

## CV for Rolf André Bohne, August 2017.

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Age, nationality: 49 years, married, father to Tirill (2003) and Edvard (2005), Norwegian.

### **Professional experience:**

2016- to date Professor at Department of Civil and Environmental Engineering - Research group on Building and Construction Engineering, the Norwegian University of Science and Technology, NTNU.

2015- 2016 Visiting Scholar at UC Berkeley, Department of Civil and Environmental Engineering.

2010- 2015 Head of research group. From 2010 - 2012, head of the research group on Building and Material technology. From 2012 – 2015, head of the new (merged) research group on Building and Construction Engineering.

2008- 2016 Associate professor at Department of Civil and Transport Engineering - Research group on Building and Construction Engineering, the Norwegian University of Science and Technology, NTNU.

2005 – 2008. Postdoctoral fellow at Department of Civil and Transport Engineering - Group of Building and Material Technology, and NTNUs Industrial Ecology Programme, the Norwegian University of Science and Technology, NTNU.

2005 Researcher at Department of Hydraulic and Environmental Engineering, and Industrial Ecology Programme, NTNU.

1997 - 1999 Assistant professor. With the responsibility of the implementation and coordination of education in the five semesters PBL-string (Problem Based Learning) in civil engineering at the Faculty of Civil and Environmental engineering. The Norwegian University of Science and Technology, NTNU.

1994 - 1997 Researcher in Environmental Engineering, Department of Hydraulic and Environmental Engineering, the Norwegian University of Science and Technology, NTNU.

1993 Compulsory military service, as a research scientist at the Norwegian Defence Microbiological Laboratory, HQ-Defence Command Norway.

### **Education:**

2000 – 2005 *PhD in industrial ecology.* Department of Hydraulic and Environmental Engineering, and Industrial Ecology Programme, the Norwegian University of Science and Technology, NTNU. Thesis title: "Eco-efficiency and performance strategies in construction and demolition waste recycling systems."

1994 Seminar on Practical Didactics (Ped.Sem.) and Seminar on Resource Management and Environmental Protection, University of Bergen.

1987-1993 *Cand.Scient. (M.Sc) in Microbiology,* Department of Microbiology and Plant physiology, University of Bergen.

### Research projects:

2016- to date	<b>ELinGO</b>
2016- to date	<b>High Per-NIM</b>
2015- to date	<b>Roller Concrete Roads</b>
2015- to date	<b>Ferry Free E39</b>
2014- 2014	<b>Fremskrivning av BA-Avafall i Oslo</b>
2010- 2013	<b>Framtre</b>
2011- 2012	<b>Brøset</b>
2009- 2012	<b>Sustainable Infrastructure</b>

### PhD students

2015- to date	<b>Gaylord Kabongo Booto.</b> Working title: "The effects of Geometric Design, Surface Characteristics and Vehicle Technology on the Environmental Impacts of Big Infrastructure Projects". Supervisor. NTNU
2015- to date	<b>Hrefna Run Vignisdottir.</b> Working title: "LCA and Sustainable thinking in maintenance and operation in large infrastructure projects". Supervisor. NTNU
2014- to date	<b>Babak E. Ebrahimi.</b> Working title: "Environmental and Economic Assessment of Norwegian Roads". Co-supervisor. Chalmers University of Technology, Sweden
2010- 2016	<b>James Kallaos.</b> Thesis title: "Energy use and emissions – developing an indicator framework applicable to the built environment". Supervisor. NTNU 2016:233

### PhD oppositions and committee work

- Javier Macias Rico**, December 8<sup>th</sup> 2016. Dept. of Civil and Transport Engineering, Faculty of Engineering Science and Technology, NTNU. Administrator of the committee and 3<sup>rd</sup> opponent. Thesis title: "*Hard Rock Tunnel Boring: Performance predictions and cutter life assessments.*"
- Sofiia Miliutenko**, April 22<sup>nd</sup> 2016. Dept. Sustainable Development, Environmental Science and Engineering Div. Environmental Strategies Research - KTH – Sweden. Opponent. Thesis title: "*Life cycle consideration in road infrastructure construction and planning*".
- Thomas Haavi**, September 12<sup>th</sup> 2014. Dep. Architectural Design, History and Technology, Faculty of Architecture and Fine Art, NTNU. 3<sup>rd</sup> opponent. Thesis title: "*Zero Emission Building Envelopes. The Effect of Insulation and Thermal Mass on Greenhouse Gas Emissions*".
- Anders-Johan Almås**, August 22<sup>nd</sup> 2013. Dept. of Civil and Transport Engineering, Faculty of Engineering Science and Technology, NTNU. Administrator of the committee and 3<sup>rd</sup> opponent. Thesis title: "*Climate adaptation and mitigation in the building sector: towards a sustainable built environment*".

### Peer reviewed journal articles:

- Bernardi, E., S. Carlucci, C. Cornaro and R.A.** 2017. An Analysis of the Most Adopted Rating Systems for Assessing the Environmental Impact of Buildings. Sustainability; 9, 1226; doi:10.3390/su9071226
- Bohne R.A., L. Huang and J. Lohne.** 2016. An overview on the global residential Building Energy Consumption in the Eight Climate Zones. International Journal of Sustainable Building Technology and Urban Development. DOI:10.1080/2093761X.2016.1167642
- Nesteby, Å.I., M.E. Aarrestad, J. Lohne and R.A. Bohne.** 2016. Integration of BREEAM-NOR in construction projects: Utilizing the Last Planner System.. Energy Procedia 96 (2016) 100 – 111. doi: 10.1016/j.egypro.2016.09.110
- Resch, E., J. Lohne, T. Kvamsdal and R.A. Bohne.** 2016. Impact of urban density and building height on energy use in cities. Energy Procedia 96 (2016) 800 – 814. doi: 10.1016/j.egypro.2016.09.142
- Skullestad, J.K., J. Lohne and R.A. Bohne.** 2016. High-Rise Timber Buildings as a Climate Change Mitigation Measure - A Comparative LCA of Structural System Alternatives. Energy Procedia 96 (2016) 112 – 123. doi: 10.1016/j.egypro.2016.09.112
- Kaspersen, B., J. Lohne and R.A. Bohne.** 2016. Exploring the CO2-Impact for Building Height; A Study on Technical Building Installations. Energy Procedia 96 (2016) 5 – 16. doi: 10.1016/j.egypro.2016.09.089
- Bohne, R.A., O.J. Klakegg and O. Lædre.** 2015. Evaluating sustainability of building projects in urban planning. Procedia Economics and Finance 21 ( 2015 ) 306–312 doi: 10.1016/S2212-5671(15)00181-1

- Huang, L., R.A. Bohne and J. Lohne.** 2015. Shelter and residential building energy consumption within the 450 ppm CO<sub>2</sub>eq constraints in different climate zones. *Energy*. doi:10.1016/j.energy.2015.07.129
- Huang, L., R.A. Bohne, A. Bruland, P.D. Jakobsen and J. Lohne.** 2015. Life cycle assessment of Norwegian road tunnel. *JLCA*. Vol.20:2, pp 174-184. DOI: 10.1007/s11367-014-0823-1.
- Huang, L., R.A. Bohne, A. Bruland and P.D. Jakobsen.** 2015. Environmental impact of drill and blast tunnelling: Life Cycle Assessment. *Journal of Cleaner Production*. Vol 86, pp. 110-117. DOI: 10.1016/j.jclepro.2014.08.083
- Lædre, O., T. Haavaldsen, R.A. Bohne, J. Kallaos and J. Lohne.** 2014. Determining Sustainability Impact Assessment Indicators. *IAPA*. DOI: 10.1080/14615517.2014.981037
- Kallaos, J., R.A. Bohne, R., and P.J. Hovde.** 2014. Long-Term Performance of Rigid Plastic Foam Building Insulation. *J. Mater. Civ. Eng.*, 26(2), 374–378. DOI: 10.1061/(ASCE)MT.1943-5533.0000817.
- Kallaos, J. and R.A. Bohne.** 2013. Green residential building tools and efficiency metrics. *Journal of Green Buildings*, Vol. 8:3, pp. 125-133.
- Bohne, R.A., L. Huang and A. Wyckmans.** 2013. Comparison of Residential Energy Consumption in Different Geographical Areas and Relevance for Environmental Policy. *Journal of Civil Engineering and Architecture*, Vol. 7.(6) s. 686-692. ISSN 1934-7359, USA
- Huang, L. and R.A. Bohne.** 2012. Embodied air emissions in Norway's construction sector: input-output analysis. *Building Research & Information* 40:5, 581–591. DOI: 10.1080/09613218.2012.711993
- Bohne, R.A., H. Brattebø and H. Bergsdal.** 2008. "Dynamic Eco-Efficiency Projections for Construction and Demolition Waste Recycling Strategies at the City Level". *Journal of Industrial Ecology* Vol. 12:1, 52-68. DOI: 10.1111/j.1530-9290.2008.00013.x
- Bergsdal, H., H. Brattebø, R.A. Bohne and D. Müller.** 2007. Dynamic material flow analysis for Norway's dwelling stock. *Building Research & Information* 35:5, 557 – 570. DOI: 10.1080/09613210701287588
- Bergsdal, H., R.A. Bohne and H. Brattebø.** 2007. "Projection of Construction and Demolition Waste in Norway". *Journal of Industrial Ecology* Vol. 11:3, 27-39. DOI: 10.1162/jiec.2007.1149
- Melin, Esa S., R.A. Bohne, F. Sjøvold and H. Ødegaard.** 2000. Treatment of ozonated water in biofilters containing different media. *Water Science and Technology*. Vol 41. No. 4-5, pp 57-60
- Thingstad, T.F., E.F. Skjoldal and R.A. Bohne.** 1993. Phosphorus cycling and algal-bacterial competition in Sandsfjord, western Norway. *Mar. Ecol. Prog. Ser.* Vol. 99: 239-259.

#### Chapters in books

- Wyckmans, A. and R.A Bohne.** 2014. "Integrated Energy.Design". In E. Støa, S. Larssæther and A. Wyckmans (eds): "Utopia Revisited. Towards a Carbon-Neutral Neighborhood at Brøset", Publisher: Fagbokforlaget Vigmostad & Bjørke AS, pp.283-303. ISBN: 987-82-450-1725-0
- Solli C. and R.A Bohne.** 2014. "Carbon-Neutral Settlements - The Operationalization of a Vision". In E. Støa, S. Larssæther and A. Wyckmans (eds): "Utopia Revisited. Towards a Carbon-Neutral Neighborhood at Brøset", Publisher: Fagbokforlaget Vigmostad & Bjørke AS, pp.89-108. ISBN: 987-82-450-1725-0
- Bohne, R.A.** 2007. "Sustainable Infrastructure. What it is and why it is important." In United Nations Economic and Social Commission for Asia and the Pacific, 2006. Sustainable Infrastructure in Asia: Overview and Proceedings, Seoul Initiative Policy Forum on Sustainable Infrastructure Seoul, Republic of Korea, 6-8 September 2006. Bangkok: UNESCAP. ISBN: 978-92-1-120507-7

#### Peer reviewed conference proceedings:

- Bohne, R.A., B. Kaspersen, J.L. Skullestad and E. Ytrehus.** 2017. Embodied Energy Versus Building Height, The "Premium" of Building Tall. Proceedings World Sustainable Built Environment Conference 2017, Hong Kong. Track 8, pp: 1992-1997. ISBN 978-988-77943-0-1
- Booto, G.K., R.A. Bohne, H. Vignisdottir, K. Pitera, G. Marinelli, H. Brattebø, H. Wallbaum and B. Ebrahimi.** 2017. The effect of highway geometry on fuel consumption of heavy-duty vehicles operating in eco-driving mode. The 10th International Conference on the Bearing Capacity of Roads, Railways and Airfields (BCRRA 2017). DOI: 10.1201/9781315100333-308
- Vignisdottir, H.R., G. K. Booto, R.A. Bohne, B. Ebrahimi, H. Brattebø and H. Wallbaum.** 2016. Life Cycle assessment of Anti- and De-icing Operations in Norway. CIB World Building Congress 2016. Volume IV, pp.441-454. Tampere, Finland, May 31<sup>st</sup>- June 4<sup>th</sup> 2016.
- Ebrahimi, B., H. Wallbaum, H. Brattebø, H.R. Vignisdottir, R.A. Bohne and G. K. Booto.** 2016. Environmental Life Cycle Assessment (LCA) of Road Pavements: Comparing the Quality and Point of Application of Existing Software Tools on the basis of a Norwegian Case Study. Proceedings of the CIB World Building Congress 2016. Volume V, pp.749-760. Tampere, Finland, May 31<sup>st</sup>- June 4<sup>th</sup> 2016.

- Huang, L., Bohne, R.A., Liu, Y.** 2014. Effect of urbanization on Chinese residential building energy consumption: Evidence from yangtze river basin. *Energy Education Science and Technology Part A: Energy Science and Research* 32 (5), pp.4125
- Huang, L., Bohne, R.A., Liu, Y.** 2014. Residential energy consumption and CO2 emission in Chongqing, China. *Energy Education Science and Technology Part A: Energy Science and Research* 32 (5), pp.4143
- Huang, L. and R.A. Bohne.** 2014. PM2.5 emission of urban dwellings in China: Case study from Fuzhou. *Word Sustainable Building 2014*. October 28<sup>th</sup> -30<sup>th</sup> 2014 Barcelona, Spain.
- Fufa, S.M, R.A. Bohne.** 2014. Environmental impact assessment of fire retardant treated wood used in exterior claddings. XIII DBMC, September 2<sup>nd</sup> – 5<sup>th</sup> 2014 São Paulo, Brasil,
- Wallbaum, H., M. Hoseini and R.A. Bohne.** 2014. E39 - A coastal highway in Norway. Brenner Congress 2014. February 20<sup>th</sup> – 21<sup>st</sup> Innsbruck, Austria,
- Bohne, R.A. and A. Wychmans.** 2013. Norwegian Smart Cities - Towards cross-scale indicators. SB13 Graz - Sustainable Buildings, Construction Products & Technologies; 2013-09-25 - 2013-09-28
- Huang, L., R.A. Bohne, A. Bruland and P.D. Jakobsen.** 2013. Life cycle assessment of Norwegian Standard road tunnel. The 6th international conference on Life cycle management; 2013-08-25 - 2013-08-29
- Fufa, S.M., B.P. Jelle, R.A. Bohne and C. Grossrieder.** 2013. LCA of Nano-Coated Wooden Claddings Utilizing Accelerated Ageing Test Results. I: 7th Nordic Conference on Construction Economics and Organisation, Trondheim, June 12-14, 2013. Akademika forlag 2013 ISBN 978-82-321-0273-0. s. 102-110
- Bohne, R.A. and L. Huang.** 2012. Life cycle assessment of dwelling sector in Norway. *Proceedings EcoBalance 2012*, Yokohama, Japan, 20<sup>th</sup> – 23<sup>rd</sup> November 2012.
- Huang, L. and R.A. Bohne.** 2012. Embodied energy of construction sector in Norway: The input-output analysis. *Proceedings EcoBalance 2012*, Yokohama, Japan, 20<sup>th</sup> – 23<sup>rd</sup> November 2012.
- Bohne, R.A., L. Huang and A. Wychmans.** 2012. Cultural and historic values in sustainability assessment. Comparison of residential energy consumption in different geographical areas, and relevance for environmental policy. *Proceedings SASBE 2012*, Sao Paulo, Brazil, 27<sup>th</sup> – 30<sup>th</sup> June 2012.
- Wychmans, A. and R.A. Bohne.** 2012. Cross-scale indicators for the indirect impact of the built environment on sustainable lifestyles. The case of Brøset, Trondheim, Norway. *Proceedings SASBE 2012*, Sao Paulo, Brazil, 27<sup>th</sup> – 30<sup>th</sup> June 2012.
- Huang, L., R.A. Bohne and P.J Hovde.** 2011. The embodied air emissions of the construction sector in Norway: The input-output analysis. *Proceedings Sustainable Building 2011*, Helsinki, Finland, 18<sup>th</sup> -21<sup>st</sup> October 2011. *Paper selected for publication in a special number of Building Research & Information*.
- Bohne, R.A. and A. Wychmans.** 2011. Parallel commissioning. A new way of planning for a sustainable settlement –The case of Brøset, Trondheim (Norway). *Proceedings Sustainable Building 2011*, Helsinki, Finland, 18<sup>th</sup> -21<sup>st</sup> October 2011.
- Bohne, R.A. and C. Soli.** 2011. How to measure environmental impact in the planning phase of a settlement - the case of Brøset, Trondheim (Norway). *Proceedings Sustainable Building 2011*, Helsinki, Finland, 18<sup>th</sup> -21<sup>st</sup> October 2011.
- Solli, C., R.A. Bohne and H. Nersund Larsen.** 2011. Inspiring, informing, and influencing sustainable urban planning processes through consumption based emissions inventories. The 5th international conference on Life cycle management. Berlin. Germany, 28-31 August 2011.
- Huang, L., R.A. Bohne and P.J Hovde.** 2011. Effect of urbanization on Chinese residential building energy consumption: a comparative study of the Yangtze River basin. *Proceedings XII DBMC*, Porto, Portugal 12<sup>th</sup>-15<sup>th</sup> April 2011.
- Bohne, R.A., A. Wychmans, J.Thomsen and E. Støa.** 2010. Towards a carbon neutral settlement in Norway. Science in action - the case of Brøset, Trondheim. Presentation at at Central Europe towards Sustainable Building 2010, Prague, Czech Republic 30<sup>th</sup> June - 2<sup>nd</sup> July 2010.
- Bohne, R.A.** “Brøset: towards a climate neutral housing settlement in Trondheim, Norway”. Presentation at 4<sup>th</sup> International Conference on Life Cycle Management, Cape Town, South Africa, September 6<sup>th</sup>-9<sup>th</sup> 2009.
- Bohne, R.A., C. Solli and H.Bergsdal.** 2009. “What does ‘climate neutral’ really mean, and what are the implications for sustainable development?”. Presentation at 4<sup>th</sup> International Conference on Life Cycle Management, Cape Town, South Africa, September 6<sup>th</sup>-9<sup>th</sup> 2009.
- Bohne, R.A., A. Hammer Strømman and R. Aalstad.** 2007. “MFA and hybrid-LCA as tools for the estimating of environmental impact from, and comparison of project alternatives in construction projects”. Presentation at 3<sup>rd</sup> International Conference on Life Cycle Management, Zürich, Switzerland, August 27<sup>th</sup> to 29<sup>th</sup>, 2007.

- Bohne, R.A., H. Brattebø, H. Bergsdal and P.J. Hovde.** 2006. "Estimation of the Service Life of Residential Buildings, and Building Components, in Norway." Proceedings The City Surface of Tomorrow. June 8-9, 2006, Vienna, Austria. ISBN: 3-902338-98-9
- Bohne, R.A and H. Brattebø.** 2003. "Eco-efficiency in Norwegian C&D waste recycling systems". Proceedings ILCEDES 2003 (Integrated Lifetime Engineering of Buildings and Civil Infrastructure). December 1<sup>st</sup>-3<sup>rd</sup>, 2003, Kuopio, Finland.
- Bohne, R.A and H. Brattebø.** 2002. Future C&D waste recycling in Norway - Learning from Danish experience? Proceedings Sustainable Building, Oslo 22<sup>nd</sup>-24<sup>th</sup> September 2002.
- Melin, Esa S., R.A. Bohne, F. Sjøvold and H. Ødegaard.** 1999. Treatment of ozonated water in biofilters containing different media. *Proceedings IAWQ Conference on Biofilm Systems*. New York, USA 17<sup>th</sup>-20<sup>th</sup>. October 1999

#### Technical reports

- Vignisdottir, H.R., R.A. Bohne, H. Bergsdal, E. Wærner, H. Jentoft og A. Dalen.** 2015. "Projection of Waste Amounts from the Building Activities in Oslo". Project report prepared for Oslo kommune September 2015.
- Dahlstrøm, O., R.A. Bohne, H. Kjerkol, H. Fjeldheim, K.S. Fredriksen, R. Sve, P.E. Svendsrud and N.P. Borvik.** 2014. "Anbefalte retningslinjer for utarbeidelse av miljøbudsjett og miljøregnskap for tunneler". Norsk Forening for Fjellsprengningsteknikk – NFF. Oslo, Norway. ISBN 978-82-92641-33-0) 62 p
- Kristjansdottir T., H. Fjeldheim, E. Selvig, B. Risholt, B. Time, L. Georges, T.H. Dokka, J. Bourelle, R.A. Bohne and Z. Cervenka.** 2014. "A Norwegian ZEB-definition embodied emission". ZEB Project report 17 – 2014. SINTEF Academic Press. ISBN 978-82-536-1399-4
- Kallaos, J., A. Wyckmans, G. Mainguy, L. Houssin, G. Valentis, F.F. Ferrara, B. Hezel, E. Broschkowski, A. Westerlind-Wigström, R.A. Bohne, F. Pacheco.** 2014 Synthesis review on resilient architecture and infrastructure indicators. WP 2: Taxonomy of architecture and infrastructure indicators. Deliverable 2.1. European Community Seventh Framework Programme RAMSES - Reconciling Adaptation, Mitigation and Sustainable Development for Cities.
- Bohne, R.A. and E.R. Wærner.** 2014 "*Barriers for Deconstruction and Reuse/Recycling of Construction Materials in Norway*". In S. Nakajima and M. Russel eds.: "*Barriers for Deconstruction and Reuse/Recycling of Construction Materials*". CIB Publication 397. ISBN 978-90-6363-085-0
- Solli C., H. Bergsdal and R.A Bohne.** 2010. Klimanøytrale boformer på Brøset. Arbeidsnotat om klimautslipp og klimanøytralitet. MiSA REPORT NO. 5/2010.
- Bohne, R.A. and A. Strømman.** 2008. "Miljøvurderinger av utvalgte prosjekter ved Statsbygg Fornebu" Project report prepared for Stastbygg July 2008.
- Bohne, R.A., H. Brattebø and H. Bergsdal.** 2007. "Avfall og mengdefremskrivninger" [Waste production and predictions of future waste productions] in "*Nasjonal handlingsplan for bygge og anleggsavfall 2007-2012*" [National Action plan for construction and demolition waste 2007 – 2012]. NHP-nettverket.

#### Invited speeches:

- Bohne, R.A. 2016.** "Helse- og miljøfarlige stoffer. Hva er farlige stoffer? Forskriftskrav og HMS". At NBEF (Norges Bygg- og Eiendomsforening) "Vedlikehold av bygninger - tilstandsanalyse, verktøy, planlegging og rapportering". Oslo 8. – 9. november 2016.
- Wærner, E. and R.A. Bohne 2013.** "Byggavfallsmengder i dag og i 2020, samt noen forslag til tiltak for å oppfylle EUs krav om 70% materialgjenvinning i 2020". Byggeavfallskonferansen 2013. Oslo, January 31<sup>st</sup> – 1<sup>st</sup> February 2013.
- Bohne, R.A. 2009.** "Byggenæringens klimautfordringer". At Tre-Miljø-Byggeri, Bygg Reis Deg 2009, Lillestrøm 22<sup>nd</sup> September 2009.
- Bohne, R.A. 2009.** "Bærekraft og livsløpsanalyser - hva er det, og hvorfor er det viktig?" At Underland, NLAs (Norwegian Landscape Architects) Nordic congress, Oslo 13<sup>th</sup> March 2009.
- Bohne, R.A. 2009.** "Bygge- og riveaktiviteten i fremtiden - Hvilke avfallstyper og -mengder får vi?" Byggeavfallskonferansen 2009. Oslo 28<sup>th</sup> – 29<sup>th</sup> January 2009.
- Bohne, R.A. 2006.** "Miljøregnskap ved stedlig løsning kontra langtransport til deponi". At Miljøringens temamøte: "Forurensede masser i Oslo og andre større byer - Videre utfordringer ved tiltaksprioriteringer, bruk av aktsomhetskart og disponering av lettere og middels forurensede masser", Oslo, 9<sup>th</sup>-10<sup>th</sup> November 2006.
- Bohne, R.A. 2006.** "Sustainable infrastructure. What it is and why it is important." At United Nations Economic and Social Commission for Asia and the Pacific, 2007. Sustainable Infrastructure in Asia, Seoul

Initiative Policy Forum on Sustainable Infrastructure Seoul, Republic of Korea, 6<sup>th</sup> -8<sup>th</sup> September 2006. Bangkok: UNESCAP.

**Bohne, R.A., H. Brattebø and H. Bergsdal. 2006.** “Fremskrivning av materialbehov og avfallsmengder fra BAE-næringen. Hvordan kan vi forvente oss at mengder og sammensetning av vil endre seg?” At Nasjonal handlingsplan for bygge- og anleggsavfall 2006 – på’n igjen! Oslo 10<sup>th</sup> May 2006.

**Peer reviewed conference presentations:**

**Bohne, R.A and L. Huang. 2013.** The Sustainable City: a new framework of cross-scale assessing. The 7th Biennial ISIE Conference; June 25<sup>th</sup> – 28<sup>th</sup> 2013, Ulsan South-Korea.

**Huang, L., R.A. Bohne, A. Bruland and P.D. Jakobsen. 2013.** Dynamic Life Cycle Assessment of Norwegian Road Network towards 2050. The 7th Biennial ISIE Conference; June 25<sup>th</sup> – 28<sup>th</sup> 2013, Ulsan South-Korea.

**Bohne, R.A and C. Solli. 2013.** How to estimate environmental impact in the planning phase of a settlement. - The case of Brøset, Trondheim. The 7th Biennial ISIE Conference; June 25<sup>th</sup> – 28<sup>th</sup> 2013, Ulsan South-Korea.

**Bohne, R.A and A. Wyckmans. 2013.** Parallel commissioning. A new way of planning for a sustainable settlement. - The case of Brøset, Trondheim (Norway). The 7th Biennial ISIE Conference; June 25<sup>th</sup> – 28<sup>th</sup> 2013, Ulsan South-Korea.

**Bohne, R.A., H. Brattebø and H. Bergsdal. 2007** “MFA as a tool in policymaking processes - Experience from the revision of Norway’s National Action Plan for Construction and Demolition Waste”. Presentation at Industrial Ecology for a sustainable future, Toronto, Canada, 17<sup>th</sup>– 20<sup>th</sup> June 2007.

**Bergsdal, H., H. Brattebø, R.A. Bohne, C. Solli and A. Hammer Strømman. 2007.** “Combining dynamic MFA and IO-LCA in studies of material and energy flows in the built environment”. Presentation at Industrial Ecology for a sustainable future, Toronto, Canada, 17<sup>th</sup>– 20<sup>th</sup> June 2007.

**Bergsdal, H., H. Brattebø, R.A. Bohne and D. Müller. 2007.** “Industrial Ecology Improves the Understanding of Dynamics in Future C&D Waste Management Systems”. Presentation at Industrial Ecology for a sustainable future, Toronto, Canada, 17<sup>th</sup> – 20<sup>th</sup> June 2007.

**Bohne, R.A., H. Bergsdal, H. Brattebø and N. Holck-Steen. 2007.** “Dynamic eco-efficiency for analyzing sustainable housing.” Presentation at Industrial Ecology for a sustainable future, Toronto, Canada, 17<sup>th</sup>– 20<sup>th</sup> June 2007.

**Brattebø, H., N. Holck-Steen, H. Bergsdal, R.A. Bohne and D. Müller. 2007.** “Dynamic Life Cycle Energy Flow Analysis of Residential Building Systems – Contributions to Regional Metabolism in Norway from 1960 to 2040”. Presentation at Industrial Ecology for a sustainable future, Toronto, Canada, 17<sup>th</sup>– 20<sup>th</sup> June 2007.

**Bohne, R.A., H. Brattebø, H. Bergsdal and P.J. Hovde. 2006.** “Dynamic eco-efficiency analysis for energy inflows to the Norwegian dwelling system during 1960-2000.” Presentation at The 2<sup>nd</sup> International Conference on Quantified Eco-Efficiency Analysis for Sustainability. June 28-30, 2006, Egmond aan Zee, the Netherlands.

**Bohne, R.A., P.J. Hovde, T. Sager and E. Holden. 2006.** “The development in eco-efficiency of personal mobility in Norway.” Presentation at The 2<sup>nd</sup> International Conference on Quantified Eco-Efficiency Analysis for Sustainability. June 28-30, 2006, Egmond aan Zee, the Netherlands.

**Battebø, H., H. Bergsdal, R.A. Bohne and D. Müller. 2005.** “Industrial Ecology Tools for the Built Environment – Part 2: Analysis of Environmental and Economic Impact of Technology and Metabolism in the Norwegian Built Environment”. Presented at Industrial Ecology for a sustainable future, Stockholm, 12<sup>th</sup> June – 15<sup>th</sup> June 2005

**Bohne, R.A., A. Eik, F. Melum, O. Michelsen, S. Støren, C. Boks, J. Huisman and A. Stevels. 2004** “Dynamic Eco-efficiency definitions for Environmental Value Chains”. The 1<sup>st</sup> International Eco-Efficiency Conference; “Eco-Efficiency for Sustainability - Quantified methods for decision making”. April 1-3, 2004, Leiden, the Netherlands.

**Bohne, R.A and A. Stevels. 2004.** “How to measure societal benefits and Eco-Efficiency for recycling systems”. The 1<sup>st</sup> International Eco-Efficiency Conference; “Eco-Efficiency for Sustainability - Quantified methods for decision making”. April 1-3, 2004, Leiden, the Netherlands.

**Bohne, R.A., H. Bergsdal and H. Brattebo. 2004** “A consistent framework for the evaluation of strategies for recycling of C&D waste, based on Eco-Efficiency”. The 1<sup>st</sup> International Eco-Efficiency Conference; “Eco-Efficiency for Sustainability - Quantified methods for decision making”. April 1-3, 2004, Leiden, the Netherlands.

**Bohne, R.A. and H. Opoku. 2003.** Recycling C&D waste in Copenhagen - An impact analysis. Presented at Industrial Ecology for a sustainable future, Ann Arbor (MI) USA, 29<sup>th</sup> June – 2<sup>nd</sup> July 2003

### Other publications

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- Bohne, R.A.** 1993. *Enzymatisk hydrolyse av organiske fosfatforbindelser i marint miljø*. Thesis for the degree Cand. Scient. (M.sc) in Microbiology, Department of Microbiology and Plant Physiology, University of Bergen.

### **Reviews**

I am acting as reviewer for the following scientific journals:

- Journal of Life Cycle Assessment, JLCA – ISSN 0948-3349
- Journal of Industrial Ecology, JIE – ISSN 1530-9290
- Building Research and Information., BRI - ISSN 0961-3218
- Journal of Cleaner Production, jclepro - ISSN: 0959-6526
- Buildings, Buildings - ISSN 2075-5309
- Energy and Buildings - ISSN: 0378-7788
- Civil Engineering and Environmental Systems, Civ.Eng. Environ. Syst. - ISSN: 1028-6608

I am acting as reviewer for new COST actions. COST is the longest-running European framework supporting trans-national cooperation among researchers, engineers and scholars across Europe. <http://www.cost.eu/>

### **Organizations:**

- Member of International Initiative for a Sustainable Built Environment (iiSBE)
- Member of the International Society for Industrial Ecology (ISIE)
- Member of the CIB W098 "Intelligent and Responsive Buildings"
- Member of the CIB W115 "Construction Materials Stewardship"
- Member of the CIB W116 "Smart and Sustainable Built Environments"