

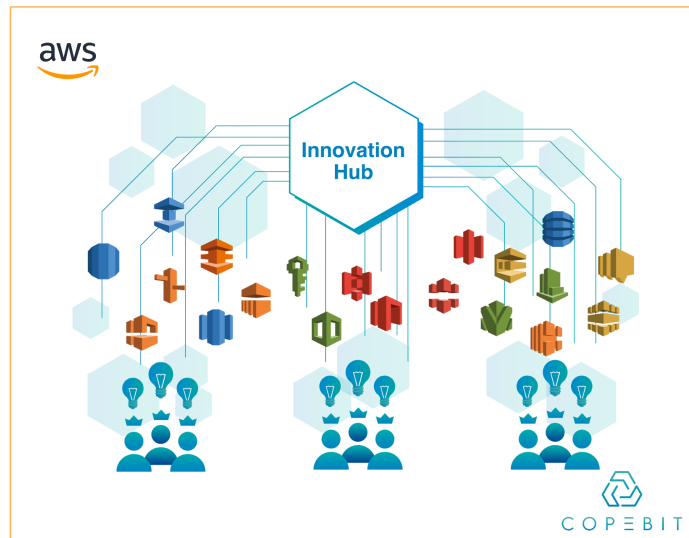
# AWS Innovation Hub

Together into the future: Cloud technologies for the energy sector — supported by copebit's AWS Innovation Hub



## Overview / Problem definition

In the modern energy sector, there is a growing demand for the integration of innovative technologies to make generation, distribution, and customer service more efficient. copebit's Innovation Hub acts as a central platform that provides energy providers with access to advanced digital solutions for specific sectors such as **hydropower, lighting** (public and private lighting infrastructure), **solar energy, wind power, biomass, and grid operations**. The copebit **Innovation Hub offers**



**companies in the energy sector the opportunity to deploy state-of-the-art technologies quickly and in a controlled and secure manner.** A particular advantage is the comprehensive support — from consulting to implementation in areas such as **technical services, energy trading, and innovation & development** — while strictly adhering to the highest standards and security requirements.

copebit's Innovation Hub is a **private cloud platform specially developed for the Swiss energy sector** that offers energy companies an immediately usable digital infrastructure. It enables **rapid access to new technologies without the need for an in-house setup and supports projects in areas such as hydropower, solar energy, wind power, and grid operation**. The Hub offers direct access to state-of-the-art digital services, tailored to the needs of the energy sector.



## Benefits / Added value

Technology challenges in the energy sector	AWS Innovation Hub
Energy companies must meet strict data protection and security requirements, especially for sensitive operational data, customer data, and critical infrastructure data.	Implementation of security solutions to ensure data security and compliance, including identity and access management, threat protection, and key management, with support for AWS services such as IAM, KMS, Shield, CloudHSM, and more

Energy companies increasingly need access to powerful AI and ML technologies, but these are often very resource-intensive. These technologies support the optimization of processes in areas such as <b>load forecasting, grid stability, maintenance predictions, and energy trading</b> and are crucial to increasing efficiency and competitiveness.	Implementation of <b>machine learning tools</b> to enable research teams to develop and train their own models without having to invest in expensive hardware and use <b>generative AI services</b> to quickly and cost-effectively support proof of concepts, MVPs, and development projects, with support for AWS services such as Bedrock, SageMaker, and more
There is a lack of flexible and scalable <b>high-performance computing capacity in the energy sector, as in-house HPC (High-Performance Computing)</b> solutions are costly and complex. However, such computing capacities are crucial for processing large amounts of data from areas such as <b>energy forecasts, grid simulations, weather-dependent production planning, and optimization of generation and consumption strategies.</b>	Implementation of high-performance computing services to perform complex computations and analytics, including efficient resource utilization, load balancing, and automated task processing, with support for AWS services such as EC2 Spot Instances, Elastic Load Balancing, and AWS Batch
Energy companies face the challenge of efficiently managing, analyzing and archiving huge amounts of data for the long term while complying with strict legal data protection requirements. This includes data from areas such as <b>generation, grid operation, consumption analyses, and maintenance forecasts, which are essential for the operation and optimization of the energy infrastructure.</b>	Implementation of cloud services for scalable data storage, big data processing, and analysis as well as data protection-compliant and secure solutions, with support for AWS services such as S3, Glue, Redshift, and others



## Offer

The copebit Innovation Hub enables users to apply leading cloud technologies immediately and in a controlled and secure manner. The particular advantage lies in the seamless support from consulting to practical implementation — always in compliance with the highest security standards and compliance regulations.

- **AWS Innovation Hub:** This is a managed AWS platform service. Customers and their specialist departments receive their own compartments, which are provided specifically for **testing, proof-of-concepts (PoCs), or development projects**. This allows customers to generate **added value** immediately and start their **digitalization or innovation projects** without burdening internal IT resources.

	Innovation Hub Basic	Innovation Hub Advanced	Innovation Hub Premium
Access to the platform "Region Switzerland"	X	X	X
Compartments	10	30	50

Configured basic services copebit standard VPC, logging, security, monitoring	X	X	X
AWS Services: <b>"IaaS"</b> EC2, S3, EBS, RDS (Basic), VPC, Elastic Load Balancing (ELB), CloudWatch, IAM	X	X	X
AWS Services: <b>"CaaS, PaaS, FaaS"</b> Elastic Beanstalk, RDS (Advanced), DynamoDB, AppRunner, ECS, EKS, ECR, Lambda, API Gateway, Step Functions, CloudFormation	n/a	X	X
AWS Services: <b>"GenAI, Big Data, Advanced Services"</b> SageMaker, Bedrock, Comprehend, Rekognition, Redshift, EMR, Glue, Kinesis, Athena, IoT Core, Greengrass, AWS Shield Advanced, Macie, Config	n/a	optional	X
<b>Consulting in the areas of MVP, PoCs, use cases, realization, implementation and infrastructure. "AWS Facilitator by copebit"</b>	optional	optional	optional
S2S Internet VPN and / or client VPN connection	X	X	X
Technology training	n/a	2h/month	4h/ month
Support compartments	best effort	best effort	5x8 (4h response time)
Platform operation	7x24h	7x24h	7x24h
Platform support	best effort	best effort	5x8 (4h response time)

- **Basic:** Ideal for beginners in the field of cloud technologies — suitable for first steps together with an experienced partner, including training and targeted ramp-up of the internal organization
- **Advanced:** Includes all basic services and is suitable for customers who already have their own use cases and carry out proof of concepts (PoCs). Includes extended consulting for implementation
- **Premium:** Includes all the services of Basic and Advanced and is aimed at customers with increased requirements in the areas of support and operation. It is suitable for the development of MVPs and PoCs with integration into existing on-premise infrastructures.



## Costs

**The standard services are available at a fixed price.** Not included are the recurring costs for the AWS services, which are charged separately. However, many functions and products can be tested as part of the AWS Free Tier (i.e. without additional AWS costs). As an AWS Advanced Consulting Partner, copebit offers its customers attractive funding

opportunities as part of the AWS Funding Program. Prices for individual services are available on request.



## Contact/ copebit AG

**At copebit, we have extensive experience and the necessary expertise in all areas to support your business transformation. Our focus is on AWS cloud technologies, which form our core competence as an AWS Advanced Consulting Partner.**



copebit AG is a leading Swiss IT company specialising in cloud consulting, development, engineering, and operation. We are experts in the latest cloud technologies and project management, from HERMES 5 to agile frameworks such as SCRUM and SAFe. Our goal is to deliver exceptional results and build successful partnerships with our clients.

### Customer references / success stories

- Landing zones: [Customer case: Appenzell Ausserrhoden Informatik](#)
- GenAI: [Customer case: HGC-Cubotoo](#)
- Data-based services: [Customer case: autoSense](#)
- Container EKS: [Customer case: Simpego](#)
- EKS / DocDB: [Customer case: Sly](#)
- [Further references](#)
- [Testimonials from customers](#)



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