

## Finance verte : Finance de marché et financement de projet (en anglais)

ECTS : 6

### Description du contenu de l'enseignement :

#### Project Finance

##### 1. Introduction to Project Finance (1/2)

- a. Comparison with corporate finance
  - b. Risks analysis
  - c. Impact on contractual framework
  - d. Overview of the various lenders
- Debt raising process and syndication

##### 2. Introduction to Project Finance (2/2)

- a. Introduction to financing documentation
  - b. The investors' perspective
  - c. Job industry
- Case study: offshore wind financing & refinancing

##### 3. Cashflow modeling

- a. Introduction to financial model
  - b. Key ratios
- Modeling exercise on excel

##### 4. Speakers from a developer/bank and/or advisors to present various points of view and perspectives on PF and Q&A sessions

#### Market Finance

##### Chapter I. Introduction and Reminders

The aim of this chapter is to (i) review the fundamentals as regards the functioning of financial markets and (ii) take stock of the impact of human activities on the environment, focusing in particular on climate change.

##### Chapter II. The material effect of environmental risks on financial markets

The chapter reviews recent studies on the physical and environmental transition risks, socially responsible investment and its motivations (Riedl and Smeets (2017)) and the major challenges of environmental finance, especially regarding regulatory projects and the design of guidelines to good practices (TCFD (2017), HLEG (2018)). The academic literature on companies' cost of capital in relation to their environmental impact is reviewed (Derwall et al. (2005), Renneboog et al. (2008), Sharfman and Fernando (2008), Capelle-Blancard and Laguna (2010), ElGhoul et al. (2011), Chava (2014), Kruger (2015), In et al. (2018), Capelle-Blancard et al. (2019), Zerbib (2020)).

##### Chapter III. Investors' environmental and sustainable practices

This chapter deals with the practices of institutional investors of several kinds (Kruger et al. (2018)): insurance companies, pension funds, banks and asset managers (Andersson et al. (2016)). It focuses on various methods of sustainable investment, such as exclusion (Hong and Kacperczyk (2009)), ESG screening, corporate engagement (Dimson et al. (2015) and Hoepner et al. (2018)), and impact investing. It includes an analysis of telecoupling and investors' responsibility in activities with a high environmental impact (Scholtens (2017) and Galaz et al. (2018)) as well as investors' ability to make corporate practices greener (Heinkel et al. (2001)).

##### Chapter IV. Financing green assets

Here the focus is on the various securities available for financing green projects: green bonds (Flammer (2018), Paraque and Revelli (2019), Zerbib (2019)), project bonds, sustainable infrastructure, real estate, green funds, and labels.

#### Chapter V. Measuring the environmental impact of investments

Presentation of the metrics available, their strengths and limitations: the carbon footprint, carbon intensity, green share, brown share and stranded asset issues (Trinks et al. (2018)), avoided emissions, 2-degree alignment, and the Net Environmental Contribution (NEC).

#### Chapter VI. Central Banking and Green Finance

This chapter deals with the reasons why central banks are concerned about the environmental impact of investments and financial markets, their ability to integrate the management of this additional systemic risk into their mandate (see Benoît Coeure's speech at the ECB in November 2018, Campiglio (2016)) and the limitations of this exercise.

#### **Compétence à acquérir :**

This course is designed to provide students with the tools to understand and support the greening of the financial system by articulating concrete examples, academic papers, and latest regulations.

Skills acquired during the course:

- Understanding the mechanisms at play in project finance applied to green assets
- Understanding of main climate risks underlying financial assets
- Identification of the environmental impact of financial assets
- Knowledge of various methods and practices of environmental investing
- Knowledge of the latest environmental finance regulations

#### **Mode de contrôle des connaissances :**

##### Project Finance

To be described

##### Market Finance

Essay and Oral presentation

Quizz