

# Sandrine MARTY

## General engineer specialized in environment and energy

DOB : 11 of February 1990

French

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FRANCE

## Education

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- 2015-2016* **Advanced Master** in Engineering and strategy to innovate in Environmental Management, **ISIGE-Mines ParisTech, France.**
- 2012-2014* **Research Master (double diploma), Ecole Polytechnique, Montreal, Canada.**  
M.Sc.A in chemical engineering. Thesis's subject: The production of calcium oxide and sulphur dioxide from phosphogypsum decomposition. GPA : 3.47/4
- 2010-2013* **Engineering studies, Ecole des Mines de Nantes, France. Master, environmental engineering.** Core subjects include: Fluid mechanics, Energy and Environmental Strategies and Processes, Statistics, School projects (OSE, MSE, PRIME, Associative projects). GPA: 3.38/4.0
- 2008-2010* **2-year intensive undergraduate program preparing for national competitive exams for entry to engineering schools, France.** Studies included: Mathematics, Physics, Chemistry, Engineering sciences, English.
- 2005-2008* **Baccalauréat, Scientifique.** French equivalent to A-levels, with honors. Studies included: Mathematics, Physics, Chemistry, Biology, Foreign languages.

## Work Experience

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- Sept. 2015-Oct. 2016* **ENGIE Futures Energies - Apprenticeship Training**  
Objective: Wind turbine projects development and monitoring.
- June 2014-June 2015* **HUTCHINSON – Engineer**  
Objective: Improvement of super capacitors production industrial process  
- Assistance to the project manager on the different stages of the process (design, purchase materials, ...)  
- Management of 3 technicians of the E-Green laboratory and scheduling tasks (VP)
- Jan. 2013-Feb. 2014  
(1 year)* **OCP Group – Final engineering internship**  
Research project in chemical department of the Ecole Polytechnique of Montreal for the company OCP (based in Morocco). Objective: Process design to recover a waste.  
(Confidential results)
- May 2012-Aug. 2012  
(3 months)* **DNV KEMA (Arnhem, The Netherlands) – Engineering internship**  
Reporting design for Cap'Wa project: theoretical analysis of the gas composition, pressure drop calculation, sizing of pumps and exchangers, choice of materials and costing.
- Jan. 2012  
(2 weeks)* **EIDER (Angers, France) – Junior engineering consulting**  
In a team of 4 students, responsible for:  
- Establishing a strategy for export development,  
- Improving the means of communication.
- July 2011  
(1 month)* **MEGIAS Plastiques (Villeneuve-Tolosane, France) – Trainee**  
This company works in plastic materials. Responsible for:  
- Analysing the supply chain of the thermoforming department to understand its function and its constraints,

June 2011  
(2 weeks)

- Working in an operator's team of the production line,
  - Interviewing 2 members of the managerial staff to get acquainted with their career.
- PROSERVIA (Carquefou, France) – Junior engineering consulting**  
Responsible for:
- Conducting an audit in a team on the Corporate Social Responsibility policy of the Company,
  - Writing a report on possible improvements in their policy.

## School Projects

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- Nov. 2013-Dec. 2013 **Ecotoxicological study of a case of contamination with TerraSys.** In a team of 2, responsible for:
- Land characterization (fictional) contaminated with various contaminants,
  - Specific Study about the PCP contamination,
  - Risk assessment with TerraSys software.
- Nov. 2012-Dec. 2012 **Life Cycle Assessment of coated paper.** In a team of 4, responsible for:
- Identify the strengths and weak points of the LCA of coated paper,
  - Propose improvement of this LCA.
- Results: Written report and oral presentation as a poster.
- Sept. 2012-Dec. 2012 **Analysis of an impact study report.** In a team of 6, responsible for:
- Review of the Impact Analysis report Turcot project (Quebec, Canada),
  - Preparation of a written report and oral presentation on the role of stakeholders in this project part.
- Nov. 2012-Dec. 2012 **Conception of a hybrid system with geothermal heat pumps to heat/cool a building.**
- Sizing of the ground loop for a classic system,
  - Conception of a hybrid geothermal system with a vertical closed loop,
  - Life Cycle Cost minimisation.
- Sept. 2011-April 2012 **OSE: Preliminary study for the installation of a solar system in a village in India.** In a team of 5, responsible for:
- Sizing a solar panel system to provide electricity in a village,
  - Analysing the financial costs and the return on investment,
  - Writing a report for a local organization for solidarity in India.
- Sept. 2010-June 2012 **Association projects manager. Eki'Libre, students association for the sustainable development.** Responsible for:
- Delivering fruits and vegetables weekly from local organic farms over the campus for students,
  - Planning documentary projections in the school about sustainability issues and open to students,
  - Conducting public debates.
- Oct. 2010-May 2011 **MSE: Simulate thermal transfers.**
- Sept. 2010-June 2011 **PRIME: Designed a model to measure the thermal comfort of a room.**

## Languages and Skills

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<b>French</b>	Mother tongue.
<b>English</b>	Fluent. IELTS ( <i>International English Language Testing System</i> ) : 7/9
<b>Spanish</b>	Intermediate level (Writing and Speaking) (B1)
<b>Chinese</b>	Notions (A1)
<b>IT</b>	Pack Office, FactSage, ASPEN PLUS, TerraSys, COMSOL, EES, Matlab, TRNSYS, Fluent, Eclipse, EC-Lab.
<b>Others</b>	Sustainability, Life Cycle Assessment, Impact studies, Project management, Transport Phenomena, Fluid dynamic, Thermodynamic, Process Engineering, Water treatment, Renewable energies.

## Hobbies

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Sports	Dance (classic, modern-jazz, hip-hop): 16 years (performing on stage once a year), Diving degree level 1 (French equivalent to PADI Open water), Yoga.
Others	Travels, Reading, Cinema.
Associative	Association of sustainability from the Ecole des Mines de Nantes, Eki'Libre. Volunteer with UNICEF. Energie Partagée.