



# SHP FUTURE : TARIFFS WITHOUT ANY SUPPORT?

## A NEW VISION ON RES ECONOMICS

A new economical situation :

Electricity pricing will be high for probably a long period:

- bet 60 and 70 €/MWh on Powernext
- day peaks over 120 €/MWh

Market prices are now very close to SHP purchase prices with a State's support

Then, 2 opposite consequences :

RES is no more an atypical cost in the electricity market

But RES should lose specificity by competition with other sources



# TARIFFS FOR SHP IN FRANCE

Two possibilities for tariffs fixing :

Cost of the technology and the sector

based on costs of a new installation and its profitability,  
proof of a need of a « feed-in tariff »

the differences with the market price are designed as a « State's support for renewables »

Avoided costs in the electricity system

Need of a global approach at a National / European level

Need to include CO<sub>2</sub> and other externalities

Actual SHP tariffs in France :

1997 PPA : 52-58 €/MWh ( av. costs w/o CO<sub>2</sub>)

2001 PPA :

New installations : 64-74 €/MWh (with CO<sub>2</sub> for 5 €/MWh)

Old installations : 47 to 52 €/MWh (with CO<sub>2</sub> for 5 €/MWh)



## SHP TOPICS IN THE ELECTRICITY MARKET

SHP brings to the electricity system more than other RES :

- semi-base use
- very decentralised installed capacity

But small hydro has specific topics :

- permanent refurbishing (no technical end)
- continuous increase of ecological costs
- very large scale of size

French policy followed since 1955 had led to:

- a pacific co-existence of a State monopole with 2000 small producers
- however, an asphyxiation of the sector by avoided cost based on nuclear (evaluated rather low)

In 1984, 1997, 2001 and 2006 tariffs negotiations have shown the difficulty in finding the reference to a fair price for SHP development or only its survival



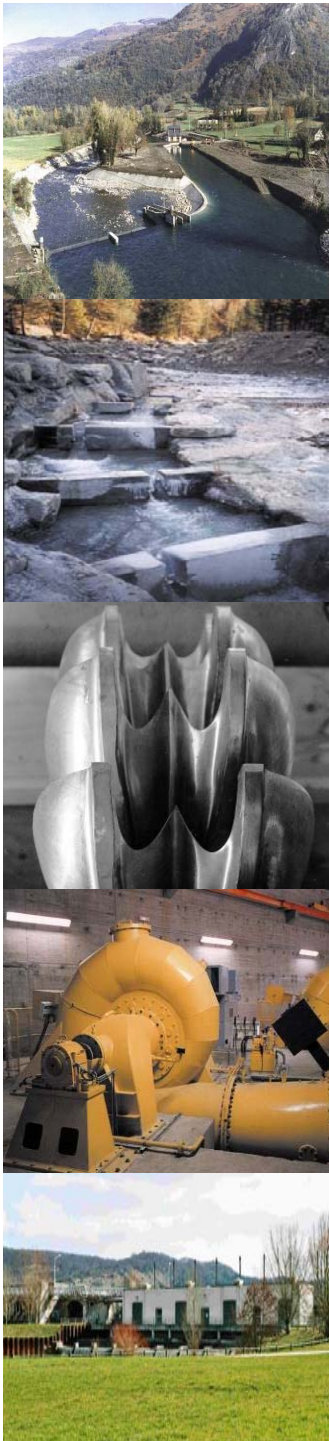
## SHP LIFE : ETERNITY, BUT 2 PERIODS

New approach initiated in 2001 (but now stopped) :

Distinction of 2 phases in a SHP life :

- 1) new installation never wired up or heavy refurbishing
- 2) old installation asking for a new contract after a first "feed-in" tariff

Now economic situation of SHP in the phase 2 is unstable and not favourable for a LT vision : the smallest installations could be the first victims



## HOW TO MAINTAIN SHP IN THE MARKET AND AVOID FLUCTUATIONS

Imagine a new PPA for the 2<sup>nd</sup> phase :

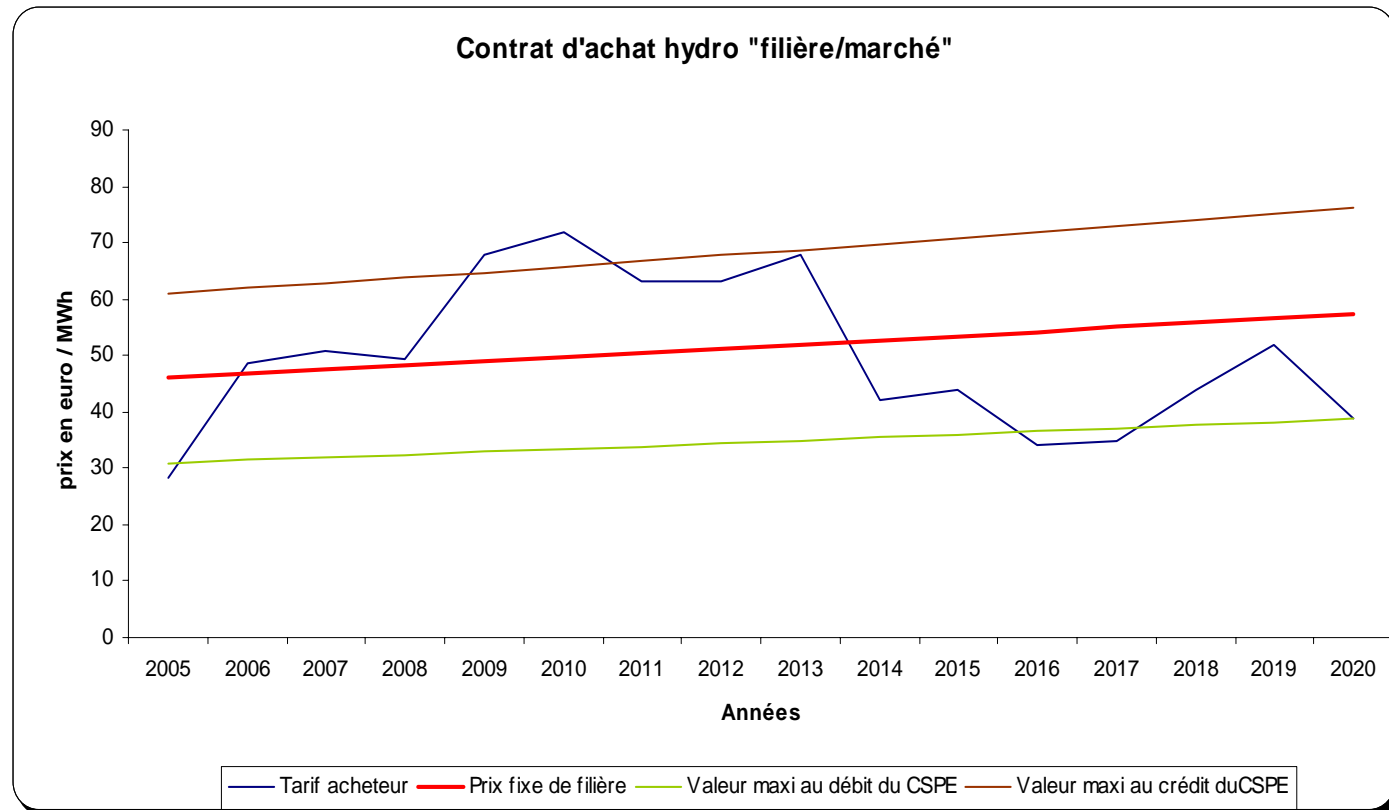
- based on the market
- with a protection against fluctuations of this market

Characteristics :

- 15 to 20 years
- Differences with the market price each year is taken inside a channel
- Reference to an indexed basic tariffs as a LT guarantee
- Competition between distributors
- Compensation of differences such as an insurance against fluctuation or a market coverage
- Reference curve began at 46 €/MWh in 2005
- Market price curve is based on 85% of Powernext at 1 y



# HOW TO MAINTAIN SHP IN THE MARKET AND AVOID FLUCTUATIONS



## NEED OF A NEW EUROPEAN APPROACH TO COMFORT NATIONAL POLICIES

### CONCLUSION

No State support for this kind of guarantee

Security for a LT vision

LT average tariff fixed at +/- 50 €/MWh without any subsidies

However :

This kind of mechanism need formal approval by the EC

To avoid suspicion of qualification of being subsidized by the State.

This way is not exclusive of :

- other approaches
- common vision of several countries concerning the same problem.



# Thank you



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