




BENJAMIN BATINGE

PERSONAL INFORMATION

Date of birth: **5th December 1988**
Nationality: **Ghanaian**
Address:  P. O. Box 214,
Sunyani,
Bono Region, Ghana
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PROFILE

I possess multidisciplinary expertise, including energy systems modelling, energy policy and transition, economic and financial viability modelling, system dynamics modelling and simulation, climate change and disaster risk assessment, water resource modelling, model-based policy design and implementation, public-private partnerships, and advanced marketing communication.

EDUCATION

- 01/2016 -12/2018 **PhD in Public and Development Management**
Stellenbosch University (Stellenbosch, South Africa)
- **Dissertation title:** *Expediting transitions in unmet electricity markets: the case of leapfrogging renewable energy in Africa*
- 08/2013 - 06/2015 **MPhil. in System Dynamics**
University of Bergen (Bergen, Norway)
- **Dissertation title:** *Energy Investment pathways for sustainable future: A System Dynamic approach to solving the electricity shortfall in Ghana*
- 08/2008 - 05/2012 **BSc. in Administration**
University of Ghana (Accra, Ghana)
- **Dissertation title:** *Challenges of Electronic Commerce adoption: the case of Ghana*
- 08/2010 - 05/2011 **Diploma in Advanced Marketing**
Harstad University College (Harstad, Norway)
- **Dissertation title:** *The Impact of Corporate Social Responsibility (CSR) on consumer perception and behaviours*

CORPORATE AND CONSULTANCY EXPERIENCE

- 12/2021 – present **Organisation: University of Energy and Natural Resources** (Sunyani, Ghana)
Position: Research Fellow
- **Summary of role:** I conduct research, assess, interpret and evaluate research impacts, and develop grant proposals.
- 05/2021 – 11/2021 **Organisation: Sustainable Solutions for Africa** (Lome, Togo)

Position: Senior Climate Policy Consultant

- **Summary of role:** I researched and wrote funding proposals on infrastructure vulnerabilities to different climate stressors, especially in Africa.

07/2021 – 10/2021

Organisation: United Nations (Climate Technology Centre and Network) (Nairobi, Kenya)

Position: Climate Finance Specialist

- **Summary of role:** I developed a GCF Concept Note in collaboration with the West African Development Bank (BOAD). I also supported drafting and submitting a Project Preparation Funding Application to the GCF for a multi-country project in the Sahel region.

10/2020 – 03/2021

Organisation: DNV GL (Oslo, Norway)

Position: Senior Researcher

- **Summary of role:** I worked on a multi-sectoral energy model, focusing on carbon capture and storage to simulate pathways to a low carbon economy as part of DNV's annual Energy Transition Outlook report.

12/2019-09/2020

Client: Government of Liberia - Ministry of Finance and Development Planning (Monrovia, Liberia)

Project: Climate Information and Early Warning Systems (CIEWS)

Position: Lead Consultant

- **Summary of role:** I led the development of the Green Climate Fund (GCF) Simplified Approval Process (SAP) Proposal for the Government of Liberia (GoL). The proposal was successfully approved by GCF, and the grant of USD 10 million and a co-financing of USD 1.4 million was awarded (see [project details here](#)).

02/2020 - 06/2020

Client: International Finance Corporation (IFC) (Washington DC)

Project: Creating Power Markets Report

Position: Short-Term Consultant

- **Summary of role:** I built a comprehensive capacity and regulatory database of the electricity and power sector in ten countries in Africa for the IFC.

12/2019-06/2020

Client: Green Climate Fund (GCF) (South Korea)

Project: Climate Information and Early Warning Systems (Sector Guide)

Position: Research Consultant

- **Summary of role:** I developed a framework and a guidance document for assessing the utility of climate information, early warning, and risk reduction in Green Climate Fund focus areas and sectors.

11/2019 - 01/2021

Client: United Nations Environment Programme (Botswana & Zimbabwe)

Project: African Coexistence Landscapes (ACL)

Position: Modelling Consultant

- **Summary of role:** I developed a water model as part of four-member system dynamics modelling team that worked with stakeholders from the Kavango-Zambezi Transfrontier Conservation Area (Angola, Botswana, Namibia, Zambia, and

Zimbabwe) on the Humans, Wildlife, and Resources nexus (see [project details here](#)).

- 06/2019-10/2019 **Client: Department of Environmental Affairs** (South Africa)
Project: UNEP Partnership for Action on Green Economy (PAGE)
Position: Research Consultant
- **Summary of role:** I worked with two modellers on a subnational System Dynamics model on the water-biodiversity nexus in four South African provinces (Limpopo, Western Cape, Eastern Cape, and Northern Cape)
- 10/2018-12/2018 **Client: Innovation for Sustainable Development Network** (Stellenbosch, South Africa)
Project: Green-EU
Position: Research Assistant
- **Summary of role:** I wrote a policy brief on Eco-innovation as a lever for Sustainable Development
- 09/2017-08/2018 **Institution: University of Stellenbosch** (Stellenbosch, South Africa)
Project: Co-designing Energy Communities
Position: Research Assistant
- **Summary of role:** I co-organised workshops to engage key stakeholders on ways to co-design energy communities with energy-poor urban households
- 06/2017-05/2018 **Client: South Africa Mohair Cluster** (Cape Town, South Africa)
Project: Sustainable Mohair Production in South Africa
Position: Modelling Consultant
- **Summary of role:** I developed a System Dynamics model on climate variability and value chain creation in the South African Mohair industry
- 06/2014-12/2015 **Institution: Haukeland University Hospital** (Bergen, Norway)
Position: Technical Assistant
- **Summary of role:** I forecasted and controlled the clothing inventory for various departments within the hospital
- 02/2011-06/2011 **Institution: Harstad University College** (Harstad, Norway)
Position: IT Assistant
- **Summary of role:** I provided students with various technical assistance in the students' computer laboratory

ACADEMIC EXPERIENCE

- 12/2021 – present **Institution: University of Energy and Natural Resources** (Sunyani, Ghana)
Position: Research Fellow
- **Summary of role:** I research Energy Access and Circular Economy in Ghana and sub-Saharan Africa. I also write grant proposals.
- 10/2019 – 09/2020 **Institution: University of Stellenbosch** (Stellenbosch, South Africa)
Position: Postdoctoral Researcher
- **Summary of role:** I researched Energy Security in Poor Urban Communities and developed an integrated energy-economy system dynamics model for South Africa.
- 05/2020–11/2020 **Institution: University of Stellenbosch Business School** (Stellenbosch, South Africa)
and from

- 03/2016–12/2016 **Position:** Part-time Faculty
- **Summary of role:** I taught Contemporary Decision-Making and Systems Methods courses in the MBA class.
- 11/2018 – 01/2020 **Institution:** Eduardo Mondlane University (Maputo, Mozambique)
Position: Visiting Lecturer
- **Summary of role:** I taught the Energy and Sustainable Development in Mozambique module under the Master's in Engineering and Business Economics programme.
- 05/2017 – 07/2018 **Institution:** Sustainability Institute (Stellenbosch, South Africa)
Position: Teaching Assistant
- **Summary of role:** I tutored in the Advanced System Dynamics Modelling module of the Master's in Sustainable Development programme
- 10/2014–12/2014 **Institution:** University of Bergen (Bergen, Norway)
Position: Teaching Assistant
- **Summary of role:** I taught System Dynamics Modelling process course in the Master's in System Dynamics class
- 08/2012–07/2013 **Institution:** University of Ghana (Accra, Ghana)
Position: Research Assistant
- **Summary of role:** I researched knowledge transfer and drivers of growth among Small Scale Enterprises in Ghana

LANGUAGE PROFICIENCY

Fluent:	English, Dagaare, Akan
Intermediate:	Norwegian
Beginner	French

TECHNICAL (SOFTWARE) SKILLS

Advanced:	STELLA, Vensim, SPSS, Microsoft Office suite (Word, Excel, PowerPoint)
Moderate:	Stata, QGIS, EViews

AWARDS, TRAINING, AND SCHOLARSHIPS

- 11/2017 **Jean Monnet Young Researcher Award for Original Work**
Symposium of International Network of Michelin cities – Clermont-Ferrand, France
- 07/2017 **System Dynamics Summer School**, Massachusetts Institute of Technology (MIT), USA
- 08/2016 **Small Grants for Thesis Writing** - Council for the Development of Social Science Research in Africa (CODESRIA), Senegal
- 01/2016 **Graduate School Scholarship**, University of Stellenbosch, South Africa
- 08/2013 **Quota Scholarship**, University of Bergen, Norway
- 07/2012 **Growth Mosaic Entrepreneurship Training** - Accra, Ghana
- 08/2009 **Tertiary Education Scholarship Trust**, University of Ghana, Ghana

PROGRAMMES, EXTRA-CURRICULAR ACTIVITIES, AND LEADERSHIP ROLES

- 11/2019-10/2020 **Vice President:** South Africa System Dynamics Chapter (South Africa)
- 02/2019 **Finalist - World Bank Young Professionals Program (YPP)**

I passed the interview and assessment and was shortlisted

11/2016-Present	Reviewer: Renewable and Sustainable Energy Reviews Journal, Energy Research and Social Science Journal, and Energy Policy Journal
08/2016-08/2018	Vice President: Concordia Residence, Stellenbosch University (South Africa)
01/2014-03/2015	President: International Students Union, University of Bergen (Norway)
02/2011-08/2011	Volunteer: Save the Children International, Redd Barna - Harstad (Norway)
08/2009-07/2010	Member: University of Ghana Business School General Assembly (Ghana)

JOURNAL PUBLICATIONS

1. **Batinge, B.**, Musango, J.K., Ceschin, F., Ambole, A., Smit, S., Mukama, M. and Petrulaityte, A., 2022. From energy security to security of energy services: The role of gendered innovations in living labs. *The South African Journal of Industrial Engineering*, 33(2), pp.49-61.
2. **Batinge, B.**, Musango, J.K., Ceschin, F., Ambole, A., Smit, S. and Petrulaityte, A., 2021. Modelling gendered innovation for the security of energy services in poor urban environments. *Systems Research and Behavioral Science*.
3. Zhang, Q., & **Batinge, B.**, 2021. A social network analysis of the structure and evolution of intra-African trade. *African Development Review*. 1– 14. <https://doi.org/10.1111/afdr.12506>
4. Musango, J.K., Smit, S., Ceschin, F., Ambole, A., **Batinge, B.**, Anditi, C., Petrulaityte, A. and Mukama, M., 2020. Mainstreaming gender to achieve security of energy services in poor urban environments. *Energy Research & Social Science*, 70, p.101715.
5. **Batinge, B.**, Musango, J.K. and Brent, A.C., 2019. Perpetuating energy poverty: Assessing roadmaps for universal energy access in unmet African electricity markets. *Energy Research & Social Science*, 55, pp.1-13.
6. **Batinge, B.**, Musango, J.K. and Brent, A.C., 2019. Sustainable Energy Transition Framework for Unmet Electricity Markets. *Energy Policy*, Volume 129, June 2019, Pages 1090-1099
7. Malisa, R., Schwella, E. and **Batinge, B.**, 2019. Augmenting Water Supplies Through Urban Wastewater Recycling (March 2019). *IEEE Systems Journal*.
8. **Batinge, B.**, Musango, J.K. and Brent, A.C., 2017. Leapfrogging to renewable energy: the opportunity for unmet electricity markets. *The South African Journal of Industrial Engineering*, 28(4), pp.32-49.

CONFERENCE PAPERS

1. **Batinge, B.**, Musango, J.K., Smit, S., Ceschin, F., Ambole, A., Anditi, C., and Petrulaityte, A. Modelling gendered innovation and energy services security in poor urban environments (2020). *Presented at the 38th International Conference of the System Dynamics Society*, July 19-25, 2020, Bergen, Norway.
2. **Batinge B.**, Musango K. J., and Brent A. C. (2019). Roadmap for universal electricity access and renewable energy targets in Ghana. *Presented at the 37th International Conference of the System Dynamics Society*, July 21-25, 2019, Albuquerque, New Mexico, USA.
3. Muranda, A., Musango, J. K., and **Batinge, B.** (2018). Coal generation lock-in. *Proceedings of the Sixth Annual System Dynamics Conference in South Africa, November 22-23, 2018*, University of the Witwatersrand, Johannesburg, South Africa
4. Duminy, L., Musango, J. K., **Batinge, B.**, Gillman, C., Taverner, I., Viljoen, M. D., and Smit, S. (2018). From model results to implementation: the case of Mohair Value Chain Sustainability Project. *Proceedings of the Sixth Annual System Dynamics Conference in South Africa, November 22-23, 2018*, University of the Witwatersrand, Johannesburg, South Africa.

5. **Batinge, B.**, Musango, J.K. and Brent, A.C., (2018). Imperatives for Private Sector Financing in Unmet Electricity Markets in Africa. *AFRE International Conference on Innovations in Engineering Sciences, Smart Materials, Bioinformatics, Manufacturing & Industrial Technologies*, September 25-26, 2018. Accra, Ghana.
6. **Batinge B.**, Musango J., Brent A. C. (2017). Implications of Urbanisation in the Sub-Saharan African cities on sustainable energy access. *Presented at the First Symposium of International Network – Michelin cities*, 29th November – 1st December 2017. Clermont-Ferrand, France.
7. Troost, A. P., Musango, J. K., Brent, A. C., **Batinge, B.**, and Currie, P. (2017). Conceptualising Pathways to Cost Recovery for Rural Mini-Grids. *Proceedings of the Fifth Annual System Dynamics Conference in South Africa, November 27-28, 2017*, Eskom Research & Development, Rosherville, Johannesburg.
8. Lartey, E., Musango, J. K., Brent, A. C., **Batinge, B.**, and Currie, P. (2017). A system dynamics approach to understanding deforestation at the Bobiri Forest Reserve, Ghana. *Proceedings of the Fifth Annual System Dynamics Conference in South Africa, November 27-28, 2017*, Eskom Research & Development, Rosherville, Johannesburg.
9. **Batinge B.**, Musango K. J., and Brent A. C. (2017). Boosting electricity access in Africa through private sector financing. *Presented at the 35th International Conference of the System Dynamics Society*, July 16-20, 2017, Cambridge, Massachusetts, USA.
10. **Batinge, B.** (2015). Sustainable Energy Future - A System Dynamics Approach to solving Electricity shortfall in Ghana. *Conference Proceedings: 33rd International Conference of the System Dynamics Society*, July 19-23, 2015, Cambridge, Massachusetts, USA.
11. **Batinge, B.** (2015). Effect of Information Design and Presentation on Decision-Making Strategies and Performance in a Dynamic Environment. *Conference Proceedings: 33rd International Conference of the System Dynamics Society, July 19-23, 2015*, Cambridge, Massachusetts, USA.

CONFERENCES ATTENDED

11/2020	9 th South African System Dynamics Conference, Johannesburg, South Africa (virtual conference)
07/2020	38 th International System Dynamics Conference, Bergen, Norway (virtual conference)
07/2019	8 th South African System Dynamics Conference, Stellenbosch, South Africa
11/2017	First Symposium of International Network of Michelin cities, Clermont-Ferrand, France
07/2017	35 th International System Dynamics Conference, Boston, USA
10/2016	5 th South African System Dynamics Conference, Stellenbosch, South Africa
07/2015	33 rd International System Dynamics Conference, Boston, USA

PROFESSIONAL AFFILIATIONS

1. Member, International System Dynamics Society (<http://systemdynamics.org>)
2. Member, South African System Dynamics Chapter (<http://systemdynamics.org.za>)