

## **ETIP HYDROPOWER Governing Board Application form**

Name and surname	Staffan Lundström
Photo	
Name of entity (e.g. company, association, etc.)	Luleå university of technology
Job title / role	Chair Professor, Head of Div., Deputy head Depart.
Stakeholder category	☐ Hydropower industry and technology <sup>1</sup>
	<ul> <li>□ Operator/owner of large hydropower plants and/or pumped storage plant(s)</li> <li>□ Independent operator/owner of small hydropower plant(s)</li> <li>□ Design, planning and project development</li> </ul>
	☐ Finance, business and insurance <sup>2</sup>
	⊠Research, innovation and development <sup>3</sup>
	☐ Environment and civil society <sup>4</sup>
Country	Sweden
Previous experience (1300 characters with spaces)	Director Swedish Centre for Sustainable Hydropower, A Swedish Energy Agency Centre of Excellence, 2022 Main applicant of granted Horizon Europe project on "Novel long-term electricity storage technologies for flexible hydropower" 2023-27. Panel member at a Swedish parliament seminar on the EU framework directive for hydropower, April 19, 2023. One of three members of the Faste Laboratory Executive committee, A VINNOVA Centre of Excellence. 2007-2016. Member of the Executive board and leader WP5 (Social Acceptance and Mitigation of Environmental Impact) in Hydroflex an H2020 project on flexible hydropower 2018-2022. Coordinator of SP4 in EERA JP Hydropower 2019 Member of the Swedish hydropower centre (SVC) steering group on turbines and generators 2009-2020. University manager and main applicant of SVC 2018-2021. Serves as Academic Backbone of the "111 Project" Discipline Innovation and Research Base on River Network Hydrodynamics System and Safety" at Hohai University, China 2017 One of eleven PIs in StandUp

<sup>&</sup>lt;sup>1</sup> Equipment supplier and/or manufacturer, maintenance industry, etc.

<sup>&</sup>lt;sup>2</sup> Financial, legal & developing institutions, development, public or commercial banks, financial organisations, and private investors/investment funds, international monetary fund, insurance, legal advisors, etc.

<sup>&</sup>lt;sup>3</sup> R&D institutions, research centers and institutes of universities, etc.

<sup>&</sup>lt;sup>4</sup> Environmental or conservation NGO's, civil society associations, policy makers, water resources associations, project stakeholders, etc.



for energy, 2010-. Member of the international expert group for upstream migrating salmon, Umeriver 2007-2010. Main supervisor for 22 PhD-students to PhD and additional 6 PhD-student to Lic. Currently Main supervisor for 4 PhD-students. Supervisor for 10 postdocs.

## Motivation to become Governing Board member (1300 characters with spaces)

In Europe and word-wide there is an increased amount of unregulated power from wind and solar and the energy market requests flexible energy storage that can be used on demand. Hydropower can respond to this request due to the power efficiency, the availability, the stability, the immense storage capacity and the capability to run on demand with rapid ramping rates. This will, however, require knowledge-driven solutions. Based on my background and current positions in Sweden and Europe I can give input to the Governing Board regarding this and what kind of research and developments that are required. I can especially give input on the nordic conditions on topics related all the ways from the turbines to the environmental impact of Hydropower. In addition to the experience and positions described above, starting a couple of PhD-student projects during 2023 combining Environmental flow modelling with National economy and Law will give me new insights with which I can share in the Governing Board.