



Jean-Sébastien BROC  
 Broc Research & Consulting



associate

35 years old

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### **Research Areas and Fields of Expertise**

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- Analysis and evaluation of energy efficiency policies and programmes (especially for the building sector and for programmes at the urban or regional level)
- Definition and testing of evaluation methods for energy efficiency activities
- Integrated and multidisciplinary approaches

### **Curriculum and professional experience**

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- Independent researcher and consultant, BR&C (2013 – on-going)
- Research Engineer at Ecole des Mines de Nantes (2003-2013)
- PhD from Mines ParisTech and Ecole des Mines de Nantes (2006)
- Engineering degree from INSA de Lyon (2003)

### **Main projects / Professional Experience**

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2015-on going	Survey of ex-post evaluations of national energy efficiency policies and programs for buildings (in European countries) (for ATEE, EEPPEE initiative)
2013-on going	Subcontractor of ADEME to contribute to the Technical Committee 257 of ISO about the standardisation of energy savings calculations
2008-on going	Involvement in the technical discussions about the implementation of the Energy Services Directive (2006/32/EC) and then Energy Efficiency Directive (2012/27/EU): bottom-up working group of the Energy Demand Management Committee ; French delegation in the Concerted Action for the Energy Efficiency Directive ; CEN (European Committee for Standardization) TaskForce 190 about energy savings calculations
2014-2015	Review of the National Energy Efficiency Action Plans submitted by the Member States to the European Commission in 2014
2013-2014	Detailed case studies about the Green Deal scheme of the UK and the KfW programmes for buildings in Germany (for ADEME)
2013-2014	Discussion paper about binding targets for energy efficiency at the European level (for the ECEEE, European Council for an Energy Efficient Economy)
2014	Member of the consortium coordinated by I Care Environment for the study reviewing the activities of the French regional observatories for energy and climate (for ADEME)
2011-2012	Subcontractor of ENERDATA for the review of innovative energy efficiency policies in the residential sector
2010	Research contract for ADEME and the World Energy Council about energy efficiency programmes for low income households
2009-2012	EvalPDU (French research project): multidisciplinary research project about the assessment of the environmental impacts of urban mobility plans and of their socio-economic consequences. Tasks: evaluation methodology and definition of the scenarios to be tested
2007-2009	EMEEES (Intelligent Energy Europe project): Evaluation and Monitoring for the EU Directive on Energy End-Use Efficiency and Energy Services. Tasks: definition of the bottom-up evaluation methodology, test on case studies.
2007-2008	Research contract for EDF R&D about energy management in office buildings

2003-2006	PhD thesis at Ecole des Mines de Nantes and Centre for Energy and Process (Mines ParisTech) about ex-post evaluation of local energy efficiency activities, including a 1-year research contract for EDF R&D in partnership with the Wuppertal Institute, Germany
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### Professional & scientific community

Board member of IEPPEC (International Energy Program and Policies Evaluation Conference) since 2013, co-chair of IEPPEC 2014 and 2016

reviewer for several scientific journals (*Energy Efficiency, Journal of Cleaner Production, ...*)

panel leader for the panel *Monitoring & Evaluation of the ECEEE* (European Council for an Energy Efficiency Economy) Summer Study 2009 and 2015

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### Main publications

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| 2015 | <p>Broc, J., 2015. Snapshot of Energy Efficiency Obligations schemes in Europe: main characteristics and main questions. Report for the Third European Workshop Meeting of the White Certificates Club, 27 May 2015.</p> <p>Broc, J., Trauchessec, E., Milin, C., 2015. Revisiting the KfW and Green Deal programmes: it's not all about finance! <i>Proceedings of the ECEEE 2015 Summer Study</i>, paper 2-150-15, 321-331.</p> <p>Bourges, B., Gourdon, T., Broc, J. (coord.), 2015. <i>Empreinte carbone : évaluer et agir</i>. Paris : Presses des Mines, octobre 2015, 386 p.</p>   |
| 2014 | <p>Broc, J., 2014. A Binding Target for Energy Demand: Why and How? Discussion Paper for the ECEEE (European Council for an Energy Efficient Economy), 16 May 2014.</p>   |
| 2013 | <p>Broc, J., Czako, V., Bertoldi, P., 2013. On the way to change of scale: review of NEEAPs' energy efficiency strategies for buildings, <i>Proceedings of the ECEEE 2013 Summer Study</i>, 503-513.</p> <p>Sebi, C., Broc, J., Lapillonne, B., Fleuriot, F., 2013. Reviewing successful and innovative policies to drive an energy efficiency strategy: case study for France, <i>Proceedings of the ECEEE 2013 Summer Study</i>, 333-338.</p>   |
| 2012 | <p>Broc, J., Melo, C.A., Jannuzzi, G.D.M., 2012. Detailed comparison of Brazilian and French obligation schemes to promote energy efficiency, <i>Proceedings of the 2012 International Energy Program Evaluation Conference</i>, 12-14 June 2012, Rome, Italy.</p> <p>Fouillé, L., Broc, J., Bourges, B., Bougnol, J., Mestayer, P., 2012. La place des modèles de trafic dans les récentes modélisations des impacts environnementaux des transports - Importance de l'explicitation des méthodes et hypothèses. <i>Recherche Transports Sécurité</i>, 28(3-4), 190-200.</p> <p>Thomas, S., Boonekamp, P., Vreuls, H., Broc, J., Bosseboeuf, D., Lapillonne, B., Labanca, N., 2012. How to measure the overall energy savings linked to policies and energy services at the national level? <i>Energy Efficiency</i>, 5(1), 19-35.</p> |
| 2011 | <p>Bosseboeuf, D. and Broc, J., 2011. Energy efficiency target for Europe: why and how to make it happen, <i>Proceedings of the ECEEE 2011 Summer Study</i>, 6-10 June 2011, Hyères, France.</p> <p>Broc, J., Osso, D., Baudry, P., Adnot, J., Bodineau, L., Bourges, B., 2011. Consistency of the French white certificates evaluation system with the framework proposed for the European energy services. <i>Energy Efficiency</i>, 4(3), 371-392.</p> <p>Broc, J., Bosseboeuf, D., Bourges, B., 2011. Energy efficiency for alleviating energy poverty: yes we can! Experience feedback from four national case studies, <i>Proceedings of the ECEEE 2011 Summer Study</i>, 6-10 June 2011, Hyères, France.</p>   |
| 2010 | <p>Broc, J. and Bourges, B., 2010. A new challenge for the energy efficiency evaluation community: energy savings and emissions reductions from urban transportation policies, <i>Proceedings of the 2010 International Energy Program Evaluation Conference</i>, 8-10 June 2010, Paris, France.</p> <p>Thomas, S., Vreuls, H., Broc, J., Adnot, J., Gula, A., Schlomann, B., Bosseboeuf, D., Lapillonne, B., Labanca, N., 2010. Monitoring and evaluation of energy savings from domestic appliances for the EU's Energy Service Directive, <i>Proceedings of Energy Efficiency in Domestic Appliances and Lighting</i>, JRC, Ispra, Italy, 211-222, 16-18 June 2009, Berlin.</p>  |
| 2009 | <p>Thomas, S., Boonekamp, P., Vreuls, H., Broc, J., Bosseboeuf, D., Lapillonne, B., Labanca, N., 2009. How much energy saving is 1 % per year? We still don't know but we know better how to find out. <i>Proceedings of the ECEEE 2009 Summer Study</i>, 1-6 June 2009, La Colle sur Loup, France.</p> <p>Vreuls, H., Thomas, S., Broc, J., Both, D., 2009. Will ESD reporting using bottom-up energy savings calculations be a nightmare or the next step in a better understanding of national energy savings?</p>   |

- 2008 Broc, J., Nogues, P., Bourges, B., Adnot, J., Baudry, P., 2008. Can Energy Savings from Operations Promoting Energy Efficient Behaviors in Office Buildings be Accounted for? *IEECB Focus 2008 (Improving Energy Efficiency in Commercial Buildings Conference)*, 10-11 April 2008, Frankfurt am Main, Germany.
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- 2007 Broc, J., Bourges, B., Adnot, J., 2007. Evaluation as a "Learning-by-Doing" Tool for the Implementation of Local Energy Efficiency Activities, *Proceedings of the 2007 International Energy Program Evaluation Conference*, 13-16 August 2007, Chicago, IL.
- Broc, J., Bourges, B., Adnot, J., 2007. A process to develop operational bottom-up evaluation methods – from reference guidebooks to a practical culture of evaluation, *Proceedings of the ECEEE 2007 Summer Study*, 4–9 June 2007, La Colle sur Loup, France.
- Thomas, S., Nilsson, L.J., Eichhammer, W., Vreuls, H., Broc, J., Bosseboeuf, D., Lapillonne, B., Leutgöb, K., 2007. How much energy saving is 1 % per year? *Proceedings of the ECEEE 2007 Summer Study*, 4–9 June 2007, La Colle sur Loup, France.
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- 2006 Broc, J., 2006. *L'évaluation ex-post des opérations locales de Maîtrise de la Demande en Energie - Etat de l'art, méthodes bottom-up, exemples appliqués et approche du développement d'une culture pratique de l'évaluation*, Thèse de Doctorat en Energétique de l'École de Mines de Paris, Ecole des Mines de Nantes, Nantes, France, décembre 2006.
- Broc, J., Combes, B., Bourges, B., Adnot, J., Hartmann, S., Fernandez, M., 2006. Raising awareness for energy efficiency in the service sector: learning from success stories to disseminate good practices, *IEECB Focus 2008 (Improving Energy Efficiency in Commercial Buildings Conference)*, 26-27 April 2006, Frankfurt am Main, Germany.
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- 2005 Broc, J., Bourges, B., Adnot, J., Hartmann, S., 2005. Local energy efficiency and demand-side management activities in France, *Proceedings of the ECEEE 2005 Summer Study*, 30 May - 4 June 2005, Mandelieu, France.
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