

Back to the future? Rhônenergia and Aqua Domitia, major developments relegitimized on the Rhône for energy and climate transition

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"Substantial planning developments in socio-ecosystems" Session

The idea of these communication is coming from an article read recently, in *the Monde*.

These article is about the possibility to extend water withdrawals from the Rhône, with the channel called Aqua Domitia, constructed between 2012 and 2022.

PLANÈTE • SÉCHERESSE EN FRANCE

Acheminer l'eau du Rhône jusqu'aux Pyrénées-Orientales, un projet relancé par la sécheresse persistante

La région Occitanie et l'Etat vont financer une étude préalable à l'extension d'Aqua Domitia, un ouvrage qui s'arrête aujourd'hui au niveau du département de l'Aude.

Par Philippe Gagnebet (Toulouse, correspondant) et Martine Valo

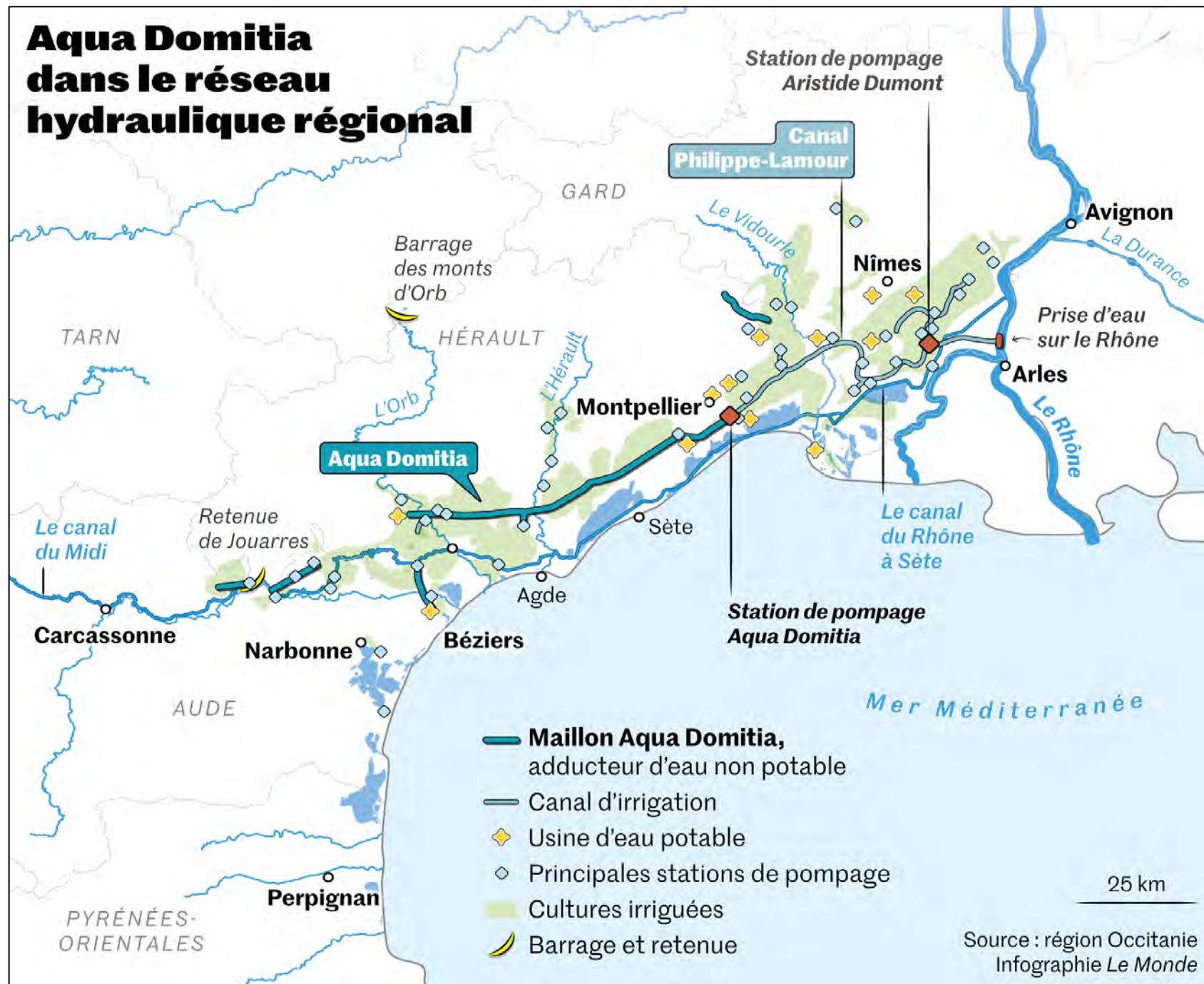
Publié le 08 avril 2024 à 05h30, modifié le 08 avril 2024 à 14h43 - 🕒 Lecture 5 min.

A controversial
and conflictual
project 90's

2,5 m³/s

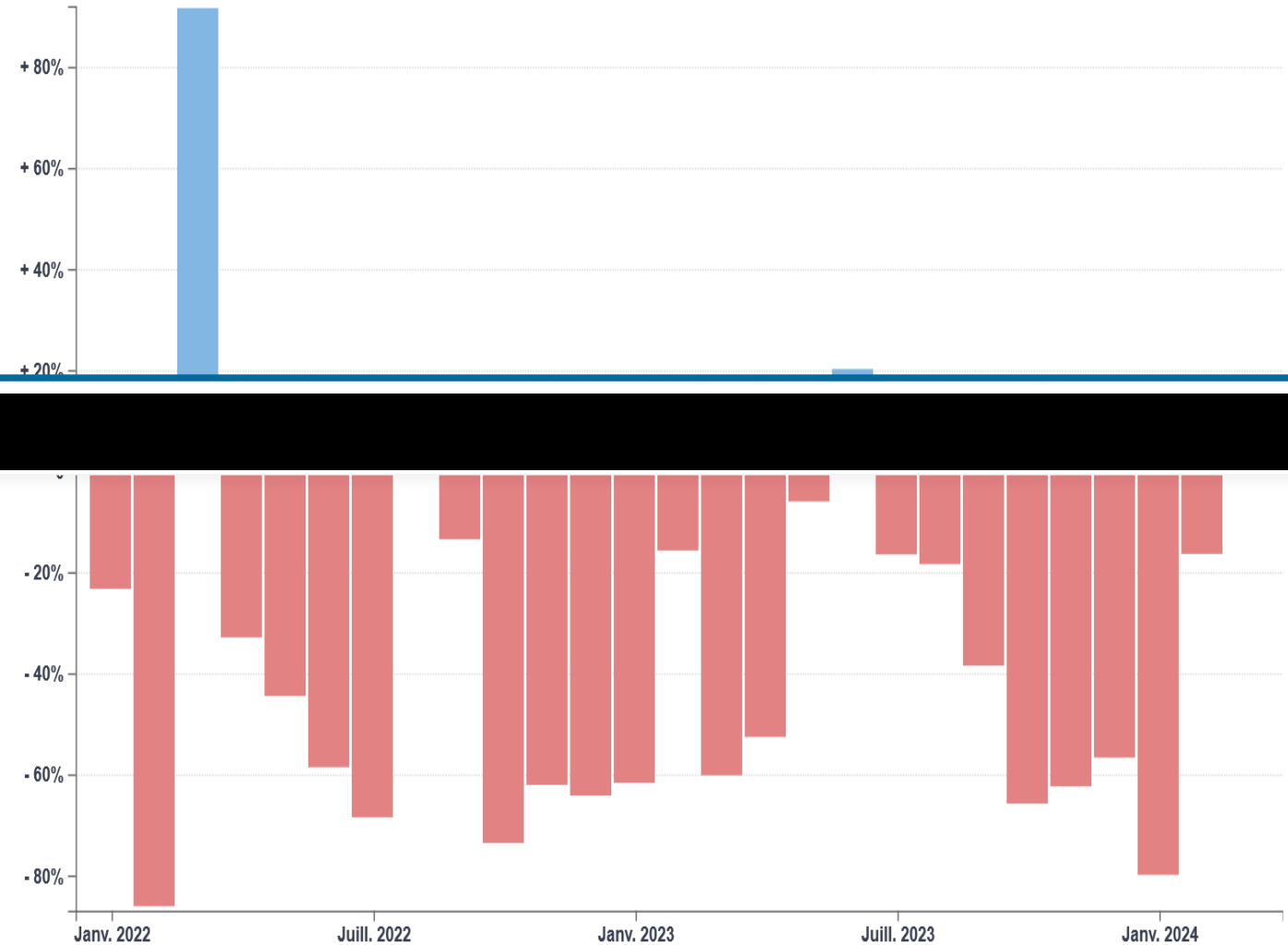
40 % Drinking water

40 % Agricultural water



Le déficit pluviométrique devient chronique dans les Pyrénées-Orientales

Ecart à la moyenne (1991-2020) du cumul mensuel des précipitations dans les Pyrénées-Orientales depuis 2022.



Source : Météo-France



Project for a hydroelectric dam on the Rhône published in 2019, called Rhônergia



Building a 20th dam

In an area of the river already dammed in the 1980s/1990s

Project abandoned / strong local and national oppositions

International, european and national context for reducing greenhouse gases

- 2021: the European Commission raises GG emissions reduction target for 2030 to 55%

- National Low Carbon Strategy

The multi-annual energy program (PPE) aims to achieve 40% of electricity production from renewable energy sources by 2030.

For energy and water needs

Heavy equipments come back :

For decarbonated energy = new dam

For agricultural water needs = new channel.

How old and contested projects are now legitimized for the climate and energy transition ?

1 - The Rhône: an inexhaustible resource?

2 - The logic of the developer/builder

3 - The contradictions overlooked

The long time of social representations...

1 - The Rhône: an inexhaustible resource?

In the context of the climate crisis, the river is perceived as a river that can “still” be used.

Aqua Domitia = increase Rhone sampling? regulated at 75m³/S.

2023: withdrawal of 165 Mm³

On the scale of the river and its water table, 50% of all withdrawals are reserved for agricultural irrigation (1,500 Mm³ per year).

Rhônenergia = last portion of river with an interesting head



The myth of abundant water!

Inauguration Aqua Domitia 2022

SCÉNARIO POTENTIEL D'INSERTION PAYSAGÈRE À TERME SUR LA BASE D'UNE PRISE DE VUE DRONE RÉALISÉE EN 2022



The context of climate change

Reports 2023 Agence de l'Eau bassin RM&C

Widespread increase in air temperature: 0.3°C since the early 1980s

River water since late 1970s: +2.2°C to +4.5°C, depending on measuring station

Less water from snow cover and more rainwater

Longer low-water periods

2 - The logic of the developer/builder

- Aquadomia : 140 kilometers of canals and three dams and reservoirs at a cost of 220 million euros
- Rhône-énergie : a run-of-river dam, dikes and upstream impoundment at a cost of 330 million euros
- An economy of “ polluting construction”
- 2 “concessionnaires” : Groupe Bas Rhône-Languedoc (1955) / Compagnie Nationale du Rhône (1933)

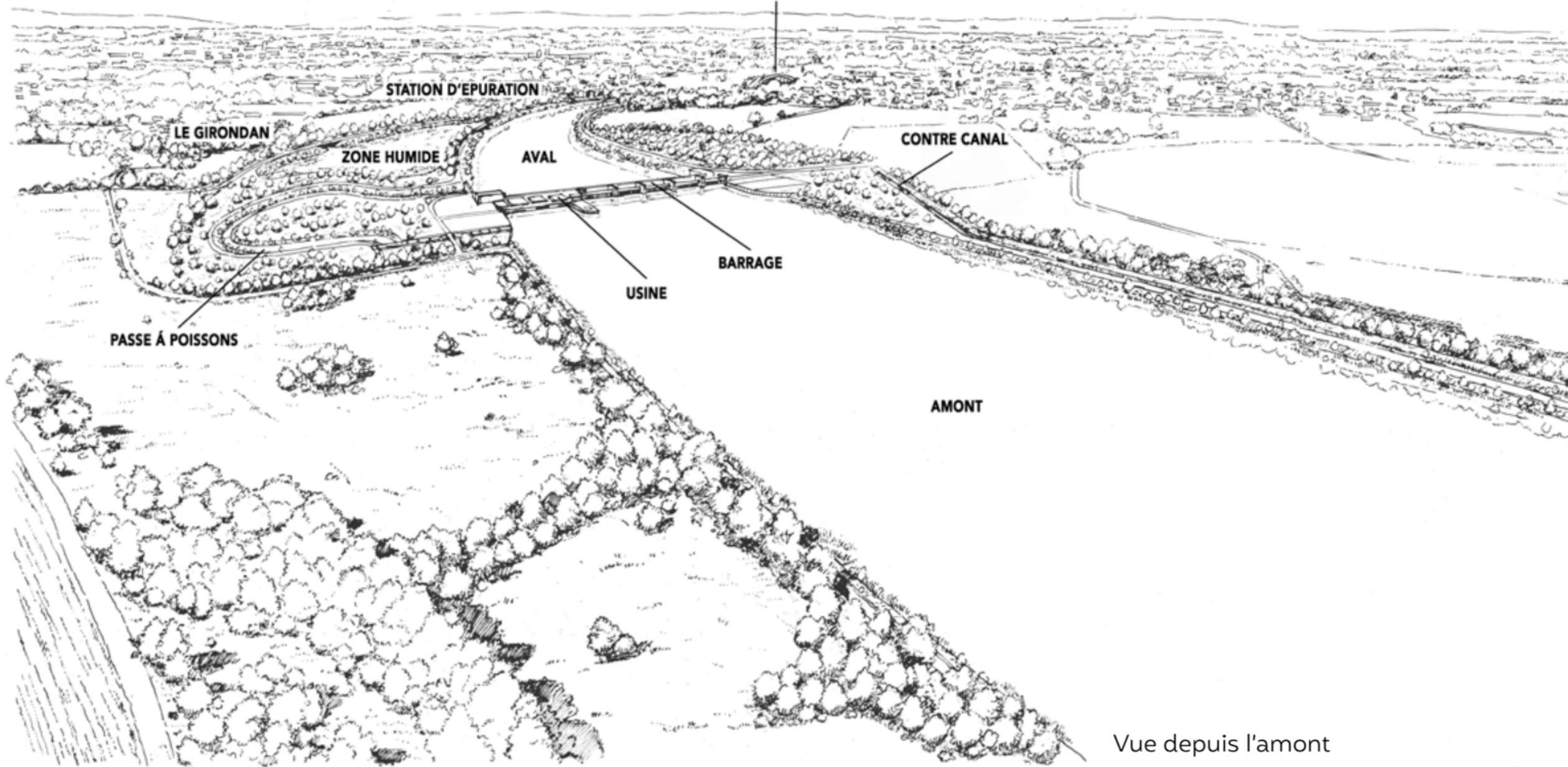
Site Internet BRL



SAINT-ROMAIN-DE-JALIONAS

PONT DE LOYETTES

LOYETTES



STATION D'EPURATION

LE GIRONDAN

ZONE HUMIDE

AVAL

USINE

BARRAGE

CONTRE CANAL

AMONT

Vue depuis l'amont

ÉCONOMIE · NUCLÉAIRE

Nucléaire : le gouvernement choisit le site du Bugey comme troisième lieu pour de futurs réacteurs

EDF prévoit une mise en service progressive des six réacteurs EPR 2 : dès 2035 pour la première paire à Penly, dès 2038 pour la deuxième à Gravelines, et dès 2042 pour la troisième au Bugey.

Par Perrine Mouterde et Adrien Pécout

Publié le 20 juillet 2023 à 10h00, modifié le 20 juillet 2023 à 10h38 ·  Lecture 3 min. · [Read in English](#)

EDF : construction of 2 EPR 2 - Bugey



The revenge of the planner?

- Climate change challenges renew the planning logic
- Primacy of the technical and planning solution // dependence on the path?
- The development players are there with their solutions, their political networks that support them, “environmental” projects on the drawing board

3 – The contradictions overlooked

- **Environmental** impacts – fragility of the ecological guidelines elaborated about the river since 40 years
- **Sobriety** : 350 million euros and + for energy savings? In buildings, transport, water leaks in the irrigation system...
- **Social change** : Crop sustainability ?
- **Ethical questions** : status and rights of nature
- **Political questions** : choice of economic development

Conclusion

- What kind of **spatial solidarity for transitions**?

International, national and local scales

- How will these projects affect **the governance** of the Rhône in the context of climate change?

- Integrated management of the Rhône-Saône plan or management by “subsidiaries” (organized *like* and *by* BRL and CNR)?



Without the car to travel through time
But with the OHM!

Thank you for your attention!