

Curriculum Vitae

Bjørn Vidar VANGELSTEN

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Høglia 42 NO-8027 Bodø NORWAY Phone: +47 9925 4275 Nationality: Norwegian Birth date: 30 December 1969

KEY QUALIFICATIONS

Bjørn Vidar Vangelsten has 25 years of experience from research (Norwegian Geotechnical Institute and Nordland Research Institute) and administration of public research programs (EU-Commission and Research Council of Norway). He has participated in and managed many national and international research projects, including EU-projects and World Bank funded development projects. His key scientific experience includes natural risk management and societal vulnerability. Since 2014 his focus has shifted towards sustainability and green transformation. In Nordland Research Institute he has lead the thematic group on Green Transformation and are working on themes related to sustainable development goals, circular economy, marine littering, climate smart and sustainable food systems and analysis of policies/strategies for green transformation. He has extended experience with quantitative data collection and analysis as well as use and development of software for technical applications and system analysis.

EDUCATION

2014-17	MBA Ecological economics, 2017, Nord university: Themes include ecological
	economics, eco-philosophy, environmental management, CSR, circulation
	economics, industrial ecology, ethical and social banking. Thesis: Towards a
	sustainable Norwegian food system: Effect of reduced meat consumption on
	Norwegian self sufficiency
2002-04	Development Studies - Poverty, Environment and Collective Action, Norwegian
	university of life sciences (NMBU): Completed course plan for MSc-program focusing
	on eco-technology, development history, conflict studies, macroeconomics,
	anthropology, strategy and management, renewable energy.
1993-97	Ph.D. geotechnical engineering, Institute for geotechnical engineering, Norwegian
	university of science and technology (NTNU), Trondheim, Norway. Dissertation:
	Numerical Simulation of Installation of Skirt Foundations
1988-92	M.Sc. civil engineering, 1992, Norwegian Institute of Technology (NTH), Trondheim.
	Thesis: Evaluation of railway tunnel in soil near Eidsvoll
Other:	Coastal skipper exam, 2001



WORK EXPERIENCE

- 2016-Now Senior researcher environment and green transformation, Nordland Research Institute, Bodø, Norway
- 2015-16 Senior adviser on green innovation, Research Council of Norway, Oslo, Norway
- 2010-15 Co-founder/owner of Nor-Dev, a consultancy on environment, renewable energy and development, Oslo, Norway
- 2008-15 Senior Engineer Natural hazards risk management, Norwegian Geotechnical Institute, Oslo, Norway
- 2006-08 National Expert/Programme Officer in Unit for Climate Change and Environmental Risks, Directorate-General for Research & Innovation, EU-Commission, Brussels, Belgium
- 2002-06 Senior engineer, Geomechanics, Norwegian Geotechnical Institute, Oslo, Norway
- 2000-02 Owner of one-person consultancy "Baltazar Dr.Ing. Bjørn Vidar Vangelsten".

Geotechnical engineering and software development, Hammerfest, Norway

1997-2000 Project engineer, Geomechanics, Norwegian Geotechnical Institute, Oslo, Norway

1996 Project engineer, Geotechnical engineering, Statoil, Stavanger, Norway

Key projects activities in the recent years include:

- Project manager GreenPace Noradapt (Local food systems a driver for sustainableg transformation of the Norwegian food system) (2021-22).
- Work Package Leader Field of goals (Co-production and implementation of the Sustainable Development Goals in regional and local planning) (2020-2023)
- Implementing UN SDGs in municipal planning (Report for the Norwegian Ministry of Local Government and Modernisation) (2020)
- Work Package Leader CityLoops (Horizon 2020 project Closing the loop for urban material flows) (2019-2023)
- Clim-Tour (Impacts of climate change on Norwegian nature based tourism) (2018-21)
- HAVPLAST (Marine plastic from Norwegian Sea Food sector mapping, quantification and management) (2018-19)
- Project manager REMAFISK (Reduce marine waste from fishery vessels) (2017-18).
- Project manager RE-D-USE (New knowledge for reduction and utilization of marine waste from fisheries) (2017-19). International collaboration between Norway, Russia and Canada
- Project manager NRI for «EKOHYD Effective and optimal introduction of hydrogen driven fast ferries» (2017-18).
- eLighthouse (Energy Saving Lighthouse Cities in the NPA region) (2016-19)
- Leader thematic group on Green Transformation in Nordland Research Institute (2016-2019)
- Team leader Green Innovation in the Research Council of Norway (2016) with responsibility for developing knowledge base for green innovation
- Development of an evaluation criteria for environmental sustainability of research projects, Research Council of Norway (2016)
- Project manager GeoRisk Assessment and Management (GRAM, 2014-15): NGI internal strategic research project on natural hazard risk management
- Deputy project leader Assessment of land loss Ca Mau, Vietnam (2012-13): Causes and solutions for land subsidence in the Mekong-delta, Southern Vietnam

Field work: Lesotho, Nigeria, Tajikistan, Thailand and Vietnam. He has had work related travels to Brazil, Cuba, India, Kyrgyzstan, Singapore, Sri Lanka and most European countries.

PUBLICATIONS – BJØRN VIDAR VANGELSTEN

- Olsen, Julia; Leticia Antunes Nogueira; Anne Katrine Normann; Bjørn Vidar Vangelsten; Ingrid Bay-Larsen (2020). Marine litter: Institutionalization of attitudes and practices among Fishers in Northern Norway. Marine Policy (2020), <u>https://doi.org/10.1016/j.marpol.2020.104211</u>
- Lundberg, Aase Kristine; Kjersti Granås Bardal, Bjørn Vidar Vangelsten, Mathias Brynildsen Reinar, Maiken Bjørkan, Tim Richardson (2020). Strekk i laget: En kartlegging av hvordan FNs bærekraftsmål implementeres i regional og kommunal planlegging. NF rapport nr: 7/2020, July 2020.
- 3. Gjertsen, Arild; Ingrid Bay-Larsen; Hilde Bjørkhaug; Bjørn Vidar Vangelsten (2020). Access to areas for algae cultivation in Norway. Marine Policy, Volume 115, May 2020, 103853.
- 4. Vangelsten, Bjørn Vidar; Bay-Larsen, Ingrid Agathe; Nogueira, Leticia Antunes; Pedersen, Vegard; Johannessen, Emil Røthe (2019). Delrapport HAVPLAST: Marint avfall fra havbruksnæringen. NF report 10/2019, September 2019.
- 5. Olsen, Julia; Nogueira, Leticia Antunes; Vangelsten, Bjørn Vidar; Normann, Anne Katrine; Bay-Larsen, Ingrid Agathe (2019). Marine littering in the Barents area: fishers' attitude and practices. Svalbard Scientific Conference; 2019-11-05 2019-11-07
- Vangelsten, Bjørn Vidar; Olsen, Julia; Haarr, Marthe Larsen; Havas, Vilma; Normann, Anne Katrine; Ivanova, Ludmila; Sanli, Elizabeth (2019). New knowledge for reduction and utilization of marine waste from fisheries (RE-D-USE). NF report 7/2019, September 2019.
- Rødås Johnsen, Hilde; Larsen Haarr, Marthe; Roland, Ane Oline; Johannessen, Emil Røthe; Bay-Larsen, Ingrid Agathe; Vangelsten, Bjørn Vidar; Nogueira, Leticia Antunes (2019). Sluttrapport HAVPLAST – Marin plast fra norsk sjømatnæring – kartlegging, kvantifisering og handling. September 2019. DOI: 10.13140/RG.2.2.19071.56485. SALT Lofoten report 1040.
- 8. Olsen, Julia; Vangelsten, Bjørn Vidar; Nogueira, Leticia Antunes; Bay-Larsen, Ingrid Agathe; Normann, Anne Katrine. (2019). Marine littering in the Barents area: fishers' attitude. High North Dialogue; 2019-06-03 2019-06-05
- Rødås Johnsen, Hilde; Nogueira, Leticia Antunes; Bay Larsen, Ingrid; Vangelsten, Bjørn Vidar; Pedersen, Vegard; Falk-Andersson, Jannike; Larsen Haarr, Marte; Roland, Ane Oline; Sanli, Elizabeth (2019). HAVPLAST: Delrapport - Tiltak og Indikatorer. March 2019. DOI: 10.13140/RG.2.2.21777.79204. SALT Lofoten report 1034.
- Vangelsten, B.V., Dale, B., Bay-Larsen, I., Gjertsen, A., Bjørkan, M., Fabritius, M., Risvoll, C., Aasen Lundberg, Aa.K. (2018). Bransjeveikartenes plass i det grønne skiftet. Nytt norsk tidsskrift 03/2018.
- 11. Temesgen, A., Guillen-Royo, M., Vangelsten, B.V. (2018). Citizen participation for sustainability and quality of life in Vågan municipality (Norway). 54th ISOCARP Congress, Bodø, Norway, 1-5 October 2018.
- 12. Vangelsten, Bjørn Vidar (2017). *Mot et bærekraftig norsk matsystem: Effekt på selvforsyningsgrad og norsk jordbruk ved redusert konsum av kjøtt.* MBA thesis Ecological economics, Nord university, 1 December 2017.
- Bjørkhaug, Hilde; Bay-Larsen, Ingrid Agathe; Bjørkan, Maiken; Risvoll, Camilla; Vangelsten, Bjørn Vidar (2017). "Upscaling algae cultivation in Norway – identifying challenges and opportunities". Hopefulness - The 13th Nordic Environmental Social Science Conference; 2017-06-06 - 2017-06-08.
- 14. Eidsvig, Unni; Kristensen, Krister; Vangelsten, Bjørn Vidar (2017). "Assessing the risk posed by natural hazards to infrastructures". Natural hazards and earth system sciences 2017; Volum 17. pp. 481-504
- Karlsrud, K, BV Vangelsten, and R Frauenfelder. 2017. 'Subsidence and Shoreline Retreat in the Ca Mau Province–Vietnam. Causes, Consequences and Mitigation Options'. *Geotechnical Engineering* Journal of the SEAGS & AGSSEA Vol. 48 No. 1 March 2017 ISSN 0046-5828.
- 16. Vangelsten, B.V, I. Bay-Larsen, M. Bjørkan, B. Dale, T. Magnussen, C. Risvoll, and H. Bjørkhaug. 2017. "Kan vi bruke næringslivets veikart til å finne lavutslippsamfunnet?" In Concerned Scientists Norway konferansen «Omlegging av Norge til bærekraftig nullutslippssamfunn: Hvordan fikk vi det til?», 17 March 2017.
- 17. Eidsvig, Unni, Marco Uzielli, and Bjørn Vidar Vangelsten. 2016. "Approaches for assessment of vulnerability of critical infrastructures to weather-related hazards." *EGU General Assembly Conference Abstracts*, 7722.
- 18. Kalsnes, B., B.V. Vangelsten, and U. Eidsvig. 2016. "Risk analyses in excavation and foundation work." In 17th Nordic Geotechnical Meeting.
- 19. Karlsrud, K., B.V. Vangelsten, and R. Frauenfelder. 2016. "Setninger som følge av grunnvannspumping- en udetonert bombe med større konsekvenser enn klimaendringer for mange land." *Fjellsprengningsdagen*, 24 November 2016
- 20. Uzielli, Marco, Bjørn Vidar Vangelsten, and Unni Eidsvig. 2016. 'Probabilistic modeling of vulnerability of road infrastructures to floods'.
- 21. Eidsvig, Unni, Krister Kristensen, and Bjørn Vidar Vangelsten. 2015. "Assessing the risk posed by natural hazards to infrastructures." *European Geosciences Union General Assembly 2015.*
- 22. Kalsnes, Bjørn, and Bjørn Vidar Vangelsten. 2015. "Social and ethical perspectives of landslide risk mitigation measures." In European Geosciences Union General Assembly 2015.
- 23. Vangelsten, B.V., Fornes, P., Cepeda, J.M., Ekseth, K.H., Eidsvig, U., and Ormukov, C. 2015. "Proposal for a probabilistic local level landslide hazard assessment model: The case of Suluktu, Kyrgyzstan." *EGU General Assembly Conference Abstracts*.
- 24. Vangelsten, B.V., Temesgen, A. (2014). *Mer fritid i stedet for mer lønn? Sammendrag fra intervjuer med norsk fagbevegelse*. Framtiden i våre hender rapport 1/2014.
- 25. Eidsvig, UMK, M Papathoma-Köhle, J Du, T Glade, and BV Vangelsten. 2014. 'Quantification of model uncertainty in debris flow vulnerability assessment', *Engineering Geology*, 181: 15-26.
- 26. Eidsvig, Unni, Bjørn Vidar Vangelsten, Christian Geiss, Martin Klotz, Kristine Ekseth, and Hannes Taubenböck. 2014. "Application of indicators derived by remote sensing for mapping of landslide hazard and vulnerability." *EGU General Assembly Conference Abstracts*.
- 27. Eidsvig, Unni MK, A McLean, Bjørn Vidar Vangelsten, B Kalsnes, Roxana L Ciurean, Sotiris Argyroudis, MG Winter, Olga Christina Mavrouli, S Fotopoulou, and K Pitilakis. 2014. 'Assessment of socioeconomic vulnerability to landslides using an indicator-based approach: methodology and case studies', *Bulletin of Engineering Geology and the Environment*, 73: 307-24.
- Fleming, Kevin, Alexander Garcia-Aristizabal, Daniel Monfort Climent, Stefano Parolai, Arnaud Mignan, Bjørn Vidar Vangelsten, Zhongqiang Liu, and Farrokh Nadim. 2014. 'The MATRIX framework applied to the test cases of Naples, Guadeloupe and Cologne', FP7 EU-project New Multi-Hazard and Multi-Risk Assessment Methods for Europe (MATRIX).
- 29. Jaedicke, Christian, Miet Van Den Eeckhaut, Farrokh Nadim, Javier Hervás, Bjørn Kalsnes, Bjørn Vidar Vangelsten, Jessica T Smith, Veronica Tofani, Roxana Ciurean, and Mike G Winter. 2014. 'Identification of landslide hazard and risk 'hotspots' in Europe', *Bulletin* of Engineering Geology and the Environment, 73: 325-39.

- 30. Liu, Zhongqiang, Farrokh Nadim, Bjørn Vidar Vangelsten, Unni Eidsvig, and Bjørn Kalsnes. 2014. 'Quantitative multi-risk modelling and management using Bayesian networks.' in, *Landslide Science for a Safer Geoenvironment, pp. 773-779* (Springer).
- 31. Khazai, Bijan, James Daniell, Sebnem Duzgun, Bjorn Vidar Vangelsten, Tina Kunz-Plapp, Ludovica Elefanta, Simona Esposito, Iunio Iervolino, Janina Braun, and Julia Schaper. 2013. Guidelines for the consideration of socio-economic impacts in seismic risk analysis., Publications Office of the European Union.
- 32. Luna, Byron Quan, Bjørn Vidar Vangelsten, Zhongqiang Liu, Unni Eidsvig, and Farrokh Nadim. 2013. "Regional scale landslide risk assessment with a dynamic physical model-development, application and uncertainty analysis." *EGU General Assembly Conference Abstracts*, 9150.
- 33. Nadim, F, Z Liu, A Garcia-Aristizabal, G Woo, W Aspinall, K Fleming, BV Vangelsten, and P van Gelder. 2013. *Framework for multi-risk assessment*, Deliverable D5, 2. FP7 EU-project New Multi-Hazard and Multi-Risk Assessment Methods for Europe (MATRIX).
- 34. Quan, Luna Byron, Bjørn Vidar Vangelsten, Zhongqiang Liu, Unni Eidsvig, and Farrokh Nadim. 2013. "Landslides induced by the interaction of an earthquake and subsequent rainfall." In 18th International Conference on Soil Mechanics and Geotechnical Engineering - Challenges and Innovations in Geotechnics.
- 35. Vangelsten, B.V. 2013. Uncertainties in Multi-Risk Assessment: Sources, Types and Quantification. EC FP7 project New methodologies for multi-hazard and multi-risk assessment (MATRIX).
- 36. Vangelsten, B.V., Liu, Z., Eidsvig, U., Quan Luna, B., and Nadim, F. 2013. Proposal for a model to assess the effect of seismic activity on the triggering of debris flows. In EGU General Assembly Conference Abstracts.
- Garcia-Aristizabal, A, W Marzocchi, G Woo, A Reveillere, J Douglas, G Le Cozannet, F Rego, C Colaco, K Fleming, and M Pittore. 2012. Review of existing procedures for multi-Hazard assessment. EC FP7 project New methodologies for multi-hazard and multi-risk assessment (MATRIX).
- 38. Khazai, B, JE Daniell, P Franchin, F Cavalieri, BV Vangelsten, I lervolino, and S Esposito. 2012. A New Approach to Modeling Post-Earthquake Shelter Demand in the Aftermath of Earthquakes: Integrating Social Vulnerability of in Systemic Seismic Vulnerability Analysis. In 15th World Conference on Earthquake Engineering, September 2012.
- 39. Khazai, B, B Vangelsten, P Franchin, and S Esposito. 2012. Emergency shelter need modeling in the aftermath of earthquakes. In 15th World Conference on Earthquake Engineering.
- 40. Cepeda, J., U. Eidsvig, B.V. Vangelsten, F. Nadim, and B. Kalsnes. 2011. A method for integrating time-uncertainty associated to landslide inventories in threshold assessments. In *Second World Landslide Forum*.
- 41. Eidsvig, U., A. McLean, B.V. Vangelsten, and B. Kalsnes. 2011. Socio-economic vulnerability to natural hazards proposal for an indicator-based model. In *Geotechnical Safety and Risk*, ISGSR 2011.
- 42. Khazai, B., B.V. Vangelsten, S. Duzgun, J. Braun, and J. Daniell. 2011. Social Impacts of Emergency Shelter Provision in the aftermath of Earthquakes: Integrating Social Vulnerability in Systemic Seismic Vulnerability Analysis. In *EGU Vienna 2011*.
- 43. Cepeda, J, H Smebye, B Vangelsten, F Nadim, and D Muslim. 2010. Landslide risk in Indonesia, *Global assessment report on disaster* risk reduction, ISDR.
- 44. Vangelsten, B.V., M. Uzielli, and S. Lacasse. 2007. Probabilistic risk estimation for a Norwegian clay slope. In 14th European Conference on Soil Mechanics and Geotechnical Engineering.
- 45. Harbitz, C. B., F. Løvholt, H. Bungum, S. Glimsdal, C. Lindholm, K. Karlsrud, F. Nadim, B.V. Vangelsten, P Gauer, and G. Pedersen. 2006. Tsunami hazard assessment along the western coast of Thailand. In *Geophysical Research Abstracts*, 07706.
- 46. Uzielli, Marco, S Duzgun, and BV Vangelsten. 2006. A first-order second-moment framework for probabilistic estimation of vulnerability to landslides. In *Geohazards, 24. International Geotechnical hazard Engineering Conference*, Lillehammer, Norway.
- 47. Karlsrud, Kjell, Hilmar Bungum, Carl B Harbitz, Finn Løvholt, Bjørn Vidar Vangelsten, And Sylfest Glimsdal (2005). Strategy for reconstruction in Thailand following the 26 December 2004 tsunami event. *Geotechnical Engineering for Disaster Mitigation and Rehabilitation*: (With CD-ROM).
- 48. Madshus, C., B.V. Vangelsten, and H. Langberg. 2002. A rational tool for prediction of ground shock from explosions in rock. In *International Conference on Protection of Structures against Hazards,* Singapore, 255-62.
- 49. Chen, S.G., J. Zhao, C. Madshus, and B.V. Vangelsten. 1999. Rock Joint Shear Strength Subjected to Dynamic Loading. In 3rd Int. Conf. on Shock & Impact Loads on Structures in Singapore.
- 50. Madshus, C., and B.V. Vangelsten. 1999. Introduction to Ground Shock Modelling in 3DEC. In *Proc. of the Joint Singapore-Norway Technical Workshop on Ground Shock in Singapore*, 31 May – 4 June 1999, 65-75.
- Madshus, C. and Vangelsten, B.V. 1999. Structural Damage Index for Ground Shock and the use of the Earthquake Database to assess the Relation between Building Damage and Lethality. In Proc. of the Joint Singapore-Norway Technical Workshop on Ground Shock in Singapore, 31 May – 4 June 1999, 285-300.
- 52. Vangelsten, B.V., and C. Madshus. 1999. Modelling of Joint Properties for Shock Propagation Analysis. In *Proc. of the Joint Singapore-Norway Technical Workshop on Ground Shock in Singapore*, 31 May 4 June 1999, 121-35.
- 53. Vangelsten, Bjørn Vidar. 1997. Numerical simulation of installation of skirt foundations, Ph.D. thesis, The Norwegian University of Science and Technology.

ARTICLES WRITTEN AS PART OF MBA PROGRAMME ECOLOGICAL ECONOMY (2014-2017)

- Significance of external stakeholders for organizations focusing on sustainability
- Zero-interest rate now what? The future for ethical and social banking.
- Disseminating research based proposals for new climate policies defining who the Research Council of Norway is?

• Who cares about a sustainable Research Council? A stakeholder analysis.

ARTICLES WRITTEN AS PART M.SC. PROGRAM I DEVELOPMENT STUDIES (2002 – 2004)

- Is There a Moral Void in Modern Norway? Looking for a Global Ethic.
- Social Anthropology and Economic Processes.
- HIV/AIDS and Development: A Case Study of the Debswana Diamond Company in Botswana
- The Zero Emission University: The Present Water Demand as NLH, and the Future Potential of Saving Water
- How can the Relationship Between Power and Identity be Analysed?
- Liberalist views on migration and their influence on EU immigration practices
- Happiness vs Immigration a Win-Win Situation?