PAAS: ENVIRONMENTAL IMPACT, FINANCING & LINK WITH CSRD

16th of May 2024
HOW TO INTERACT & COMMUNICATE WITH US?

**During the Webinar**

Please ask your questions or comments in English

**At the end of the Webinar**

Please take 2 minutes to answer 4 questions, and help us improve your experience

**After the Webinar**

change@pacct-sustainability.org

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Re-Live our webinar on our website
Today’s speakers!

Dimitris KARAMITSOS
Senior energy efficiency business developer specialist and team lead

Simon LUTZENBERGER
Head Sustainable Finance Solutions Switzerland

Dominiek PLANCKE
CEO

BASE
CHG Meridian
ETAP Lighting International
Environmental impact and PaaS: Overall view with BASE experience
Energy demand projected to increase by 50% by 2050.

Renewable Energy and Energy Efficiency offer 90% of mitigation measures to reduce emission and EE can deliver 35% of the cumulative CO2 savings by 2050.

Circular economy could reduce global greenhouse gas emissions by 39% by 2050 compared to the linear economic model.*

This will require at least USD 2.4 trillion annual global investment to stay below 1.5°.

*Source: Ellen MacArthur Foundation
Frequency of actors

Market barriers:
- CAPEX
- Performance uncertainties
- Complexities of system and circularity integration
- Lack of expertise
- Priority of investment
Product-as-a-Service
Why shifting to a PaaS model?
Facing 2 mega-challenges

Global Climate change
Update april 2022

Depletion of natural resources
Estimated remaining world supplies of non-renewable resources
Our Brand Promise

Tomorrow's light:
Innovative lighting, delighting our customers.

Tomorrow's light:
Lighting with a 'light' footprint, so that our lighting will not weigh on the future of the planet.
C-LaaS: a strong enabler of a circular economy

For a fixed periodic amount we guarantee a pre-defined lighting performance and energy consumption optimised for circularity.

Offering owners an EFFORTLESS, WASTELESS and ENDLESS experience.
A video to illustrate

C-LaaS Project
Sint-Paulus College
Waregem

20% less luminaires
80% refurbished luminaires
70% energy savings
20 years performance contract
Financing PaaS models
PUSHING SUSTAINABILITY THROUGH CREATIVE FINANCIAL SOLUTIONS.

Simon K. Lutzenberger
CHG Meridian group

Estd. 1979
headquarter: Weingarten, Germany

CHG-MERIDIAN Schweiz AG is operating in Switzerland and Liechtenstein out of our offices in Baden AG.

CHF 9.8 billion (31.12.2022)
Total technology portfolio financed and managed

30 country subsidiaries with 1,300+ employees
providing service coverage in 190+ countries worldwide
> 12,500 customers worldwide

1,000,000+
IT assets were refurbished and remarketed in 2022

98%
of all returned assets receive a second product life from CHG-MERIDIAN

CERTIFIED
ISO 9001, ISO 14001
ISO 27001, BSI B15.1
ITIL 4, PRINCE 2
SCRUM & KANBAN
DESIGN THINKING

40+
Years of Experience
We have been committed to Lifecycle Thinking since 1979. For us, this means extending product lifecycles through refurbishment and reuse.

We consider ourselves part of the circular economy. Through our business model we are helping to conserve resources and mitigate climate change.”
The importance of eco-design
Our Brand Promise

- Recycle
- Remanufacture
- Refurbish
- Repair
- Use

Wasteless
Effortless
Endless
Design for project lifecycle

LIGHTING DESIGN → FINANCING → INSTALLATION COMMISSIONING → MAINTENANCE CURATIVE/PREVENTIVE → RENOVATION

- Required lux levels
- Actual lux levels
- Power consumption

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**L70 @ 50kHrs**

- 800: 140%
- 700: 120%
- 600: 100%
- 500: 80%
- 400: 60%
- 300: 40%
- 200: 20%

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**L70 with CLO @ 50kHrs**

- 800: 140%
- 700: 120%
- 600: 100%
- 500: 80%
- 400: 60%
- 300: 40%
- 200: 20%

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**ETAP’S R&D FOCUS**

**L99 @ 50kHrs**

- 800: 140%
- 700: 120%
- 600: 100%
- 500: 80%
- 400: 60%
- 300: 40%
- 200: 20%

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Prolong useful lifetime

A circular product design reduces waste from the start

Tomorrow’s light is **ENDLESS**
Design for project lifecycle

LIGHTING DESIGN → FINANCING → INSTALLATION COMMISSIONING → MAINTENANCE CURATIVE/PREVENTIVE → RENOVATION

Our U3 OFI range:
(Optimized For Interdistances)

Office 28.8 x 14.4 m
32 pcs of U3352/LEDN770S
-55% LUMINAIRES
544 lux
0.74 W/m²/100 lx

Solution optimized for Interdistances
A circular product design reduces waste from the start
Tomorrow’s light is WASTELESS
Design for project lifecycle

LIGHTING DESIGN ➔ FINANCING ➔ INSTALLATION COMMISSIONING ➔ MAINTENANCE CURATIVE/PREVENTIVE ➔ RENOVATION

1ST GEN E8
13 Kg
118 lm/watt
24,450 lumen
IP20

NEW E8
10 Kg
167 lm/watt
24,350 lumen
IP65

3 anti-drop screws give access to all electrical connections for easy installation and servicing.

‘sealed for life’ design

Driver and gasket can be easily replaced. Unique for an IP65 luminaire.

Luminaires are easily accessible
A circular product designed for easy maintenance
Tomorrow’s light is EFFORTLESS
Minimally invasive renovation solutions: refurbishment
Measurement to guide customers and employees

The **product circularity score** indicates how well our products fit into the circular economy based on our endless, effortless and wasteless principles.

The **lifetime efficiency score** compares the energy and material impact of our luminaire with a reference product in the market.

www.etaplighting.com/en/tomorrow’s-light
Rule of thumb for good green products

1. Design for a long useful life
   • plan for upgrades
   • earn margins from supplies (consumables, spare parts and maintenance)

2. Plan for short usage cycles
   • repurposing has to be simple (limited customization effort, sufficient volume in secondary market)
   • enable flexible usage models (short term rentals, pay-per-use / aaS)

3. Understand your risks
   • long-term demand
   • innovation cycles
What creative financial models can do for you

A great new set of opportunities

Enabling short contract terms

Enabling profitable business on refurbished products

Creating recurring revenue

Ensuring a secondary use for the assets
Challenges & Difficulties
New risk balance

- Data collection
- Long term contracts
- Supplier insolvency

Data Security
Lock in
Discontinuation of Services

Risk of loss of Ownership
Technical and performance Risk
Volume Risk
Financial Risk

- Access right
- Service Level Agreement
- Pay per use/outcome
- Operational changes
- Partners selection
- Customer credit risk
- Impact on Balance Sheet on the short term (the fish model)
Examples

E-bikes & E-trottinettes

- Highly mobile unit
- Subscription model
- Low risk per unit
- Outsourced manufacturing
- Short renting duration
- Climate impact / negative profits

Cooling as a Service Plants

- Partly mobile units
- Pay per output
- Asset controlled by provider
- Incentive to optimize life cycle
- High risk per unit (high investments – long contracts)
- Experts in systems
CaaS for Dairy Factory by Energy Partners, South Africa

**Context:** Plant expansion requiring more refrigeration. (retrofit and consolidation)

**Solution:** Two-stage ammonia system with solar PV and heat recovery for hot water. 10MW plant with 8.8 M Eur investment. Possible extension to 15MW. The facility is in South Africa, KwaZulu-Natal.

**Benefits:**
- Decreased energy consumption by 40%
- Saving greenhouse gas (GHG) emissions of 2100 tons/year through solar,
- Efficiency gains and hot water recovery from the refrigeration system add a further 4,470 tons/year.

Examples

Applying CaaS in industry

www.caas-initiative.org/case-studies
Stakeholders

Financier

Financier Contract(s)

PaaS provider

PaaS Contract

PaaS Service

Customer

Recycler

Supplier Contract(s)

Sub-suppliers / Manufacturers

The PaaS provider

- Original Equipment Manufacturer (OEM)
- Energy Service Company (ESCO)
- Distributor
The transformation journey towards full circularity

- Different way of selling
- Different way of developing
- Different way of producing
- Different way of managing business risks
Challenges on the road to creative financial models

Establish a secondary market
- slow depreciation
- control market pricing and availability (at least to a degree)

High project cost is a problem for short contract terms
- optimize your product for low effort (de-)installation

Ensure a long useful lifetime
- spare part availability
- maintenance services
- software support AND transferability of licenses
- build a brand that customers trust
Product strategy is king!
No creative financing without solid strategy

Design for a long useful product life
• more margins from upgrades, spare parts and supplies

Plan for short usage cycles
• low effort for adds/moves/changes

Establish upgrade routes throughout your portfolio
Q&A (10min)

Two possible ways to ask your questions

Raise your hand and you will interact by video directly with the speakers

Ask your questions in the chat
PaaS and EU Regulations
PRODUCT-AS-A-SERVICE is everywhere in the EU regulation on sustainability

<table>
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<th>GREEN DEAL</th>
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<td>ACTION PLANS</td>
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<td>New Circular Economy Action Plan (2020)</td>
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<td>Others...</td>
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**GREEN DEAL**

**ACTION PLANS**
- New Circular Economy Action Plan (2020)
- Others...

**STRATEGY**

**DIRECTIVES & REGULATIONS** - BINDING -

**IMPLEMENTATION**
- Funds
- Networks
- Labels, Certifications
PRODUCT-AS-A-SERVICE is everywhere in the EU regulation on sustainability

**GREEN DEAL**

**ACTION PLANS**
- New Circular Economy Action Plan (2020)
- Others...

**DIRECTIVES & REGULATIONS - BINDING -**
- CSRD
- ESRS

**Funds**

**Networks**

**Labels, Certifications**

**TAXONOMY**

CSRD: Corporate Sustainability Reporting Directive (CSRD) requires companies to report on the impact of corporate activities on the environment and society, and requires the audit (assurance) of reported information.

ESRS: European Sustainability Reporting Standard
PRODUCT-AS-A-SERVICE is everywhere in the EU regulation on sustainability

GREEN DEAL

ACTION PLANS
- New Circular Economy Action Plan (2020)
- Others...

Directives & Regulations - BINDING -

CSRD

ESRS

Funds

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Labels, Certifications

TAXONOMY

CSRD: Corporate Sustainability Reporting Directive (CSRD) requires companies to report on the impact of corporate activities on the environment and society, and requires the audit (assurance) of reported information.

ESRS: European Sustainability Reporting Standard. "Product As A Service" explicitly mentioned in the text.
The environmental objectives to which business activity can contribute

- Mitigation of climate change
- Adaptation to climate change
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems

It is a classification system that allows anyone to see if a business/activity contributes to 1 or more of the 6 EU Environmental objectives, and to what extent.
PaaS in the Taxonomy

Annex 2, dated 27th June 2023, defines circular models eligible to the Taxonomy:

« Product-as-a-Service and other circular use- and result-oriented business models »

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The activity provides the customer (physical or legal persons) with access to, and use of product(s), while ensuring that the ownership remains with the company providing this service, such as a manufacturer, specialist or retailer. The contractual terms and conditions ensure that all the following sub-criteria are met:

(a) there is an obligation for the provider of the service to take back the used product at the end of the contractual agreement;

(b) there is an obligation for the customer to give back the used product at the end of the contractual agreement;

(c) the provider of the service remains owner of the product;
Two possible ways to ask your questions

1. Raise your hand and you will interact by video directly with the speakers.
2. Ask your questions in the chat.
Q&A and conclusion
Q&A (15min)

Sequence 1
Environmental impact and PaaS: Overall view with Base experience

Why shifting to a PaaS model?

Financing PaaS models

Sequence 2
Importance of eco-design

Challenges & Difficulties

Sequence 3
PaaS & EU Regulations
How to reach us?

Our website
Replay & presentation in the “Program” section

Our LinkedIn page

Our emails
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gurvan.guennec@pacct-sustainability.org
francois.johnston@pacct-sustainability.org
Register to our next webinar on the 25th of June from 10:30am to 12:00pm (CET)

Financing PaaS models

- Asset financing
- Risk sharing
- Use cases
It will only take 2 minutes!

Thank you!