



# ENVIRONMENTAL IMPACT AND DISPUTES ABOUT BAUXITE RESIDUES: HISTORICAL LANDMARKS, RECENT SETTINGS, AND PERSPECTIVES IN THE CASE OF THE PROVENCE MINING BASIN

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# INTRODUCTION

## Studies & expertise

### 2013 - 2018 (OT-MED thesis)

- PhD thesis: Territorial management and industrial environmental conflicts: In search of biodiversity (PhD thesis)

### 2015 (2019 (OHM-BMP)

- Study : Geography of a public inquiry: Spatial analysis of the registers of observations established during the request for authorization to operate by the ALTEO Company (*Sup. J.C. Raynal*)

### 2018-2019 (COGOV EU Program)

- Post-doctoral research : Survey on the modernization of public action Eu countries: Gardanne pilot case study (France) « An (original) tandem of consultation to solve an environmental conflict » (Boutin, 2019)

### 2019 (OHM-BMP)

- Study: Ecological concerns arising from the Great National Debate on the BMP territory (yellow vests movement)

### 2019 - 2021 (Consultant)

- Consulting for the local State (PACA Préfecture): Ecological and industrial transition of the Gardanne-Meyreuil basin (ending production of electricity from coal) (Paris Agreements 2015, COP21) : closure of the last 4 coal-fired power plants: Cordemais, Le Havre, Saint-Avold, Gardanne-Meyreuil
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**More than 50 stakeholder interviews on the case of the Alteo alumina plant at all levels of decision-making:**

former ministers and advisors, top civil servants, corporate managers, mayors and representatives of local authorities, and other stakeholders such as local residents, environmental associations, ...

# INTRODUCTION

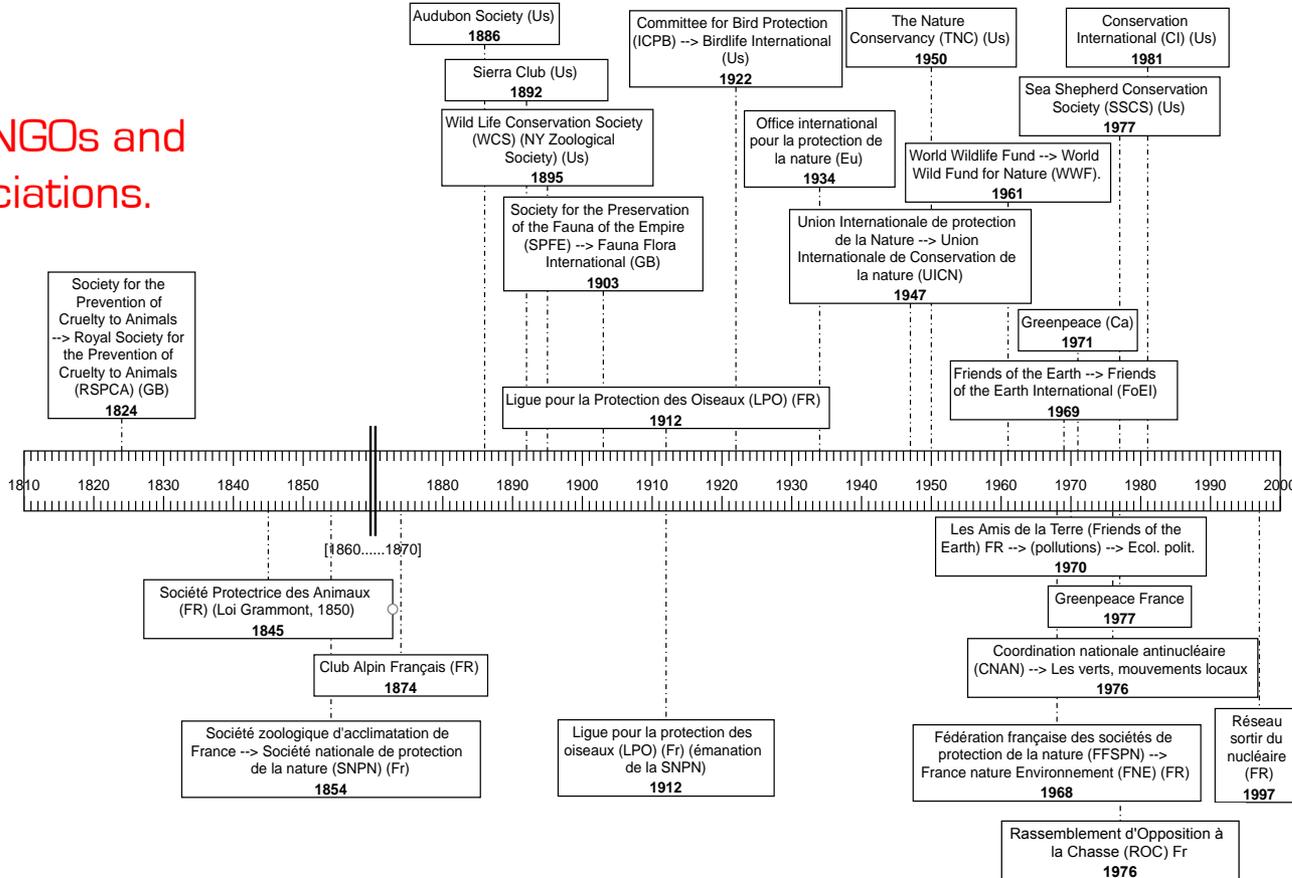


- **Historical landmarks**  
→ Models (Gouvernance)
- **Recent setting (events)**  
→ Tools (Innovation)
- **Prospective (transition)**  
→ Bifurcation (trajectory)

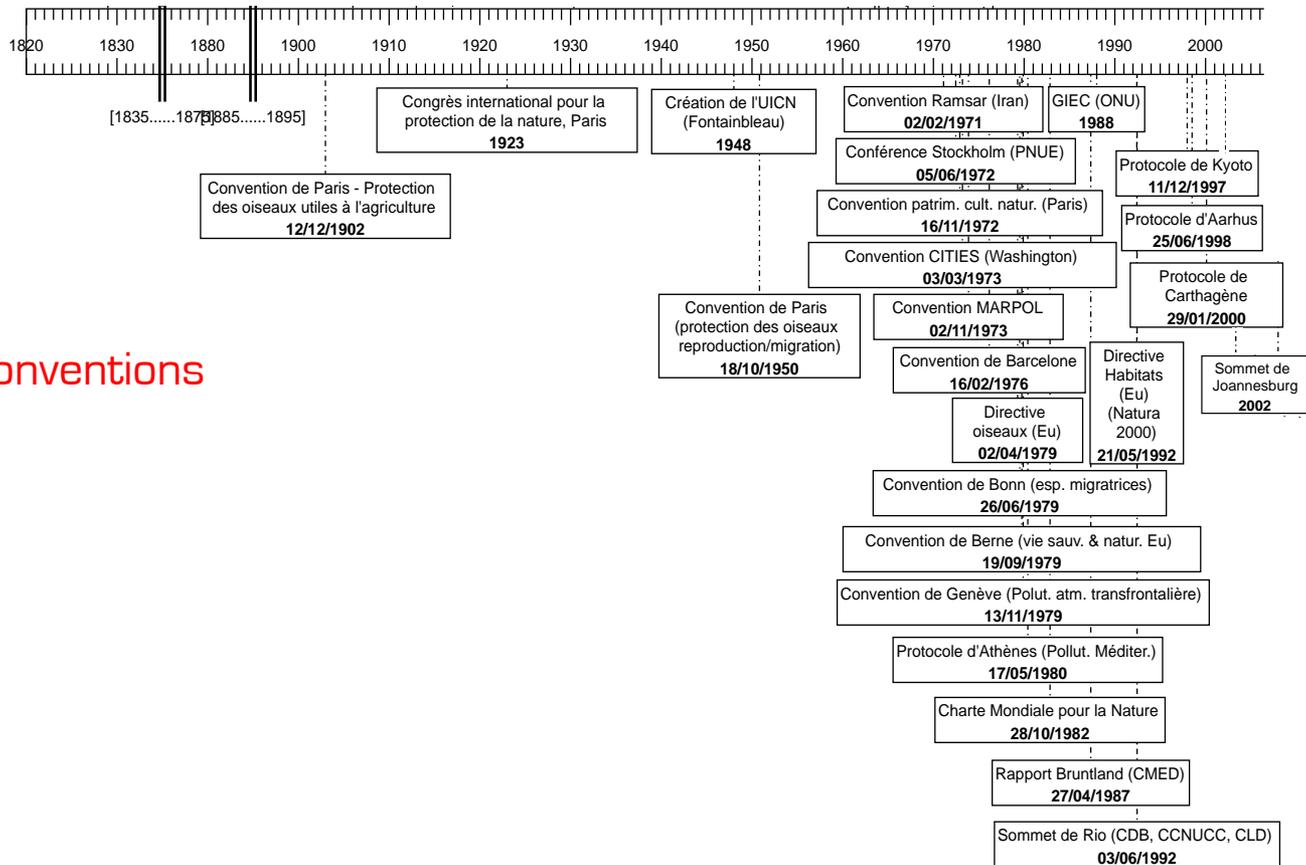
# 1 – HISTORICAL LANDMARKS

## Environmental NGOs and academic associations.

©Boutin, 2018



# 1 – HISTORICAL LANDMARKS



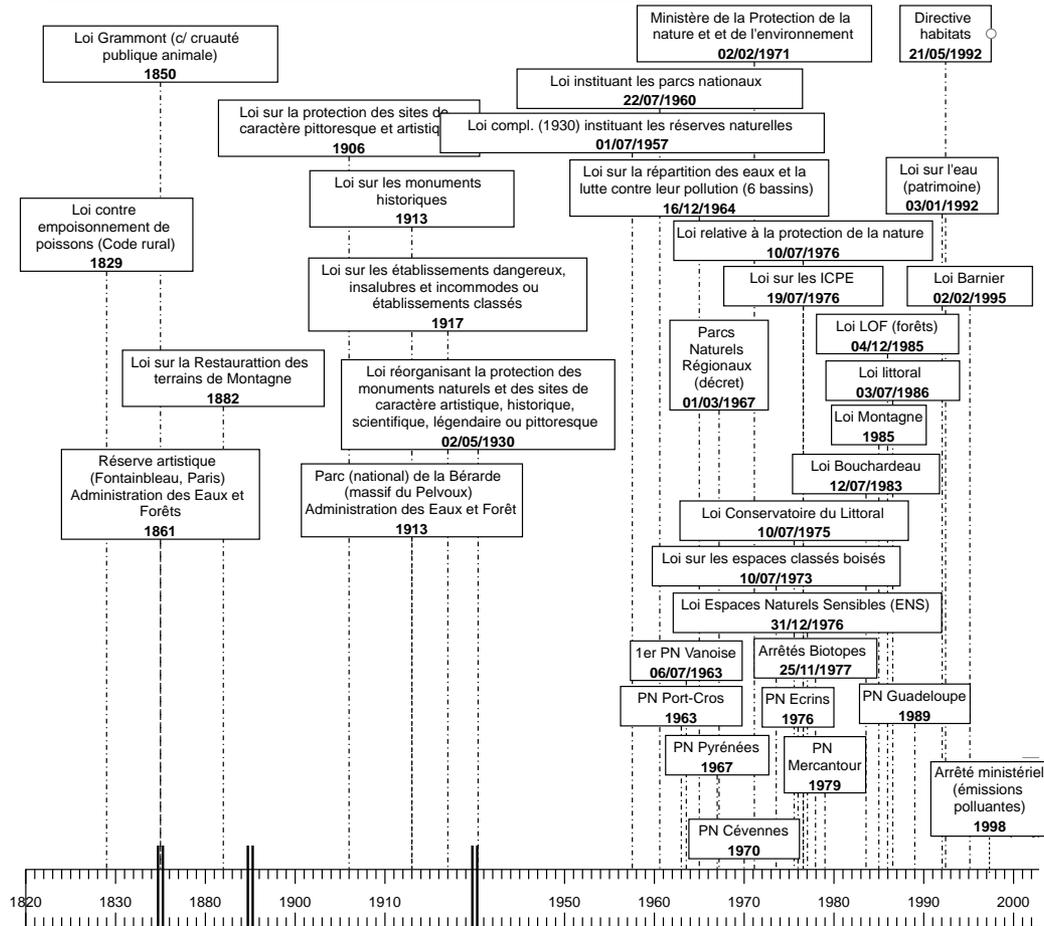
## International Conventions

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# 1 – HISTORICAL LANDMARKS

French translation:  
*Napoleonic system/  
 tradition (legislation and  
 decrees)*

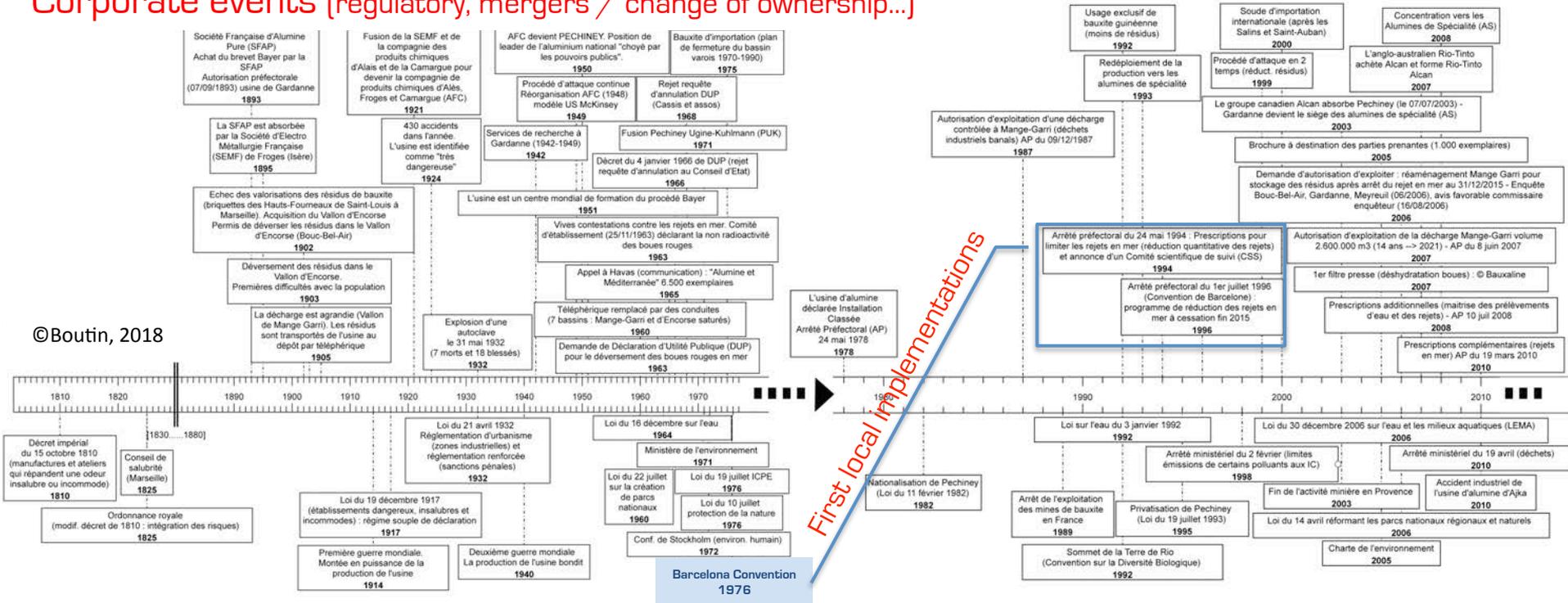
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# 1 – HISTORICAL LANDMARKS

## Corporate events (regulatory, mergers / change of ownership...)

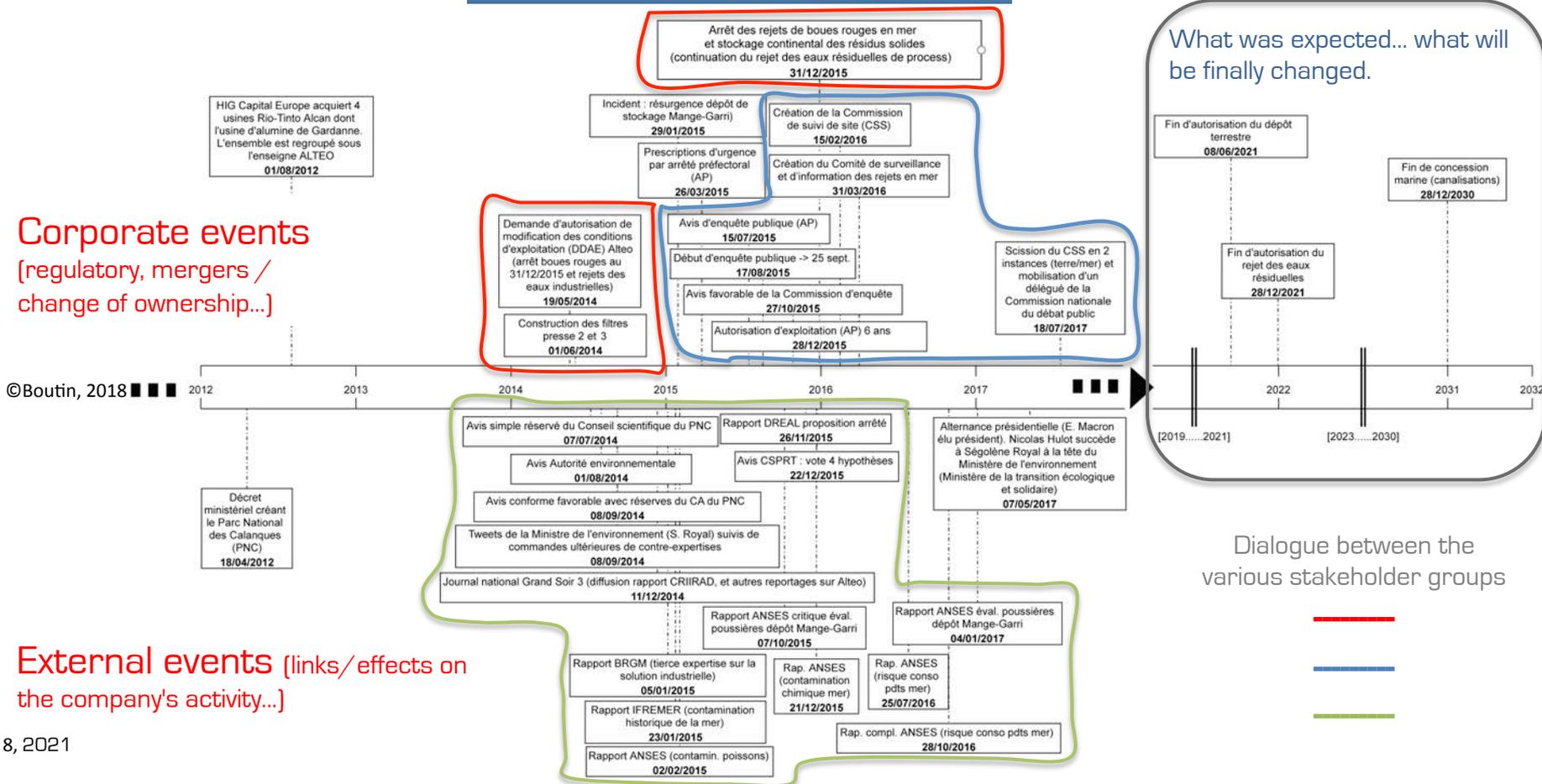
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## External events (links/ effects on the company's activity...)

June 8, 2021

# 1 – HISTORICAL LANDMARKS



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Ref	Corporate attitudes	Environmental strategy
Olivero, (2013, 2014)	<b>Minimalistic</b>	<ul style="list-style-type: none"> <li>• Belligerent strategy, limited to compliance,</li> <li>• Environmental attitude is "reactive" and environmental protection is low,</li> <li>• The means: to avoid legal proceedings and to solve issues (when they arise),</li> <li>• The strategy is therefore guided by the regulatory restrictions.</li> </ul>
	<b>Breathless</b>	<ul style="list-style-type: none"> <li>• The environment is a function worthy of interest, and integrated into management,</li> <li>• However, constraints (economic /regulatory instability) lead to reactive / sometimes retrograde attitudes,</li> <li>• Decisions are assessed according to the additional value of environmental investments.</li> </ul>
	<b>Responsible</b>	<ul style="list-style-type: none"> <li>• Environmental standards highly developed, with the aim of integrating environmental protection into its management systems and strategy.</li> <li>• Institution's philosophy is strongly outward-oriented.</li> <li>• The company is "proactive": environmental issues are a top priority.</li> <li>• Environmental excellence is targeted (innovative solutions → competitive advantage).</li> </ul>
Martinet & Reynaud, 2004	<b>Wait and see (attentiste)</b>	<ul style="list-style-type: none"> <li>• Lack of awareness of the impacts of activities,</li> <li>• or by a "free rider" strategy,</li> <li>• or lack of means to green investments,</li> <li>• or "cautious" attitude (regulatory inflation → delay green investments as much as possible)</li> </ul>
	<b>Adaptative</b>	<ul style="list-style-type: none"> <li>• Strategy to comply with expected standards, at the pace of the company,</li> <li>• Technological adaptation that anticipates future renewals, but with a low velocity.</li> </ul>
	<b>Proactive</b>	<ul style="list-style-type: none"> <li>• The company is "proactive" in terms of environmental protection and is careful to maintain its image</li> <li>• The strategy can lead to the evolution of the regulations (upwards), to keep the competitive advantage.</li> </ul>

# CONFRONTATION OF MODELS

## Technocratic Democracy (Callon, 1998)

Models	Assumptions / Viewpoint leading to guideline	Functioning / Science-citizen interactions	Methods / Tools	Requirements / Limits
1 The public education (training)	Scientific knowledge and risk assessment is based on objective knowledge that is opposed to indigenous knowledge based on beliefs and ideologies, leading to variable and irrational risk perception.	<b>The public does not participate directly in the production of knowledge.</b> Links between the scientific sphere and the public sphere are indirect and managed by the State.	Actions of information and instruction of the public which contribute to bring closer the perceived risk of the objective risk by the dissipation of the emotions and the beliefs allowing to take rational decisions.	Relationships of trust between profane and scientists. <b>Not appropriate for environmental conflicts</b> (mistrust of profane people towards scientists and science (and more widely towards the technocratic apparatus). <b>(Requires long time resources)</b>
2 - The public debate	Scientific knowledge has a universal value. However, it is incomplete and insufficient, and must be enhanced by indigenous observations and knowledge. Confrontation of perspectives, knowledge and judgments are mutually profitable.	<b>Consultation procedures</b> that provide a minimum right of <b>access to information and allow dialogue between experts/profane, citizens/politicians.</b> The debates contribute to blurring the boundaries between experts and non-experts.	Construction of a public space for discussion giving voice to different stakeholders transforming the decision-making process by taking into account the existence and diversity of controversial local situations.	The legitimacy of the decision depends on the existence of a consultation and an open debate. In a crisis situation, agreement is reached through compromise, which results from complicated strategic games between actors placed in a negotiation situation. <b>Difficulties: Tricky representativeness issue and complexity of (strategic) games.</b>
3 - The co-production of knowledge	The role of non-specialists in the production of knowledge and know-how is crucial.  This model of collective cross-learning allows mutual enrichment between scientists and experts.	<b>Procedures that actively involve lay people</b> (through associations) in the production of knowledge.	Creating the conditions to ensure that non-specialists play an active, and in certain circumstances, even a leading role in the co-production of knowledge.	Knowledge produced not in isolation from external realities, but constructed (diluted) and manipulated collectively in seeking to achieve a common good. Legitimacy relies on the ability of groups (scientists and profane) to get recognition for the validity of their action. <b>Difficulty to clearly distinguish "common" from "individual" interests.</b>

# CONFRONTATION OF FILTERS

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<i>Filters/Models/Cosmologies</i>	Anthropocenic	Ecopragmatic / ecomodernist / eosystemic	Promethean
<b>Man-Nature interactions</b>	Man affects nature on a scale that threatens the very existence of life.	Man and Nature may have benefits to interact under certain conditions	Nature is imperfect (threatening). It must be improved by/for humans.
<b>Religion, myths, cosmologies, metaphors</b>	Guilt, punishment, apocalypse (orphism)	Reconciliation, redemption, initiation	Prometheus, cornucopia horn
<b>Perspectives</b>	Pessimism (eschatology)	Circumspection (balance / resilience)	Optimism (confidence)
<b>Action principles and justifications</b>	Precaution (sobriety)	Awareness (prudence: thresholds)	Innovation (risk-taking, audacity)
<b>Solutions</b>	Top-down regulation	Bottom-up devices (co-construction)	Free of regulation (barriers of innovation)

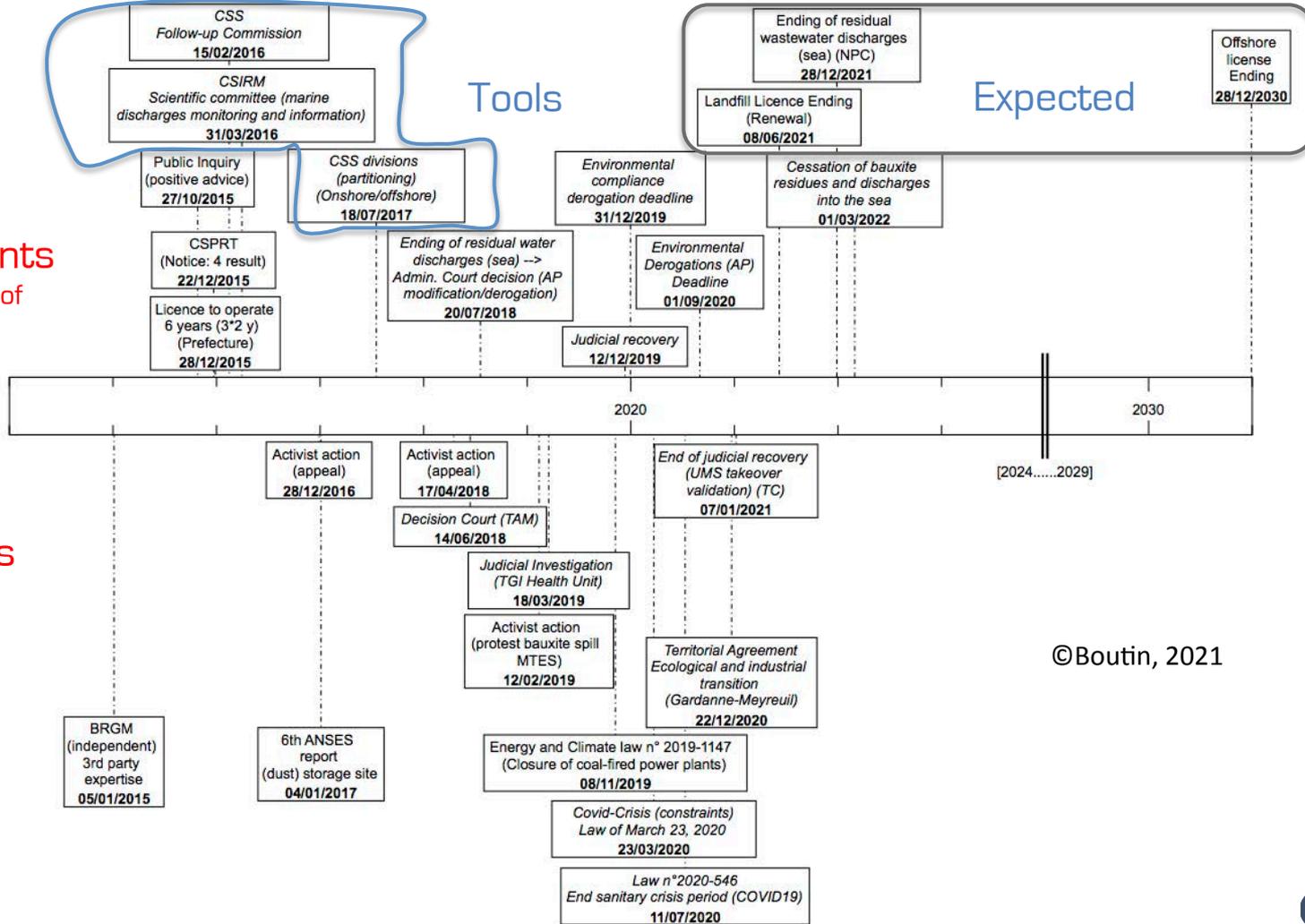
*Similarities* (red arrow pointing from Anthropocenic to Ecopragmatic)

*≠ perspectives* (red arrow pointing from Ecopragmatic to Promethean)

## 2 – RECENT SETTINGS

Corporate events  
(regulatory / change of ownership...)

External events  
(links/effects on the company's activity...)



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## PILOTE CASE STUDY REPORT: FR-TACT (TANDEM CONCERTATION) AN (ORIGINAL) TANDEM OF CONCERTATION TO SOLVE AN ENVIRONMENTAL CONFLICT ABOUT INDUSTRIAL POLLUTION (GARDANNE PILOTE CASE STUDY) (Boutin, 2019)

### TOOLS

- CSS, Site monitoring committee (Commission de Suivi de Site)
- CSIRM, Committee for the monitoring and reporting of chemical discharges at sea (Comité de Surveillance et d'Information des Rejets en Mer)

<http://cogov.eu/wp-content/uploads/2020/10/D2-3.pdf>

#### Project Details

Grant Agreement Number: 770591

Project Acronym: COGOV

Project website: [www.cogov.eu](http://www.cogov.eu)

Project Full Title: *Co-Production and Co-Governance: Strategic Management, Public Value and Co-Creation in the Renewal of Public Agencies across Europe*

Project Start Date: May 2018 (42 months)

#### Partners





## TOOLS:

## Barriers

Category	Code	Barriers Effects
<i>Contexts of change / transitions / reforms / society</i>	BE12	Environmental awareness
	BE3	Conflict between environmental and employment concerns
<i>Crisis situation</i>	BE7	Manipulation and media amplification
	BE13	Soliloquy / monology / agitation
	BE23	Litigation (NGOs)
<i>Delay</i>	BE5	Slow down / delay
	BE10	Decisions of administrative courts
<i>Lack of dedicated resources to support the concertation</i>	BE14	Difficulty in maintaining the dynamic / rhythm
	BE19	Time available / Time expended
	BE20	Budgetary cuts / loss of HR
<i>Lack of effective participation</i>	BE6	Withdrawal / exit / non-entry into the debate (disclaiming with the rules of the game)
	BE9	Difficulty in mobilizing the stakeholders
	BE11	Difficulty of expression / Lack of listening and consideration
<i>Lack of efficient/effective communication (within stakeholders)</i>	BE2	Difficulty in providing information / results / expertises / assessments (Inadequacy /insufficiency)
	BE8	Failure / Inadequate / Poor communication & reporting / Opacity (Firm/State services)
	BE16	Stressful / uncomfortable situation (State services)
<i>Lack of environmental consideration</i>	BE22	Lax / permissive approach (French culture)
<i>Lack of equity (focusing State resources on individual concerns)</i>	BE15	Imbalance / lack of fairness (resources / decision)
<i>Lack of knowledge / experience (i.e. learning by doing approach)</i>	BE21	Difficulty in changing the trajectory / culture (firm)
	BE25	Trial and error
<i>Lack of stakeholders' trust</i>	BE1	Loss of reliability / confidence / diffidence of stakeholders
<i>Political context</i>	BE24	Political concerns & game/will (battles) at the highest level / punctual motivation / political and media activism
<i>Radical / obstructive postures</i>	BE4	Radical / obstructive postures
	BE17	Blackmail / greed for financial gain
	BE18	Damage (NGOs)

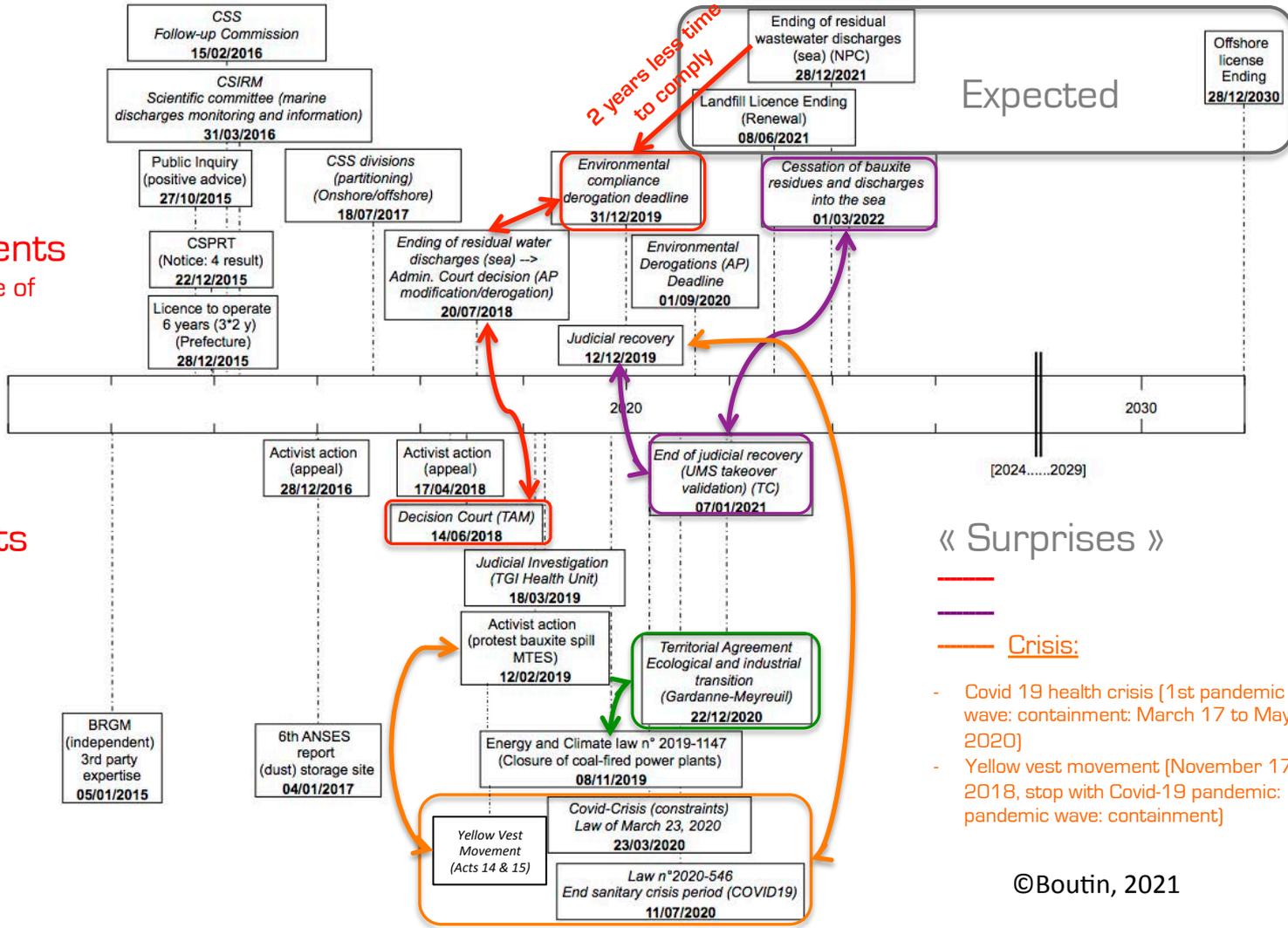
## Drivers

Category	Code	Drivers effects
<i>Designated and skilled project manager and team coordinator</i>	DE13	Capability / know-how (Prefect - State Services)
<i>To organize effective dialogue/meetings with (and in) the community</i>	DE1	Dialog / Debate
	DE12	Innovation (creation of the scientific device)
	DE4	Method / rules and compliance with the rules of the game
	DE14	Territorial decentralization
<i>To supervise the progress of the project and produce knowledge</i>	DE8	Scientific expertise
<i>To support stakeholders expression and increase their equally consideration</i>	DE10	Capability / know-how (Function/personality guarantor)
<i>To enhance the device and firm process/protocol/procedure to restore trust / legitimacy</i>	DE2	Deployment of resources - Dynamic / locomotive / pressure
	DE3	Adaptation of the device to the local context (geographical / thematic division and representativeness)
	DE6	Change of trajectory (industrial firm: continuous improvement trajectory)
<i>To have meaningful interactions with the community to reassure and bring appeasement</i>	DE9	Appeasement
<i>To change state services and firm views and behaviour and improve stakeholders consideration</i>	DE5	Transparency
	DE7	Culture change
	DE11	Change of trajectory (industrial firm: consultation strategy)

# 2 – RECENT SETTINGS

Corporate events  
(regulatory / change of ownership...)

External events  
(links/effects on the company's activity...)



« Surprises »

— Crisis:

- Covid 19 health crisis (1st pandemic wave: containment: March 17 to May 11, 2020)
- Yellow vest movement (November 17, 2018, stop with Covid-19 pandemic: 1st pandemic wave: containment)

### 3 - PROSPECTIVE

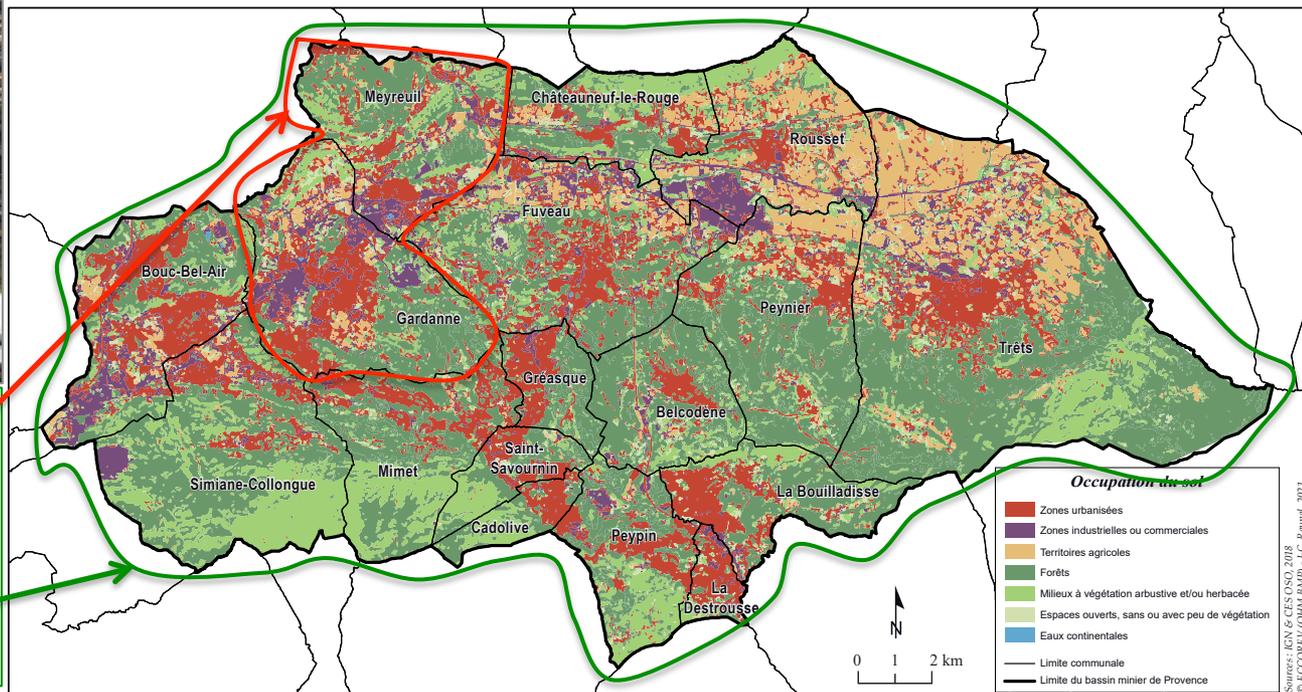
- **Ecological and industrial transition**  
→ Bifurcation (trajectory: eco-social-spatial effects)



- Gardanne Meyreuil Territorial Agreement (« Pacte », December 22, 2020: 2 municipalities)

- Meeting (signatories), March 16, 2021 (pragmatic governance: Enlarged territory of the Provence mining basin 17 municipalities)

→ opportunities: Coal fund, Recovery fund, Collective transition plan, European "FTJ" fund)



Thank you for your interest.

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