5208 Prince-of-Wales
Montreal, Quebec
CANADA H4V 2N1

Phone +1 (514) 708-5580
francois.tardy.1@gmail.com

François Tardy, P.Eng. M.Eng. MBA

Education and training

2017 – Concordia University Montreal, QC
Ph.D (Building Engineering)
Centre for Net-Zero Energy Building Studies

2012 – 2013 HEC Montreal Montreal, QC
MBA (Intensive / English)
HEC 2013 Team Captain at the Ross Energy Case Competition, Michigan

2003 – 2005 École de Technologie Supérieure Montreal, QC
M. Eng. (Mechanical Engineering)
Masters Thesis: A study of the use of heat pipes in thermal storage for cooling.

1997 – 2002 Université de Moncton Moncton, NB
B. App. Sc. (Mechanical Engineering)

Professional experience

2012 – François Tardy Consulting Montreal, QC
Consultant

- *Expertise in grants and incentives for energy efficiency and carbon reduction.*
- *Energy audits, cost estimation and energy efficiency projects of all types.*
- *Long-term exclusive contracts with large organizations.*

2014 – Concordia University & ETS Montreal Montreal, QC
Part-Time Faculty Member

- *Engineering Management*
- *Machine Design and Drawing*
- *Engineering Economics*
- *Theory of Machines*
- *Project Management*
- *Project Cost Estimating*
- *Virtual Product Development*
- *Thermodynamics*
- *Mechanical Engineering Drawings*
- *HVAC Design*
- *Computer-Aided Mechanical Design*

2013 – 2014 Vanier College Montreal, QC
Teacher
Electricity and lighting courses, Building Science and Technology Department

2008 – 2012 PCO Innovation (Accenture) Montreal, QC / Lyon, France
Consultant

- *(2012) **IBM / Bombardier Aerospace.** CATIA V5 / ENOVIA Support and sustainment for a global data migration project at involving Indian suppliers.*
- *(2011) **Volvo Powertrain Finance**. Deployment of customized SAP financial system for production sites around the world. Global super user status and coordination at all levels between sites. Based in Lyon, France.*
- *(2009) **Volvo IT**. Design standards and CATIA/ENOVIA for suppliers in Bilbao,Spain.*
- *(2008) **Volvo 3P**. Responsible for thermal experimental activities in Lyon, France.*

2010 – 2011 EH2solar Blainville, QC

Director of Engineering

- *Chief engineer on the design, development and submittal for various cogeneration and desalination project proposals for California.*
- *Responsible for efficiency and feasibility studies regarding submitted projects, SR&ED tax credit claims, patent applications, and other engineering duties.*
- *Association with various U.S. government agencies and power plant owners.*

2008 Carrier / United Technologies Laval, QC

Refrigeration Engineer

- *Chief engineer of refrigeration for the World Trade Center (NYC) submittal project at Carrier Corporation, one of the largest new development projects in the company.*
- *Created one of the most innovative product simulation programs in the company and managed refrigeration activities on a full-scale experimental setup.*
- *Managed the plants' customer service department and others, and provided engineering expertise on many internal projects.*

2006 – 2007 École Polytechnique de Montreal Montreal, QC

Research Assistant

Thermohydraulic design of a Ventricular assist device and study of its effects on blood flow. Expertise developed in Meshing, Gas Dynamics, Heat Transfer and Turbulence.

2005 – 2006 Bombardier Aerospace Montreal, QC

Aerospace Engineer

Completed 1-year New Graduate Training Program, focusing on flight systems, avionics, stress, design, pneumatics, experimental, flight testing, and more, resolved a number of pneumatics and icing problems in CRJ and Challenger aircraft.

2002 Trans-F-Air Saint-Hubert, QC

R&D Project Manager

Filters, refrigeration devices and design and optimizing of a compact mobile ice-storage cooling system. Hired and managed co-op students. ISO 9001 certification.

2000 – 2001 Public Works & Gov. Services Canada Halifax, NS

Student Mechanical Engineer

Design and implementation of HVAC systems for federal buildings, research on alternative refrigerants, cost-estimating and redesign of systems.

Professional Accreditations

Member: **Ordre des ingénieurs du Québec**

Member: **ASHRAE**

USGBA LEED GA

Languages

Canadian citizen. Trilingual; strong abilities in French and English, both written and oral. Advanced level in Spanish. Extensive experience in translation for large organizations.

CAD Tools

- ArcGIS ArcMAP
- CATIA / Enovia LCA
- eQuest / eQRefrig
- Femlab 3.0 / Comsol Multiphysics
- Autodesk REVIT / CFD

Publications

Tardy, F., Lee, B. (2019) Building related energy poverty in developed countries – Past, present, and future from a Canadian perspective. Energy and Buildings. 194, pp. 46-61.

Hosseini, M., Tardy, F., Lee, B. (2018) Cooling and heating energy performance of a building with a variety of roof designs; the effects of future weather data in a cold climate. Journal of Building Engineering 17, pp. 107-114.

Sami, S., Tardy, F. (2015) Numerical Prediction of Thermal Storage Using Phase Change Material. Journal of Technology Innovations in Renewable Energy. 4. 80-90.

Tardy, F., Sami, S. (2009) Thermal analysis of heat pipes during thermal storage. Applied Thermal Engineering. 29. 329–333.

Tardy, F., Sami, S. (2008) An experimental study determining behaviour of heat pipes in thermal storage. International Journal of Ambient Energy. 29. 162-168.

Tardy, F., Sami, S. (2005) A Study of the Use of Heat Pipes in Thermal Storage for Cooling. Proceedings of the ASME Process Industries Division, PID, 2006, pp. 89-93.

Conferences

Comprendre l'énergie dans le contexte économique d'aujourd'hui

- Club ÉnergieÉTS, Montreal (Canada), May 12th, 2016.
- Conférence Internationale des Formations d'Ingénieurs et de Techniciens d'Expression Française, Montreal (Canada), August 24th, 2016.

Filling the Industry Leadership Gap in Sustainability

- Business Beyond Tomorrow, Montreal (Canada), March 18th, 2017.

Les réalités économiques des énergies renouvelables

- École Nationale d'Agriculture, Meknès, Morocco, May 11th, 2017.
- Université Cadi Ayyad, Marrakesh, Morocco, May 22nd, 2017.

Media

C'est quoi la pauvreté énergétique et comment on devrait s'y attaquer? *Moteur de recherche*, Radio-Canada Première, October 22nd, 2019.

Thermal imaging of housing stock can tell us where energy costs will hurt, Concordia researchers show. Concordia University News, October 1st, 2019.

Professional Service

Article Reviewer:

- *Energy Policy* (1)
- *Energy and Buildings* (3)
- *Journal of Building Engineering* (6)

Research Grant Application Reviewer:

- *Mitacs Accelerate* (3)

Judge: 2016 – Engineering and Commerce Case Competition, Concordia University

Judge: 2015- 2019 – School science fair, The Study, Westmount

Other

Member: Golden Key International Honour Society, Concordia University Chapter.

Cardholder: ASP Construction Safety (Quebec).