



Water markets in the Urban sector

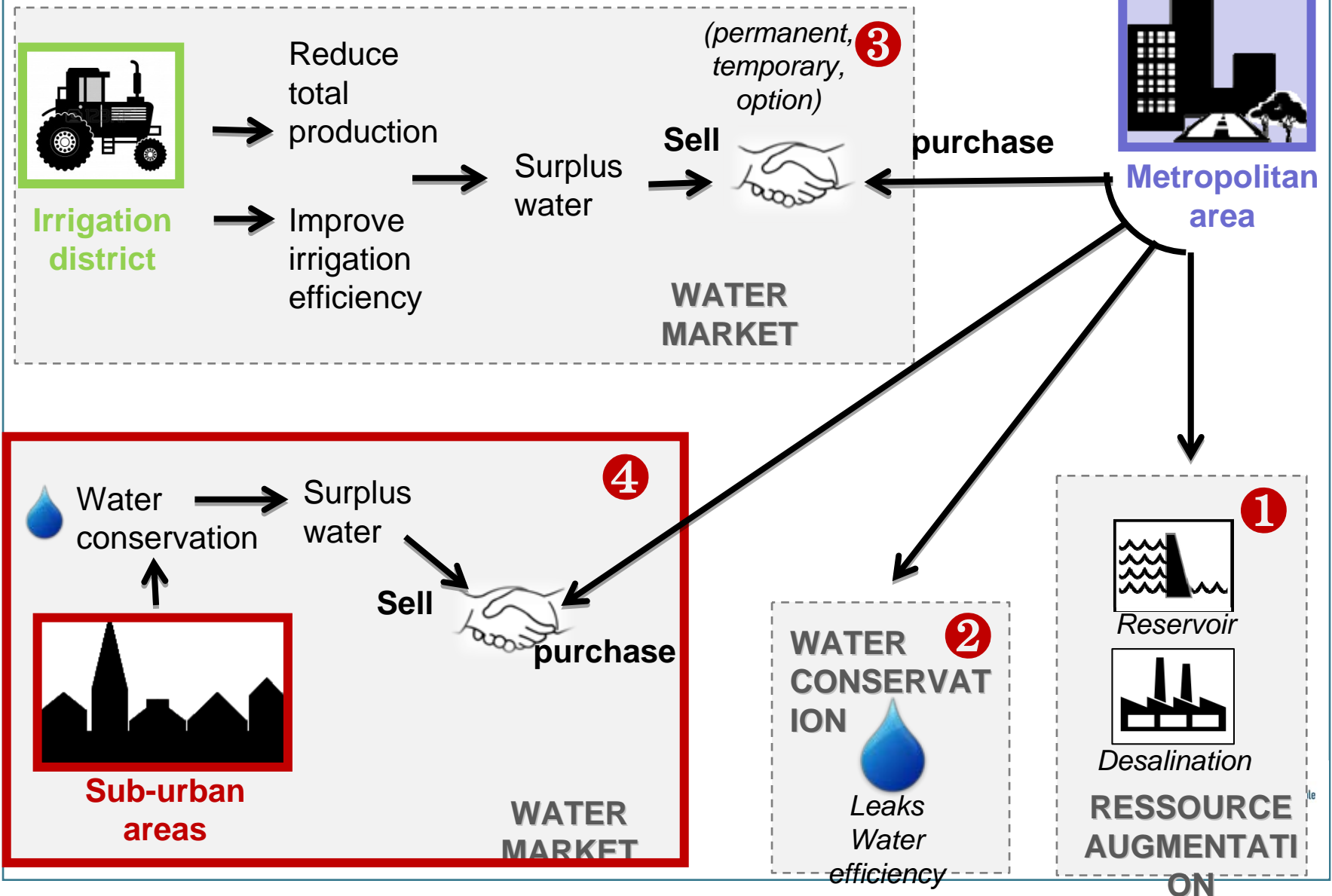
Simulating a Market for Water Saving certificates
in Southern France

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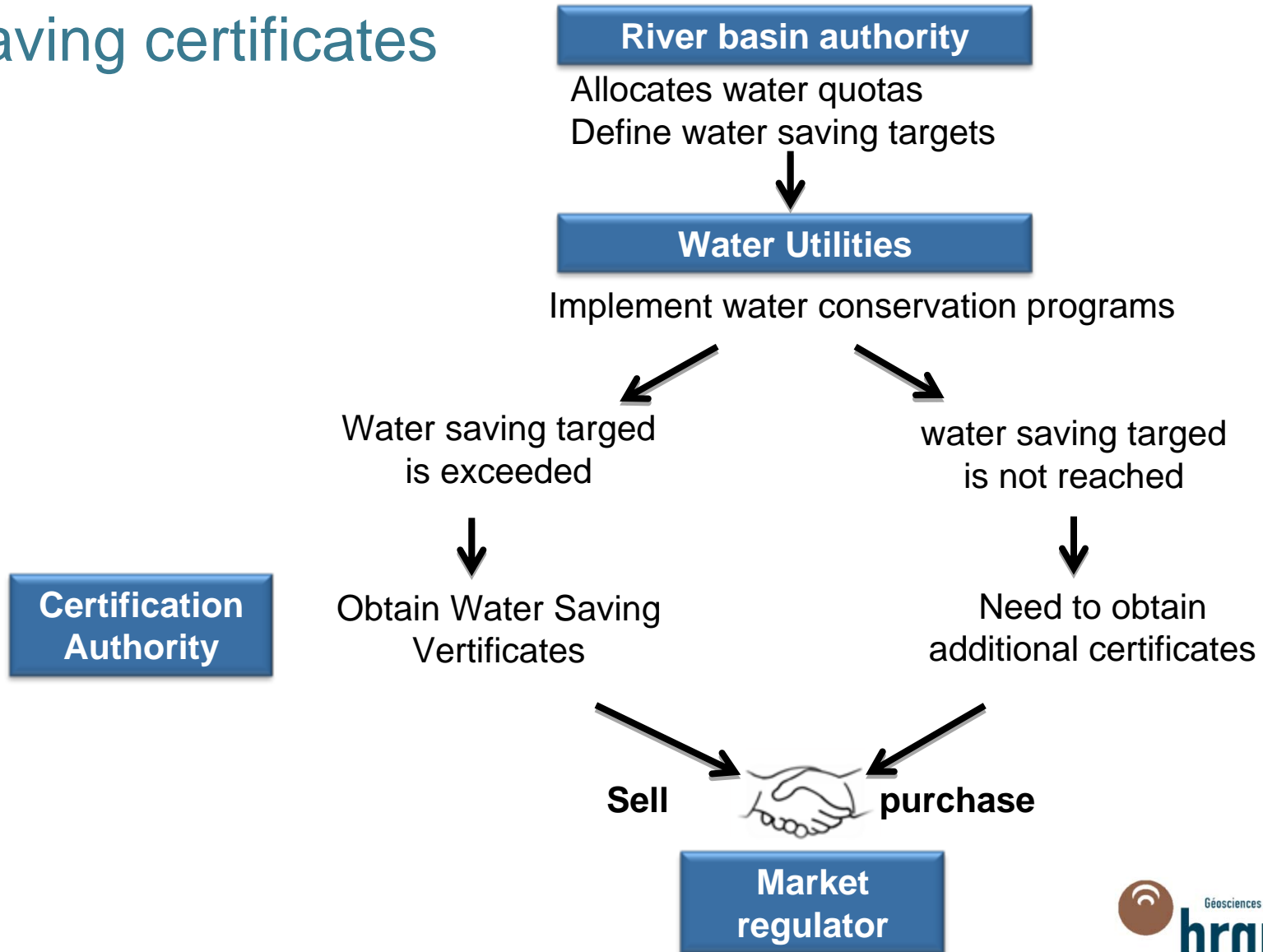
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Tradable water saving certificates

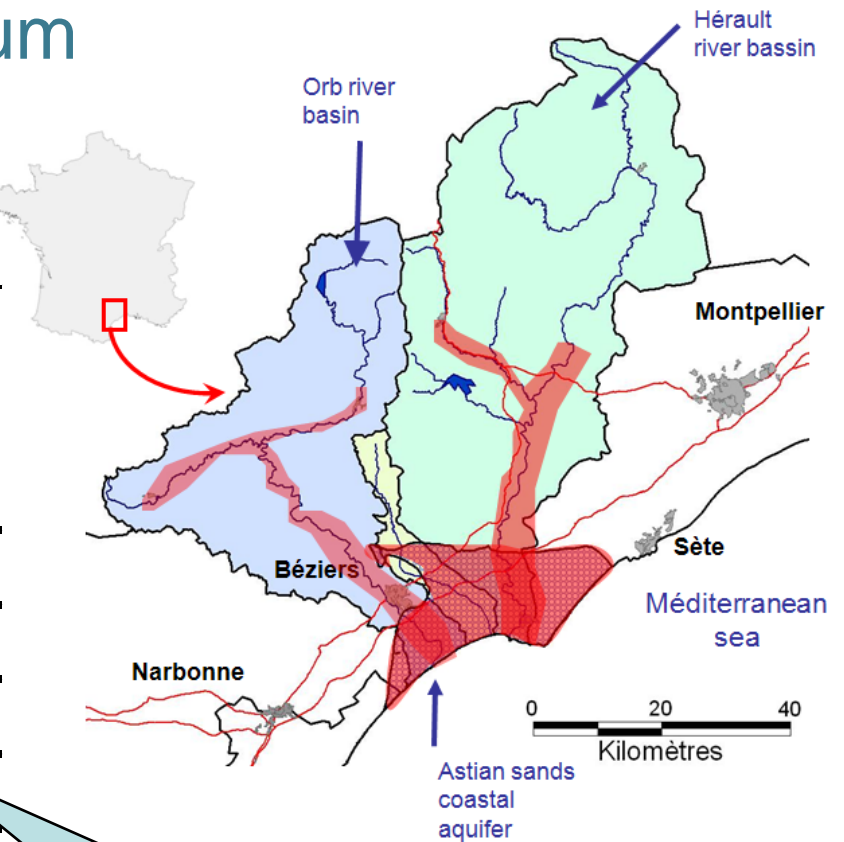


Simulated market equilibrium

> Without & with market

	Reference situation (no trade)	Trade without spatial restriction
Vol saved	5256	6257
Total cost	1526	1131
Average cost	0.29	0.18
Vol traded	--	2459

- 32 DWU can't meet their target
- Deficit of 16% in volume



- Objective can be met
- -25% cost
- 40% saving obtained through trade

Conclusion

> Market for WS certificates

- DWU have different water saving cost => potential for trade
- Intensity of trade will depend on :
 - Transaction costs
 - Cost of resource augmentation (desalination, interbasin transfer)

> Market as an option

- Agriculture to urban (high marginal values differences)
- Option market (insurance against drought)
- Need for long term agreements (no risk of shortage)

Results

> Water saving measures

	Description of water conservation measure
M1	Improve detection and repair of leaks of distribution network.
M2	Free distribution of water conservation devices (households)
M3	Water intensive landscapes replaced with xeric vegetation
M4	Seasonal water pricing (increased rate in summer)
M5	Water saving appliances in public building
M6	Water saving devices in hotels (faucet aerators, toilet flushes)
M7	Water saving audits for campsites / holiday parks
M8	Household water saving audits (single family house)
M9	Same as U8 for multifamily houses + automated reading meter.
M10	Replacement of irrigated lawns with artificial turf for sport grounds

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