Digitalisation in Hydropower 2025

Use of advanced digital technologies and tools







Update: 11 April 2025

vgbe/Enerjisa Üretim Expert Event Digitalisation in Hydropower 2025

The 9th vgbe Expert Event "Digitalisation in Hydropower 2025" in cooperation with Enerjisa Üretim will provide again a comprehensive overview of important topics regarding digitalisation in hydropower dealing mainly with the results and practical experiences of newly developed and implemented innovative digital measures, tested products and tools from the view of the operators. Topics of the lectures are:

- Asset Management
- Workforce Management
- Advanced Data Analytics
- Inspection & Measurement
- Visualisation (VR, AR, 3D GIS ...)

Based on practical examples, you will gain insights into how to implement and apply digital solutions successfully.

EVENT VENUES

Optional: 15 Oct. 2025 | Visit of Senkron ROC – Remote Operation Control Center

Enerjisa Üretim A.Ş., Head Office Barbaros, Lale Sok. Ağaoğlu My Office İş Merkezi No:1/16, 34746 Ataşehir/İstanbul

First day: 16 Oct. 2025 | Conference

Adana Hilton SA Sinanpaşa, Hacı Sabancı lv. No: 1 01220 Yüreğir/Adana, Türkiye

Second day: 17 Oct. 2025 | Site visit with stations

Köprü Hydropower Plant (37°37'12.9"N 35°36'42.1"E) Ergenuşağı Köyü Gökdere Mevkii Kozan/Adana

CONFERENCE LANGUAGE AND OFFICE

The conference language is English and the office will be open from 08:00 on 16 October 2025.

EVENING EVENT

On Thursday, 16 October 2025, starting at 19:30, all conference participants are invited to a get-together at the event venue.

CONFERENCE TICKET

Participation *)	Single ticket	Package ticket
	(1 participant)	(3 participants)
vgbe members	€ 850	€ 2,200
Non-members	€ 1,100	€ 2,900
Universities, Authorities	€ 400	€ 1,000

*) Participation fee excluding Türkiye VAT (20 %)

The participation fees include the conference presentations (after the conference), coffee breaks, lunches, participation in the Evening Dinner event and bus shuttle on 17 October 2025. All participants of the conference are requested to register online. It is not possible to accept credit cards or currency on-site at the conference office.

Participant invoices will be issued in Turkish Lira using the exchange rate applicable on the invoice date.

EXHIBITION AND SPONSORING OPPORTUNITY

Promote your company activities directly in the conference room on 16 October 2025 by booking our exhibition package (€ 450.- excluding Türkiye VAT, 1 roll-up + own brochure display).

ONLINE REGISTRATION

https://register.vgbe.energy/36025/

vgbe energy e.V.

Deilbachtal 173 45257 Essen, Germany Mr. Jens Paluszkiewicz t +49 201 8128-202 e ygbe-digi-hpp@ygbe.energy



<u>i-npp@vgbe.energy</u> the

Have direct access to the event website.

PRIVACY POLICY & GENERAL TERMS

Detailed information on data protection as well as the general terms and conditions can be found here: i <u>https://t1p.de/vgbe-vsAGBen</u> (external shortlink)

MEDIAPARTNER AND COOPERATION



vgbe/Enerjisa Üretim Expert Event **Digitalisation in Hydropower 2025**

Enhanced digital controls can boost hydropower performance, cut costs, and optimise asset management. These systems aid decision-making and enhance operational efficiency, which is crucial as many hydropower plants require refurbishment and modernisation in the coming years. Based on practical examples you will gain insights into how digital solutions are already successfully implemented and applied.

PROGRAMME in ISTANBUL (OPTIONAL)		
Note: If you are attending this progamme item, you will need to book a flight from Istanbul to Adana to attend the conference on October 16, 2025.		
As an additional and optional opportunity all participants are invited to visit the headquarter of Enerjisa Üretim to gain an insight into the work in the Senkron ROC – Remote Operation Control Center.		
	ST WEDNESDAY, 15 OCTOBER 2025	
EEST	WEDNESDAY, 15 OCTOBER 2025	
EEST	WEDNESDAY, 15 OCTOBER 2025 Visit of Enerjisa Üretim´s Control Room Center at the Head Office	
EEST	Visit of Enerjisa Üretim´s Control	
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11:00	Visit of Enerjisa Üretim´s Control Room Center at the Head Office Group 1 (max 30 participants)	



PROGRAMME in ADANA

EST	THURSDAY, 16 OCTOBER 2025	EEST	THURSDAY, 16 OCTOBER 2025
09:30	Welcome and opening Enerjisa Üretim Acquisition Story A. Serçe, General Manager (HES, RES,GES, Natural Gas & New Technologies), Enerjisa Üretim		SESSION 2 Lecture 6 From hydro for hydro E. Stempfel, AXPO
	Enerjisa Üretim Digital Journey A. İnal, Deputy General Manager (Information Tech & Digital Business), Enerjisa Üretim	15:00	Coffee Break
10.10	Türkiye & Hydro Power Plants C. H. Kılıçaslan, Deputy General Manager, General Directorate of State Hydraulic Works (DSİ)	15:40	SESSION 3 Lecture 7 Towards online vibrational fingerprints <i>M. Boden, Alpiq Holding AG</i>
10:10	Current activities of vgbe in digitalisation on hydropower M. Bachhiesl, vgbe energy		Lecture 8 Harnessing predictive maintenance experience
10:30	SESSION 1		with Metris DiOMera JC. Marongiu, ANDRITZ AG
	Lecture 1 Physics-based diagnostic assessments and innovative monitoring technologies for hydropower assets A. Jung, Voith Hydro Holding GmbH & Co. KG		Lecture 9 Technologies for 3D visualisation of hydro- power plants and VERBUND's rollout strategy B. Hollauf, VERBUND Hydro Power GmbH
	Lecture 2 Anomaly detection for speed governors D. Gezer, TÜBİTAK Marmara Research Center		Lecture 10 Nature positive & hydro power plants for future Ö. Sönmez, Enerjisa Üretim
11:30	Lunch	17:30	
13:00	SESSION 2	17.50	Outlook for the site visit to the Köprü Hydropower Plant
	Lecture 3 Digitalisation strategies of a hydropower plant M. E. Atmaca, EÜAŞ / Eurelectric Türkiye	17:50	Ş. Zilelioğlu, Enerjisa Üretim Closing words
	Lecture 4 Microsoft & Assets management with Al P. C. Honningsvåg, EMEA Business Leader – Energy and Resources Industry, Microsoft	19:30	Evening Dinner and Get-Together at Adana Hilton
	Lecture 5 Knowledge graphs and agentic AI for predictive maintenance in hydropower plants	Ada	

S. T. Kandukuri, NORCE

Site visit and demonstration of Enerjisa Üretim's Köprü Hydropower Plant in Kozan/Adana

On the third day of the Expert Event, Enerjisa Üretim will present digital solutions in the Köprü Hydropower Plant in Kozan/Adana. Participants can take part in a guided tour, and experts will be on hand to answer guestions and be available for further in-depth technical discussions.

Please note: Sturdy shoes are required for the plant visit!

PROGRAMME at Köprü Hydropower Plant

EEST	FRIDAY, 17 OCTOBER 2025	
08:00	Departure via bus shuttle to Enerjisa Üretim´s Köprü Hydropower Plant in Kozan/Adana	
09:00	Welcome and grouping of participants for visit of stations Guided visit to the demonstration stations	
12:30	Networking	Snacks, soft drinks, coffee
	0	o the demonstration stations

Get in touch with the experts for knowledge exchange at the stations (Open House)

15:00 End of visit 15:00 Departure by shuttle bus to Adana Airport _ 15:40

In cooperation with **ENERJISA**ÜRETİM



Demonstration stations and the presenters



Renewable Energy Management Suite (REMS) **OnePact Monitor, Feasibility and Predict** Live Demo and User Story (operational)



Station 3

CyberPact Hub **Ensuring Compliance & Security** in Industrial Operations Live Demo and User Story (operational)

CoPilot for Power Plants

Live Demo and User Story (operational)



Station 5

မ္ပါ္သီ

Power Plant Operation & Management Systems Asset Management, PPM & Dark Plant Live Demo and User Story (POC)

Remote Operation Tools ROV, Communication & DAM Safety Tools Live Demo and User Story (operational)

Station 6 <u>نا</u>



HSE with Enerjisa Üretim Smart Solutions for a Safer & Healthier Workplace Live Demo and User Story (POC)

Station 7

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Academy Technical Traning with VR/AR

Live Demo and User Story (operational)

Demonstration stations and the presenters



Sustainable Future Fish Tracking with Chips Live Demo and User Story (POC)



Inventory Hub - Mobil & Kaizen Application **RFID Projects** Digitalisation of Warehouse Records Live Demo and User Story (operational)

Station 10



Predictive Maintenance Thermal Cameras and Ultrasonic Wall **Thickness Measuring Device** User Story (operational)

Station 11



Mobile Remote Operations of Power Plants Live Demo and User Story (operational)

Mobile Senkron





Archimedes' Screw New Technology in Renewable **Energy Generation**

User Story (operational)



Köprü Hydropower Plant



DIGITALISATION IN HYDROPOWER 2025

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vgbe/Enerjisa Üretim | Expert Event (15) 16 and 17 October 2025 (Istanbul) and Adana | Türkiye

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Köprü Hydropower Plant



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