



**MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE**

*Liberté  
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# **OFATE - CADRE RÉGLEMENTAIRE ET MÉCANISME DE SOUTIEN EN FRANCE**

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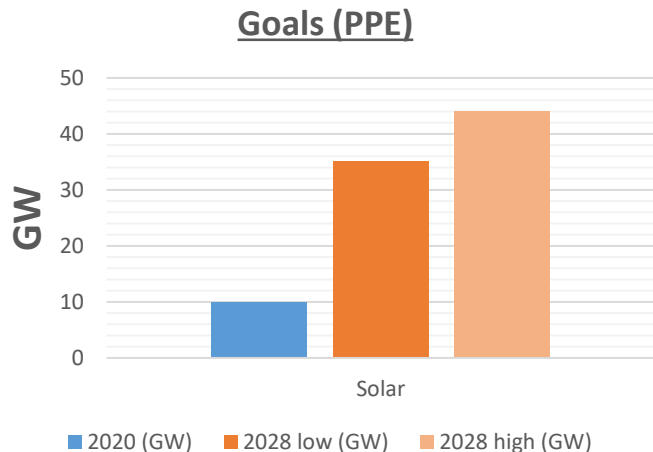
# Summary

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# 1. Solar energy in the next few years in France

Solar will play a major role in our power mix for the incoming years up to 2050.

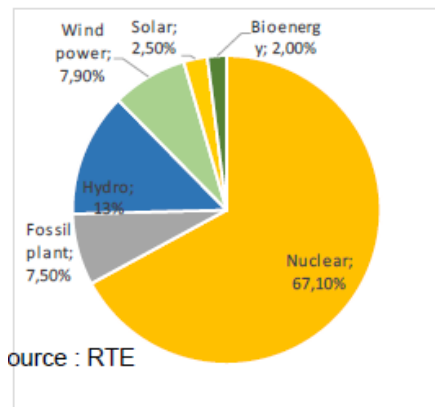
We have set ambitious objectives for 2023 and 2028 for solar development (about 20GW in 2023 and 35GW to 44GW in 2028).



(GW)	2016	2023	2028
<b>Ground</b>	3,8	11,6	20,6 to 25
<b>Rooftop</b>	3,2	8,5	14,5 to 19
<b>Total</b>	7	20,1	35,1 to 44,0

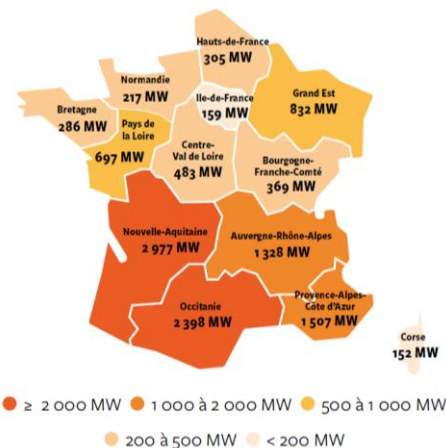
# 2. Solar energy in 2021

**Power mix in 2020**



Source: RTE

**12,6 GW PV plants (21/06/30)**



Source: Ministry for Ecology statistics

# 3. Support mechanisms

In France, solar projects are supported by Feed-in Tariff and Feed in premium.

Supports are given through tenders or through open tariff

October 2021:

- **Threshold has been raised (from 100kWc to 500kWc)** to be eligible for support without application to tenders.
- **Size and amount** of projects applying to tenders **have been raised**



	Rooftop installations	Ground-mounted plants	Self-Consumption
0-100kWc	Open tariff (FIT)		Open tariff (FIT)
100-500kWc	Tender (FIT) 0,45 GW /y		Tender (FIP) 0,15 GW
> 500 kWc	Tender (FIP) 0,45 GW /y	Tender (FIP) 1 GW /y	
1 MWc			
8 MWc			
30 MWc			

	Rooftop installations	Ground-mounted plants	Self-Consumption
0-500kWc	Open tariff (FIT)		Open tariff (FIT)
> 500 kWc	Tender (FIP) 1,1 GW /y	Tender (FIP) 1,85 GW /y	Tender (FIP) 0,1GW /y
10 MWc			
30 MWc			

## 3. Support mechanisms

➤ **Ground-mounted plants above 250 kWc are subject to an environmental impact assessment.** Permits on rural or forestry land are delivered only if the rural or forestry activity can perdure.

**We are currently working on raising up this threshold up to 500 kWc**

➤ **For entering the tenders, ground-mounted plants** must comply with stronger implantation conditions to limit environmental impacts and preserve rural, agricultural, pastoral and wooded areas:

**1st case:** field registered as « urbanized » or « to urbanize ».

**2nd case:** field registered in a natural zone where renewable energies can be developed, without deforestation or wet area.

**3rd case (environmental bonus):** degraded land (landfills, industrial brownfield, polluted area, etc.)

**We are currently working on allowing plants on agricultural areas**

➤ **No support for ground-mounted plants < 500kWc.**

**We are currently working on a new open tariff for small ground projects (up to 500kWc) on "brownfields".** The work has not even started yet, but our minister has made some announcement at the beginning of October.

# 3. Support mechanisms

=> **Bonus for local governance and crowdfunding.** It was just a price bonus before September 2021.

Tender criteria	Maximum score		
	Rooftop tender	Ground tender	Self-consumption tender
Price	70	70	100
Carbon impact	25	16	-
Environmental bonus	-	9	-
<b>Equity investment</b>	<b>5</b>	<b>5</b>	-
<b>Participatory financing</b>	<b>2</b>	<b>2</b>	-
TOTAL	100	100	100

# 3. Support mechanisms

## ➤ Equity investment

x % of equity (voting members)
Held by at least a territorial authority or at least 20 different people
Living in the State Department (or in a bordering Department) of implantation of the project

## ➤ Participatory financing

y % project finance
Held by at least a territorial authority or at least 20 different people
Living in the State Department (or in a bordering Department) of implantation of the project

=> We have set a working group about one year ago in order to facilitate deployment of such projects. Results of the working group will help to implement "Renewable energy directive"



# 3. Support mechanisms

10 actions in order to speed up PV deployment :

<https://www.gouvernement.fr/10-mesures-pour-accelerer-le-photovoltaïque>

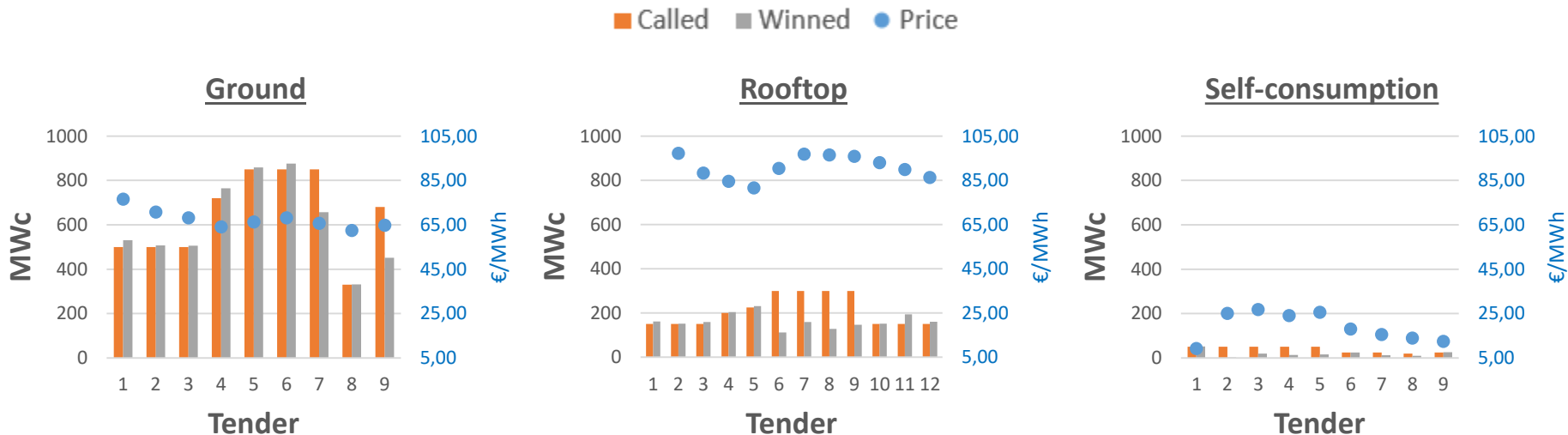
10 actions to support local project: <https://www.ecologie.gouv.fr/10-mesures-developpement-des-energies-renouvelables-citoyennes>

# 4. A look back at the past tenders

European Commission recently approved our new scheme support (end of July). New tenders are now open for the next five years

Rooftop: 19% Crowdfunding

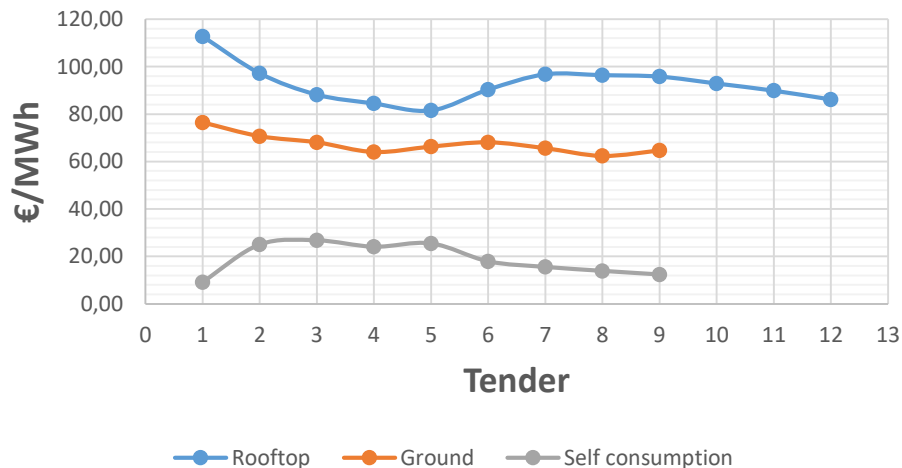
Ground: 41% Crowdfunding



# 5. View on electricity pricing

PV is more and more competitive, compared to electricity market.

PV prices (and premium for Self consumption)



Energy	Price (€/MWh)
Ground wind	60
Ground solar	52 (large plants)
	63 (small plants)
Rooftop solar	76 (large plants)
	85 (small plants)
PV commercial (<100 kW)	110
PV résidentiel (<9 kW)	179
Sea wind turbine	200
Floating wind turbine	280
Small hydro-electricity	87