

Environmental performance as a socio-economic lever for a company: the case of SNCF Réseau

The purpose of this thesis is to answer the main question: **How to monitor the environmental performance of SNCF Réseau, the railway infrastructure manager in France, as a socio-economic lever for its industrial activities?**

Research questions

How to characterize environmental performance in a complex design process?

Systemic analysis of the design project process in SNCF Réseau

Dimensions of environmental performance in infrastructure projects

How to measure and monitor environmental performance in infrastructure design projects?

Evaluation approaches in the design project process

Development of an environmental dashboard

From environmental to global performance: how to characterize environmental actions?

Monetarization of environmental externalities

Linking environmental and global performances

Preliminary results
Environmental performance's dimensions

Methodology

Literature review & industrial diagnosis

Proposal of an environmental dashboard

Application to railway design projects

Results and improvements

Example of a railway project that involves various stakeholders and generates externalities

