSTRY

- SUSTAINABILITY ISSUES IN THE SPA & WELLNESS INDUSTRY
- OPPORTUNITIES FOR IMPLEMENTING CE ELEMENTS WITHIN THE SPA INDUSTRY
- FOOD SERVICES IN HOTEL RESTAURANTS

Promoting sustainable growth of the European tourism sector

- Strengthen the image of 'Destination Europe' in major outbound markets under one common brand
- Foster Europe's USPs through pan-European product development



Thank you!

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www.etc-corporate.org
www.visiteurope.com



2018 EU-China Tourism Year
ecty2018.org



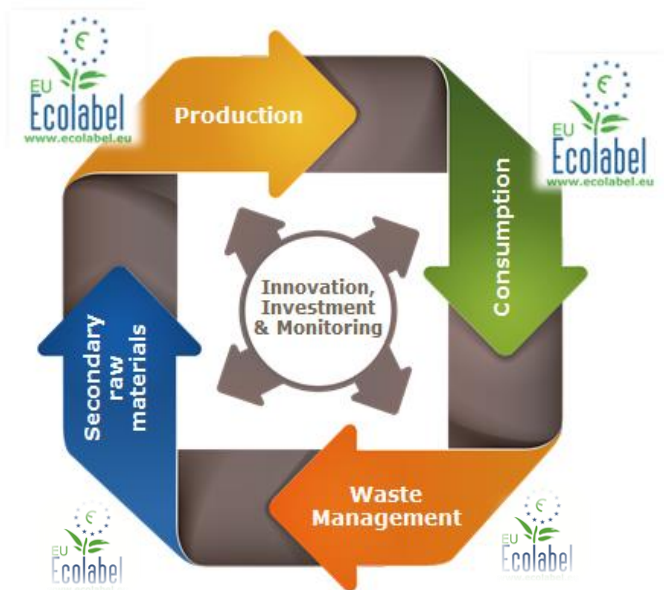
ADVANCING CIRCULARITY SOLUTIONS IN TOURISM AND CONSTRUCTION

PANEL DISCUSSION (PARALLEL SESSION 4)

**European Commission
Environment Directorate-General
Kristine Dorosko (EU Ecolabel team)**

September 2018

A tool for EU consumers to put circular economy in practice!



- A **voluntary scheme established 25 years ago** aiming at promoting products and services with a lower environmental impact
- **The official European Ecolabel**, managed by the European Commission and Member States
- Is the **only EU wide Type 1 Ecolabel** - provides businesses the opportunity to use one label for all their pan-European or global marketing
- **Multi-criteria (pass/fail)** and third party verified criteria addressing main environmental impacts over the products' or services' life cycle
- Provides **consumers** an environmental certification they can trust!



HOW GREEN CAN YOU SHOP?

LOOKING FOR A GREEN HOLIDAY?

Hotels and campsites can display the label, too. They are just as comfortable as traditional accommodation, but use less energy and water and produce less waste, including food waste.

ec.europa.eu/ecat/hotels-campsites

It is easier than you think to make the responsible choice for your home, work or free time. Here are just some of the products with the EU Ecolabel to inspire you to switch to a sustainable lifestyle.

CLEANING-UP

Washing detergent has to work at **30°C**, saving energy and money with each wash.

PERSONAL CARE PRODUCTS

8 million tonnes of plastic enter oceans each year - criteria **ban microplastics** and **limit packaging waste**.

ELECTRONIC EQUIPMENT

Products must be **easy to repair and upgrade** so they last longer.

DO-IT-YOURSELF

Keep your indoor air clean. Paints have **less than half** the solvent emissions of conventional products.

PAPER PRODUCTS

Almost half all trees harvested worldwide become paper. Support **recycled** or **sustainable** sources instead.

FURNITURE

Items must **do their job well** and last. When their useful life ends, they must be **easy to recycle**.

CLOTHING AND TEXTILES

Shoes must be assembled in **safe and fair conditions** - doing good while looking good!



READY TO START SHOPPING?

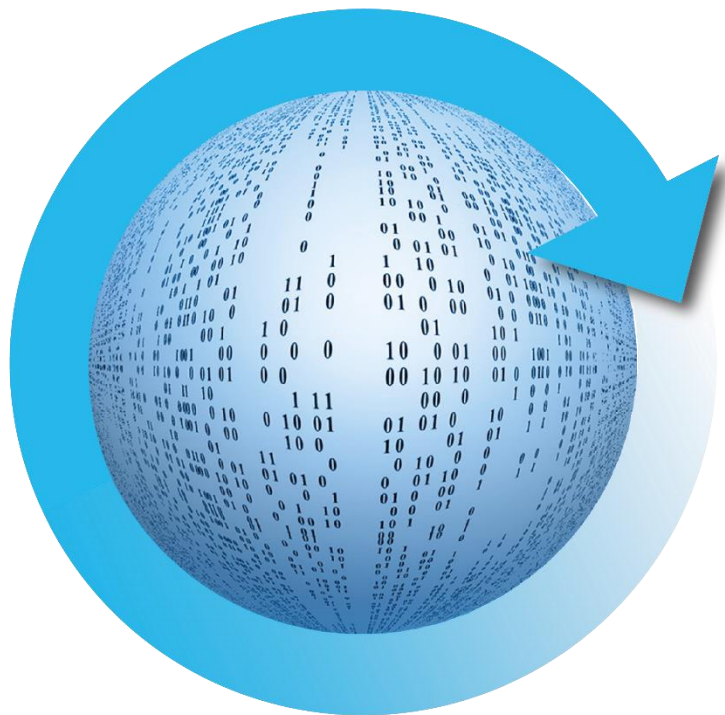
Access the full catalogue of products here: ec.europa.eu/ecat

Revised EU Ecolabel criteria for Tourist accommodation services



- On 25 January 2017, the EC adopted a revised set of criteria for the service group "Tourism Accommodation" (Decision 2017/175/EC), valid for 5 years,
- Targets environmental hotspots,
- Savings for businesses,
- Environmental excellence and corporate social responsibility.

Thank you!



One planet
travel with care



 **slido**
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