



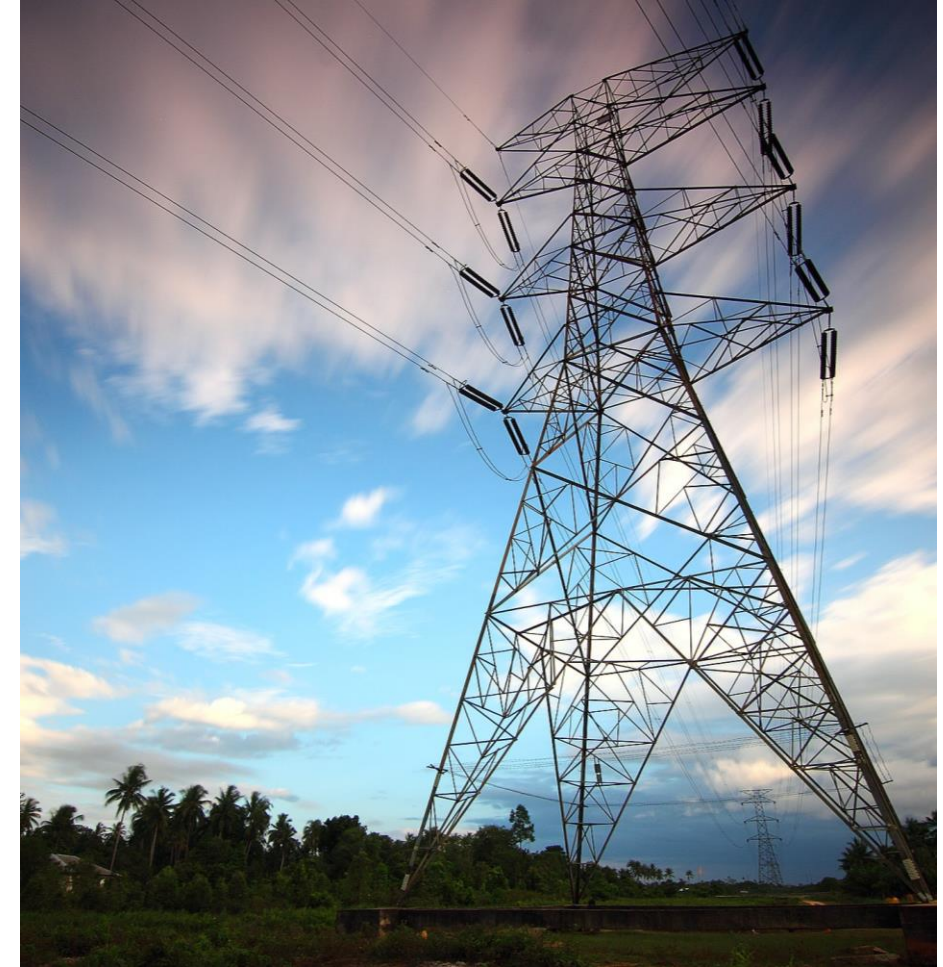
Web Energy

Energy, water, gas monitoring and forecasting platform

A.Kiourkos

Energy Management

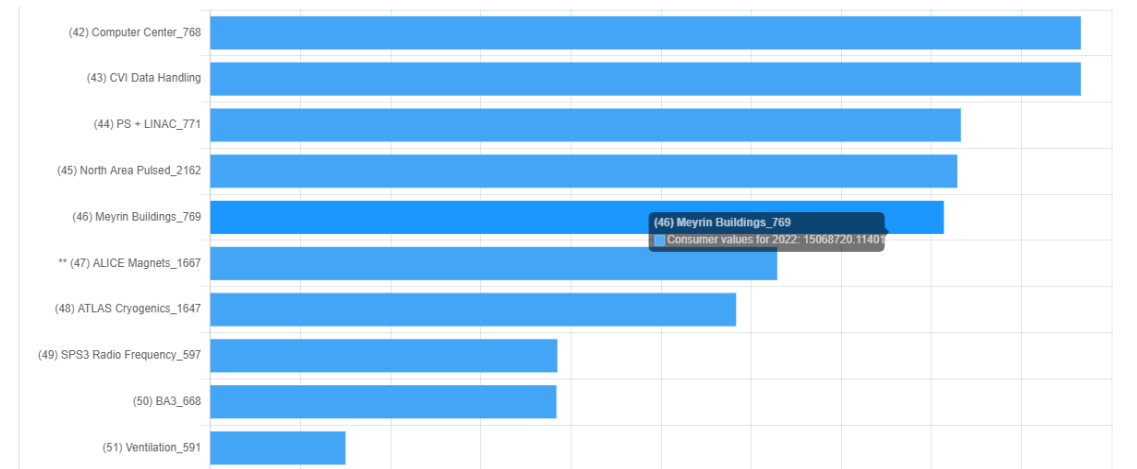
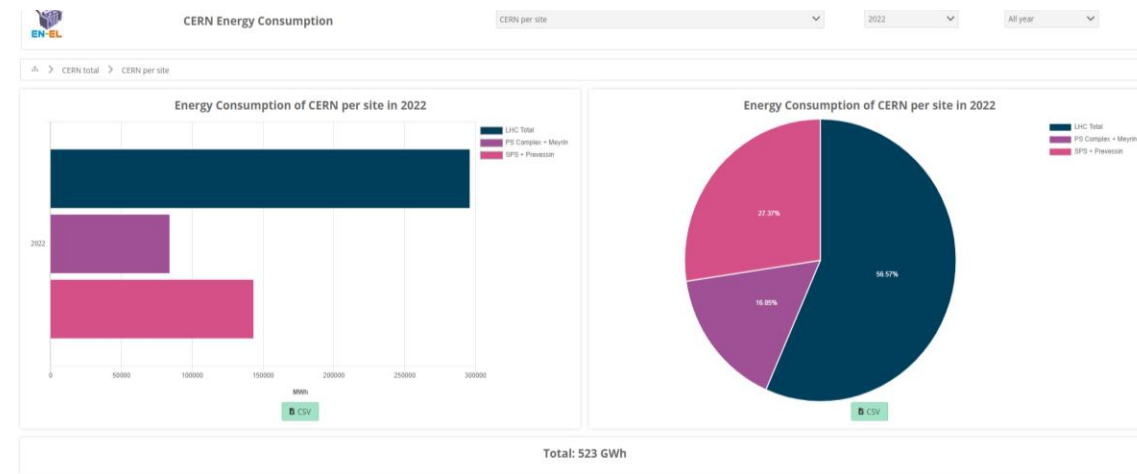
- The process of tracking and optimizing energy consumption
- Collect and analyse energy consumption data
- Define objectives and energy targets in order to drive action and improve efficiency
- Identify optimizations
- Improve energy footprint and reduce CO2 emissions
- Identify significant energy uses and reduce costs
- Give visibility to the energy consumption
- Make users aware of their environmental footprint



Web Energy

- Used to manage the energy consumption at CERN
- Generates energy consumption forecast based on accelerator schedule
- Enables to identify early, deviations from forecasted consumption
- Assists with the management of the electricity contract
- Allows to evaluate assumptions
- Findings discussed at the EMP
- Gives visibility of the energy consumption to the users

<https://energy.cern.ch>



Web Energy

WebEnergy by EN/EL

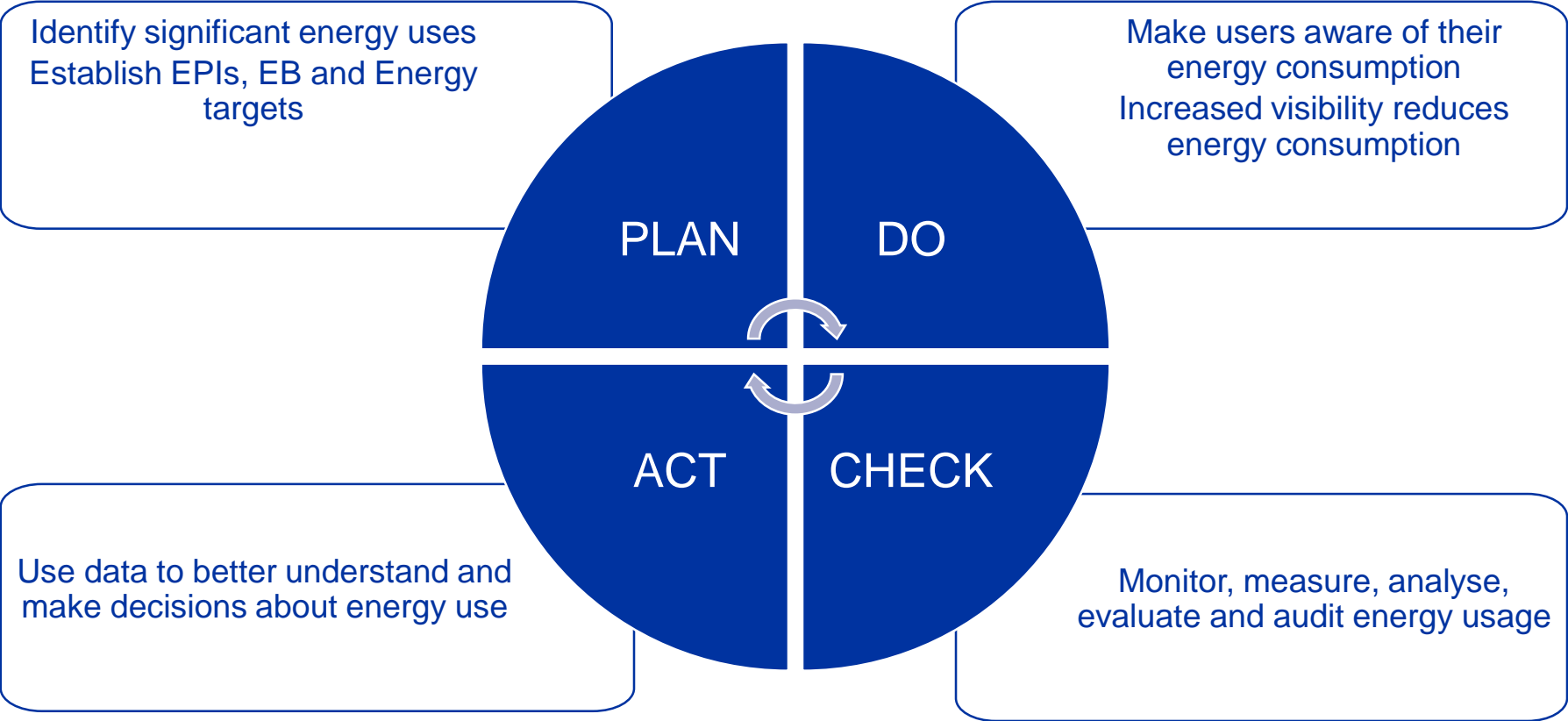


CERN Energy Consumption

- Proven, turnkey solution
- Contains the lessons learned from CERN's energy management team
- Lowers the technical barriers for implementing an energy management system
- Can be deployed to the cloud
- Can be used in different environments, from SMEs to large organizations
- Suitable for energy monitoring in buildings, sites, industrial facilities, airports etc.

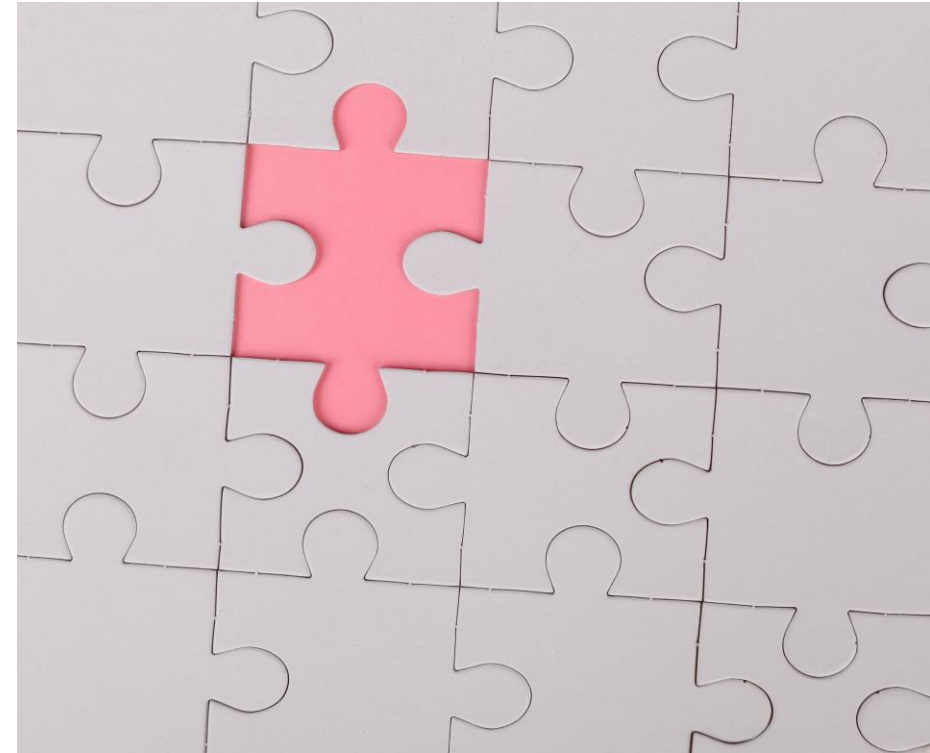
How will it help?

Enables continuous improvement via assisting in the all steps of the PDCA Cycle (ISO50001)



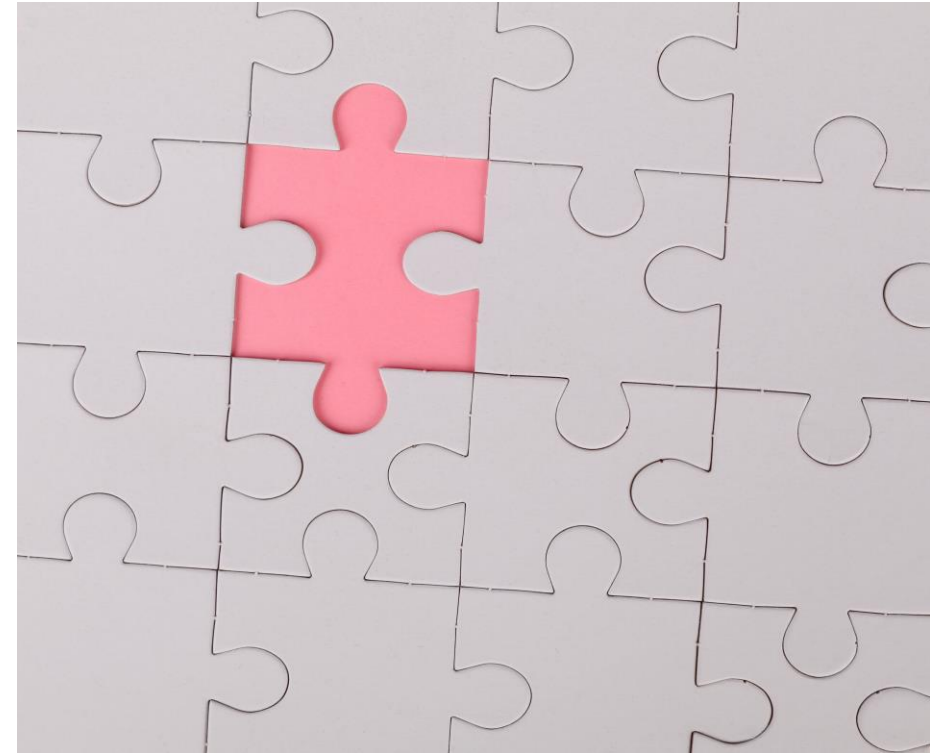
What is required?

- Make Web Energy a complete Energy Management Solution
- Add support for Gas and water
- Incorporate Energy Performance Indicators and Energy Baseline
- Advanced reporting (custom reports, virtual invoices etc.)
- Support generic data sources (currently CERN specific)
- Customizable look and feel
- Generic documentation



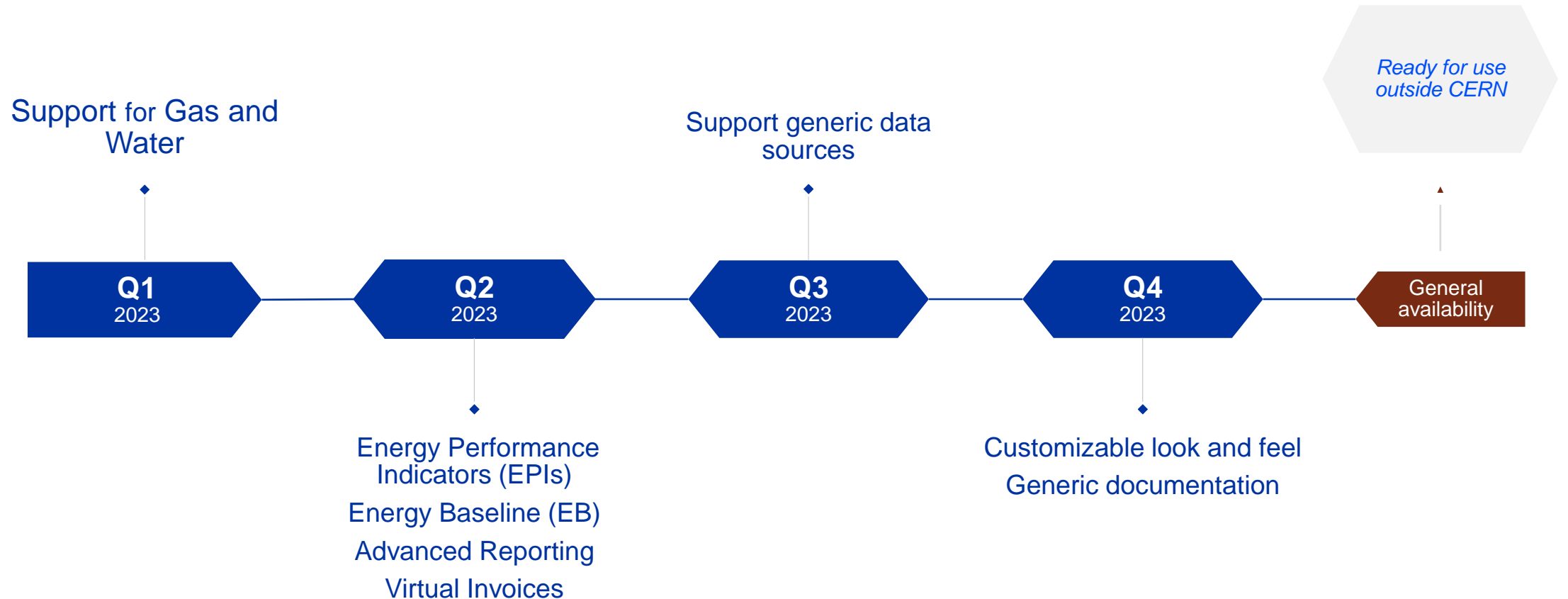
Nice to have

- Support for renewables
- CO2 emissions
- Advanced analytics using ML
- Electric car fleet management



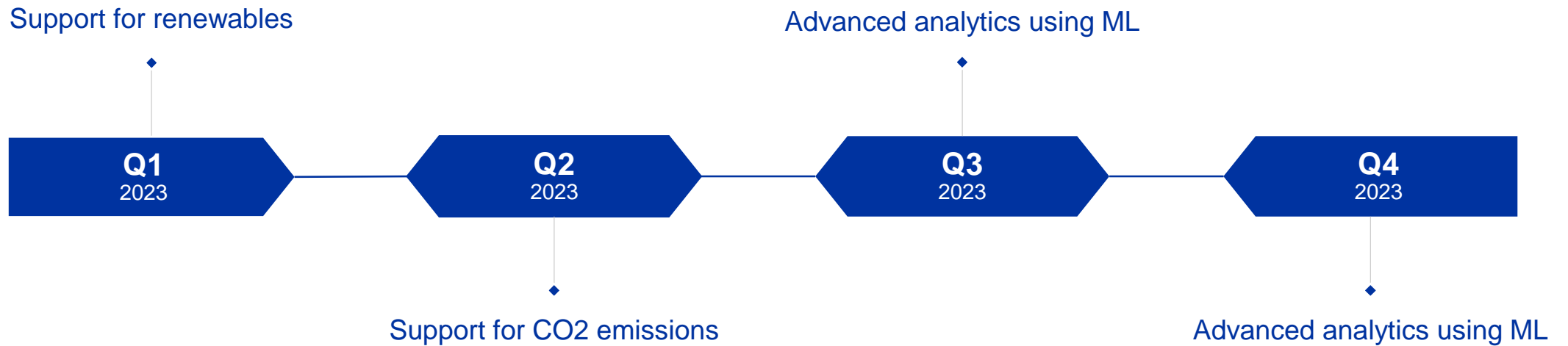
Timeline - Year 1

Resources: 1 FTE from the graduate program

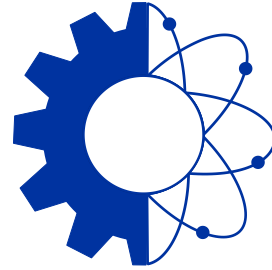
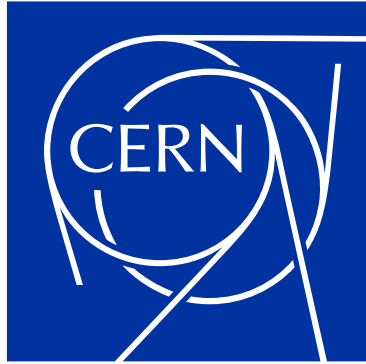


Timeline - Year 2

Resources: 1 FTE from the graduate program



Questions?



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