## **Invitation to Tender**

### Procurement of a Service Provider for Power-to-X Feasibility Study – Saare-Liivi Offshore Wind Park (SLOWP)

Utilitas Wind invites qualified service providers (individuals or companies) to submit proposals for conducting a comprehensive feasibility study for a Power-to-X (PtX) facility, powered by renewable electricity from the Saare-Liivi Offshore Wind Park (SLOWP). The objective is to deliver a robust, investment-ready business case to inform early engineering decisions and enable progression toward FEED and FID.

#### Timeline

The procurement process is expected to follow the schedule below:

- ITT release date: 15 April 2025
- Deadline for tender submissions: 18 May 2025 (23:59 EEST)
- Estimated contract award: June 2025
- Feasibility Study Completion: Q1 2026

#### **Reporting and Communication**

The selected service provider will report to Utilitas Wind's project team and maintain regular communication with the designated PtX project lead. Progress updates will be expected at agreed milestones, and all deliverables will be submitted in electronic format.

#### **Contact for Questions and Submissions**

All questions, clarifications, and tender submissions should be directed to:

Jüri-Mikk Udam Utilitas Wind juri-mikk.udam@utilitas.ee

## 1. Introduction & Background

Utilitas Group is a leading renewable energy producer and district heating provider in the Baltic region. With over 250 MW of onshore wind capacity in operation or under construction, Utilitas Wind (subsidiary of Utilitas Group) is well-positioned to accelerate the deployment of renewable energy within the region, supported by its established pipeline and regional presence.

The Saare-Liivi Offshore Wind Park (SLOWP) is Utilitas Wind's flagship offshore project, located in the Pärnu County maritime area in the Gulf of Riga. It is the most advanced offshore wind development in Estonia and is co-financed by the European Union. The first phase of SLOWP will consist of up to 80 wind turbines, with a planned capacity of up to 1200 MW and an expected annual production of approximately 5 TWh of green electricity. The commercial operation date is targeted for the 2030–2032 period.

In parallel, Utilitas Wind is exploring the potential for integrating a PtX facility that would convert offshore wind energy into green hydrogen and its derivatives (e-methanol, e-methane, SAF or e-ammonia). A concept study has already been conducted to evaluate the technical and economic feasibility of such a development. However, to move toward FEED and ultimately FID, Utilitas now seeks to commission a feasibility study to validate key assumptions and provide a solid business case.

The **objective** of this study is to deliver a detailed and actionable **business case** for PtX development integrated with SLOWP. The outcome should enable Utilitas Wind to **proceed toward engineering** or consider adjusting the concept, depending on findings.

## 2. Scope of Work

The study is divided into two Work Packages (WP) and delivered over three Work Stages.

The work packages and tasks below represent the minimum expected scope. Bidders are encouraged to propose additional areas of investigation or alternative structuring where they see added value. The proposed project plan and approach will be considered during the evaluation process.

### Work Packages

#### Work Package 1: Market & Offtake Analysis

- Identify and prioritize potential e-fuel offtakers
- Conduct direct outreach (e.g. interviews, calls) to assess interest, expected volumes, pricing, and timelines
- Coordinate outreach strategy with Utilitas Wind, who may join selected interviews
- Deliver market scenarios and recommendations, aiming to secure LOIs from interested buyers

#### Work Package 2: Main Feasibility Study

- CO<sub>2</sub> Supply Assessment
  - Evaluate local (biogenic) CO<sub>2</sub> sources: availability, CAPEX/OPEX
  - $_{\odot}~$  Assess logistics and cost/reliability of alternate or imported  $\rm CO_2$  supply routes

#### • Power Procurement & LCOH Modelling

- Model power sourcing strategies (merchant, PPA, CfD), including price structures
- Conduct LCOH sensitivity analysis across scenarios (WACC, curtailment, capacity factors)
- Site & Infrastructure Evaluation
  - Compare Tallinn vs Pärnu scenarios: access to grid, CO<sub>2</sub>, water, logistics, land use, synergies
  - Assess environmental and spatial aspects relevant to PtX siting (e.g. water intake, proximity to sensitive areas, emissions, infrastructure footprint)
  - o Identify integration risks and infrastructure development needs
- Techno-Economic & Technology Assessment
  - Provide vendor mapping and early engagement (e.g. electrolyzers, synthesis licensors) for pricing and availability
  - Benchmark CAPEX/OPEX and assess technology readiness for main components
- Financial & Investment Modelling
  - Build a full project finance model (IRR, NPV, DSCR, payback)
  - Test investment viability under various support schemes and market conditions

- Socioeconomic impact analysis (e.g. jobs, regional value creation, energy security benefits)
- Regulatory & Risk Advisory
  - Map key applicable EU and national regulations (EU ETS, RED III, FuelEU Maritime, etc.)
  - o Identify and recommend mitigation measures for safety and policy risks
  - Note: Local permitting and planning will be handled internally by Utilitas Wind and are not part of this scope

### Work Stages & Timeline

#### Stage 1: Scoping & Scenario Framing (by September 2025)

- Review existing materials and Concept Study
- Refine assumptions and data gaps
- Provide comparison of Tallinn vs Pärnu sites (cost, environment, infrastructure)
- Deliver Scenario Briefing with shortlisted project configurations

#### Stage 2: Deep Analysis & Market Engagement (Sept–Dec 2025)

- Conduct detailed modelling and vendor consultations
- Perform market outreach and offtaker engagement (WP1)
- Midterm progress check with Utilitas Wind team

#### Stage 3: Final Business Case & Decision Support (Jan–Feb 2026)

- Develop financial and risk models
- Finalize feasibility package with clear FID readiness assessment
- Include executive summary, investment logic, risks, and timeline
- Deliver presentation-ready materials for internal and external stakeholders

### **Key Deliverables**

- Scenario Briefing Report (end of Stage 1)
- Midterm Findings Report (Stage 2)
- Comprehensive Feasibility Report (final deliverable)
- Executive Summary (standalone slide deck)
- WP1: Market engagement log (e.g. LOIs, MOUs, anonymized feedback)
- Supporting appendices (financial models, assumptions, references)

### Additional Background Information

A confidential background package is available to help bidders prepare tailored proposals, including context from the PtX concept study, offshore wind development, and key project considerations. Interested bidders may request access by signing a mutual NDA – please contact the tender representative for details.

## 3. Consultant Requirements

## **Experience & Qualifications**

The bidder must demonstrate a proven track record in both feasibility and project delivery contexts:

- Demonstrated experience conducting PtX feasibility studies, evidenced by at least three (3) references of completed studies related to green hydrogen, emethanol, e-ammonia, or other synthetic fuels.
- 2. Experience in providing consulting, project management, or advisory support to at least one (1) large-scale PtX or hydrogen project that has progressed beyond feasibility ideally to FEED, FID, or construction.

## **Team Composition**

The consultant team must collectively demonstrate expertise across the following key roles and subject areas:

- PtX Technology Lead
- Energy & Infrastructure Expert
- Market Analyst
- Financial Analyst
- EU Regulatory & Policy Expert

Individual team members may cover multiple roles. The proposal should clearly indicate who is responsible for each role. The use of subcontractors is permitted, provided their roles and responsibilities are clearly defined. As a guideline, the core team should consist of at least 3-5 qualified experts covering the key competence areas.

## 4. Proposal Submission Requirements

Interested parties are requested to submit their proposals by **18 May 2025 (23:59 EEST)** to: juri-mikk.udam@utilitas.ee

All proposals must be submitted in PDF format.

### **Required Proposal Content & Structure**

Please structure your submission as follows:

- 1. Introduction & Background
  - Brief company overview, relevant experience, commitment to quality and timelines
- 2. Team Composition & Qualifications
  - Key personnel, roles, qualifications, and relevant project experience
- 3. Methodology & Project Plan
  - Proposed approach, task execution strategy, and use of tools or technology
- 4. Timeline
  - o Planned schedule with milestones aligned to the study's work stages
- 5. Cost & Budget
  - Transparent breakdown of costs (including travel if applicable); specify if VAT is included
- 6. References & Annexes
  - At least 3 references for completed PtX feasibility studies
  - At least 1 reference for PtX advisory or project management beyond feasibility
  - Each reference must include:
    - Client Name & Contact Details
    - Project Description
    - Scope of Work
    - Outcomes Achieved
  - CVs of all key team members

# 5. Evaluation Criteria

No.	Area	Evaluation Guidance	Weight
1.	Project Plan & Methodology	<ul> <li>Realistic and well-structured plan with milestones and resource allocation</li> <li>Clear understanding of PtX project scope and goals</li> <li>Practical, best-practice methodology</li> <li>Ability to manage complexity and communicate effectively</li> </ul>	40%
2.	Team & PtX Competence	<ul> <li>Demonstrated PtX/hydrogen experience (feasibility, advisory, or development)</li> <li>Strong references and relevant CVs</li> <li>Understanding of EU PtX policy (FuelEU Maritime, RED III, EU ETS)</li> <li>Team covers all key domains: tech, infra, finance, EU policy/regulation</li> </ul>	30%
3.	Cost Proposal	<ul> <li>Transparent and structured cost breakdown</li> <li>Justified pricing aligned with scope</li> <li>Overall value for money</li> </ul>	30%

## 6. Terms & Conditions

Utilitas Wind reserves the right to amend, cancel, or revise the tendering process at any time. All tendering costs are the sole responsibility of the bidder.

Utilitas Wind also reserves the right to amend the Scope of Works based on the submitted proposals or to decide to contract for all work packages from one single tenderer or contract for one or several work packages separately from different tenderers. In the latter case, the work packages will be evaluated separately.