Edge computing to support sustainable and circular economy

Your friendly neighbourhood IT solution

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“There will be 41.6 billion connected IoT devices generating 79.4 zettabytes (ZB) of data in 2025.”

Cloud is not designed to directly handle this scale.

Source: IDC
“The Edge Will Eat The Cloud”
At the Edge:

Everything will be connected, Everything will compute, Everything will be understood

It’s the **information** that matters
Edge is the solution for scale.
Simplicity matters.
Circular IT.
Smart lighting and traffic monitor

20 current cities, including:
- Porto
- Florence
- Berlin
- Geneva
- Zurich
- Basel
- Bern

30 more under deployment, including:
- Paris
- London
- Barcelona
Principle

Low traffic
Low light

Medium traffic
Medium light

High traffic
Full light
Smart Street Lighting Solution - Edge application
Information in action.

In this dashboard you can visualize real-time traffic data from Ankerru N49a in Antwerp, BE. These data have been captured by the VolumLight™ solution developed by Schreder and SixSq, which has been selected to be a pilot within Synchronicity - a global market, where cities and businesses develop IoT and AI-enabled services to improve the lives of citizens and grow local economies.

Here you’ll find the statistical information about traffic density which is used to dynamically adapt the luminosity of the corresponding city street lights.
Information in action.

Synchronicity

In this dashboard you can visualize real-time traffic data from Av. De Sistancia Pais in Porto, PT. These data have been captured by the VolumLight™ solution developed by Schreder and SixSq, which has been selected to be a pilot within Synchronicity - a global market, where cities and businesses develop IoT- and AI-enabled services to improve the lives of citizens and grow local economies.

Here you’ll find the statistical information about traffic density which is used to dynamically adapt the luminosity of the corresponding solar-powered lights.

Energy consumption & savings

Energy consumption & savings stacked

Energy consumption & savings per weekday
Creating value for all edge participants.

- **Software Vendors** – ease and acceleration of go-to-market and monetisation.

- **System Integrators (SI)** - coherent global control, including edge and cloud with app marketplace.

- **Edge Hardware Manufacturers** - transform hardware into a smart edge device, connected to the Nuvla.io eco-system.

In the last 12 months:

- **>50 PB** Data processed at the edge
  Data that would otherwise be lost.

- **>1 PB** Data transferred to clouds
  High quality data for more insights.
When I need the data?

All events detected by edge apps deployed remotely from App Store
Conclusion.

1. Edge computing is key in making IT sustainable and contribute to a circular economy
2. Information matters → local transformation is required
3. In cities, edge infrastructures could become shared/public/public-private assets
4. Governance matters
5. It’s a lego challenge, as we have all the bricks: little risk!
6. We are committed to realise this vision, but need public and private partners
Thank You

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