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Communities and common knowledge goods in emergence of doubly green chemistry

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Introduction

What we call doubly Green chemistry is a new industry that emerges from the constraints and opportunities for two traditional industries: chemistry and agriculture. Doubly green chemistry, is a chemistry stemming from agricultural raw material ("biosourced") but which must also be clean (green chemistry in the usual sense of the phrase).
Economics highlight the emphasis of research and of knowledge bases in the emergence of new sectoral systems of innovation and production.
In the framework of our thesis we address the question of the scientists coordination for the emergence of doubly green chemistry.

Experimental

The notion of "futurity" developed by J.R. Common explains that the coordination of scientists emerges through shared visions of the future. It's on and around technological promises and "mythe rationnel" that the scientists develop "community's productive patrimonies" core of epistemic communities.
Firstly, we make a review of the literature and empiric observations to check the existence of such communities of promises.
Then, in a dynamic perspective, to understand how scientists coordinate themselves in and beyond those communities, we operate a return at the micro-economic level. We make a qualitative work based on "*content analysis*" of 30 research projects of two public laboratories to analyse their coordination strategy.

Results and Discussion

At the meso-economic level, the review of the literature and our empiric observations show us the existence of several communities of promises.
Then, the micro-economic level work gives us two results:
- Firstly, in the diachronic point of view: laboratories are involved in several simultaneous coordination logics.
- Secondly, in the synchronic point of view: laboratories are involved in several communities which could have different visions of what de doubly green chemistry must be.

Conclusions

We have two conclusions:
- Synchronic and diachronic consistency of scientist's mobilization produces communities and circulation of knowledge as common goods
- Each community of chemists selects and strengthens several technological roadmap to 2CG

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