



# World Federation of Engineering Organisations (WFEO) nomination

## Personal statement from Professor Jim W. Hall

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Professor Jim Hall is a chartered civil engineer, a fellow of the Institution of Civil Engineers and the Royal Academy of Engineering. In November 2024, he became the 160<sup>th</sup> President of the Institution of Civil Engineers (ICE). He is a professor of climate and environmental risks at the University of Oxford, UK.

Prof. Hall is internationally recognized for his research on risk analysis and decision making under uncertainty for infrastructure systems, water resource systems, flood and coastal risk management and adaptation to climate change. His group in the University of Oxford is at the forefront of risk analysis of climatic extremes and their impacts on infrastructure networks and economic systems, from local to global scales. Prof. Hall's career highlights include:

- Appointed commissioner of the UK's National Infrastructure Commission.
- Member of the UK Prime Minister's Council for Science and Technology.
- Contributed to the Nobel Prize-winning Fourth Assessment Report of the Intergovernmental Panel on Climate Change.
- Chair of the Science Advisory Committee of the International Institution for Applied Systems Analysis.
- Won national and international awards for research on water, coastal and flooding risks.

As President of the Institution of Civil Engineers for 2024/5, Prof. Hall has been speaking around the world, about how infrastructure completely shapes our lives. We all depend on it, and often in quite invisible ways. But we know that infrastructure, and how we plan and build it, needs to change, particularly if we are to respond to the threats posed by climate change.

The majority of the world's greenhouse gas emissions come from the energy, transport, water and waste sectors, which civil and infrastructure engineers are responsible for. There are also many unmet needs for infrastructure services, especially in low- and middle-income countries around the world. To create sustainable infrastructure also requires attention to safety, maintenance, productivity and inequality, all which relate to infrastructure. So civil and infrastructure engineers play a fundamental role in solving the world's problems.

Although a civil engineer, if elected, Prof. Hall hopes to speak on behalf of all engineering disciplines, and it is with these aspirations that he aims to make an impactful contribution to WFEO's activities.

# Proposal for UK National representative for WFEO

## Consent form

### Private & confidential

<b>Name of applicant</b>	Professor Jim W. Hall
<b>National honours and distinctions</b>	n/a
<b>Academic qualifications</b>	<ul style="list-style-type: none"> <li>MA by proclamation, University of Oxford, 2011</li> <li>PhD "Uncertainty Management for Coastal Defence Systems", University of Bristol, 1999</li> <li>Postgraduate Certificate in Engineering Management, Joint Board for Engineering Management, 1998</li> <li>BEng in Civil Engineering, 1st class honours. Best student in class and 5 graduation prizes, University of Bristol, 1990</li> </ul>
<b>Membership of professional bodies (showing grade)</b>	<ul style="list-style-type: none"> <li>Fellow, Royal Academy of Engineering, 2010</li> <li>Fellow, Higher Education Academy, 2007</li> <li>Fellow, Institution of Civil Engineers, 2005</li> <li>Fellow, Royal Statistical Society, 2004</li> <li>Member, Institute for Learning and Teaching in Higher Education, 2002</li> <li>Corporate Member (MICE) and Chartered Engineer (CEng), Institution of Civil Engineers, 1996</li> </ul>
<b>Registrations (CEng, FEng, Eur Ing etc.)</b>	CEng, FEng
<b>Principal engineering disciplinary interest</b>	Climate change adaptation & mitigation, water, coastal and flood risks, infrastructure systems
<b>Present post</b>	Professor of climate and environmental risks at the University of Oxford
<b>Service on Trustee Board/Council/Institution Committees (if applicable)</b>	<ul style="list-style-type: none"> <li>President, Institution of Civil Engineers 2024/25</li> <li>Invited witness to the Environmental Audit Committee hearing on Flood Resilience in England (22 January 2025)</li> <li>Member of the Programme Advisory Board (PAG) for the UKRI-Defra funded Maximising UK Adaptation to Climate Change Programme (from November 2024)</li> <li>Invited witness to the Environmental Audit Committee hearing on Climate Change and Security (14 May 2024)</li> <li>Deputy Chair of the RAEng Green Future Fellowship Steering Group (from May 2024)</li> <li>Member of the Steering Group for the Royal Academy of Engineering's Green Future Fellowships programme (April 2024 – 2027)</li> <li>Member of the Royal Society Land Use Review Group for Defra's Land Use Framework (LUF) for England (September 2023).</li> <li>Invited to give evidence to the House of Lords Industry and Regulation Committee (13 June 2023).</li> <li>Chair of the Use Cases Advisory Group for the National Grid ESO Virtual Energy System programme.</li> <li>Director of the Digital Task Force for Planning (from January 2023)</li> <li>Member of the UK Climate Adaptation Research and Innovation Board (from October 2022)</li> <li>Commissioner of the National Infrastructure Commission (from April 2022)</li> <li>Invited to give evidence to the Joint Committee for the National Security Strategy hearing on Critical national infrastructure and climate adaptation (17 January 2022). Cited in the Committee's final report <a href="https://committees.parliament.uk/publications/30507/documents/175976/default/">https://committees.parliament.uk/publications/30507/documents/175976/default/</a></li> <li>Member of the Environmental Impact Expert challenge group for the National Security Risk Assessment (January to March 2022)</li> <li>Member of the Institution of Civil Engineers, State of the Nation steering group (June – October 2021)</li> <li>Member of the expert quorum for the Royal Academy of Engineering Review of the National Security Risk Assessment Methodology (April-June 2021)</li> <li>Member of the climate resilience expert advisory panel of the National Infrastructure Commission (from March 2021)</li> <li>Briefed the Prime Minister on climate change (18 March 2021)</li> </ul>

- Invited to give evidence to the House of Lords Risk Assessment and Risk Planning Committee (17 March 2021)
- Vice President of the Institution of Civil Engineers (from April 2021)
- Chair of the Institution of Civil Engineers Research, Development & Innovation panel (from January 2021)
- Member of the Arc Universities Environment Partnership Board (from January 2021)
- Member of the Royal Academy of Engineering Net Zero Working Group (from January 2021)
- Invited evidence to the Environmental Audit Committee's inquiry on Greening the COVID Recovery (December 2020)
- Co-author of the Royal Society research briefing on 'improving climate resilience' (November 2020 – April 2021).
- Member of the OxCam Data Observatory Project Board (November 2020 to February 2021)
- Member of the steering group for ICE's policy programme: "Covid-19, the new normal and implications for infrastructure systems" (May to October 2020)
- Member of the Trustee Board of the Institution of Civil Engineers (November 2020 to November 2023)
- Chair of UK-IIASA Committee (from March 2020)
- Member of the Prime Minister's Council for Science and Technology (from March 2020)
- Member of the National Flood Risk Assessment Independent Peer Review Group (from April 2020)
- Member of the Steering Group for the Institution of Civil Engineers Enabling Better Infrastructure project (January to December 2019)
- Chair of the Steering Group for the £18.7 million UK Climate Resilience Programme (November 2019 to April 2023)
- Member of the National Framework Senior Steering Group for water resources (from September 2018)
- Member of the Digital Framework Task Group for Digital Built Britain (August 2018 to March 2022).
- Peer reviewer of the joint Royal Society and Royal Academy of Engineering report on "Greenhouse gas removal" (June 2018)
- Chair of the Governance Board for the £8 million Data and Analytics Facility for National Infrastructure (2017 to present).
- Member of Defra's Network of Evidence Experts (September 2017 – present)
- Invited witness to the Treasury Select Committee Inquiry 'Autumn Statement 2016' (December 2016)
- Member of the Expert Advisory Group for the National Infrastructure Commission (August 2016 – July 2021)
- Member of the Executive Group for the "National Needs Assessment – A Vision for UK Infrastructure" chaired by Sir John Armitt (August 2015 – October 2016)
- Member of the Environment Agency's Long-Term Investment Strategy Development Group (March 2016 – present)
- Member of the Governance Board for the UK Climate Projections (UKCP18) (2016-2019)
- Member of the Peer Review Panel for the UK Climate Projections (UKCP18) (March 2016 – November 2018)
- Chair of the Peer Review Panel for the Water UK "Water resources long-term planning framework" (November 2015 – July 2016)
- Member of the Scientific Advisory Group (Chaired by Sir Mark Walport) for the National Flood Resilience Review (February – June 2016)
- Member of the Royal Academy of Engineering Working Group on the Sustainability of Liquid Biofuels (March – January 2017)
- Co-chair of the Oxford Martin School Restatement Project on Natural Flood Management (May 2015 – April 2016)
- Invited evidence to the Environmental Audit Committee hearing on Climate Change Adaptation (7 January 2015).
- Peer reviewer of the Environment Agency's Long Term Investment Scenarios (LTIS) (July-October 2014)
- Member of the Oxford Martin Policy and Research Steering Group (2014-2016)
- Reviewer of the Royal Society report on "Human resilience to climate change and disasters" (August 2014)
- Invited evidence to the Review of the Resilience of the Transport Network to Extreme Weather Events (Brown review) (May 2014)
- Member of the Scientific Advisory Group for Emergencies (SAGE) for the 2014 floods emergency, Chaired by the Government Chief Scientific Advisor (February 2014).
- Member of the Institution of Civil Engineers, State of the Nation Infrastructure steering group (Oct 2013-April 2014)

- Member of the Steering Committee for the ESRC Centre for Climate Change Economics and Policy at LSE and Leeds University (July 2013-present)
- Member of the Engineering Policy Committee of the Royal Academy of Engineering (June 2013 – October 2016)
- Member of the steering group for the Engineering the Future “Infrastructure Timelines” project (August 2012 – June 2013).
- Peer reviewer of the Foresight Project: Improving Future Disaster Anticipation and Resilience (August 2012)
- Advisor to Thames Water on adaptation of the Thames Tunnel to climate change (April-July 2012)
- Member of the steering group for the LWEC Water Climate Change Impact Report Card (2012-13)
- Peer Review of the Proposed Work Plan for the Met Office Hadley Centre Climate Programme April 2012- March 2015 (April 2012)
- Member of the Institution of Civil Engineers Public Voice Committee, subsequently Policy and External Affairs Committee (2012-2020)
- Member of the Royal Academy of Engineering membership Panel 2 (Civil, structural, public works and building services engineering) (2011 - 2014).
- Chairman of the Trustees of the JBA Trust (August 2011 – present).
- Member of the HM Treasury / Infrastructure UK “Infrastructure Data Group” (May 2011- 2012).
- Expert reviewer of the Foresight project on “International Dimensions of Climate Change” (March 2011).
- Visiting Professor in the School of Civil Engineering and Geosciences at Newcastle University (2011-2015)
- Panel member for the UK Flood and Coastal Erosion Risk Management research strategy (2010-2011)
- Member of the water and interdependencies sector groups (convened by the ICE and RAEng respectively) for the Defra study on Engineering, Infrastructure and Climate Change Adaptation (May-November 2010)

I hereby declare that the details and information given above are complete and true to the best of my knowledge, and I give my consent to be nominated as the UK representative to the World Federation of Engineering Organisations.



Signature of nominee:

Date: 4 April 2025