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RES auctions in Poland – new opening?

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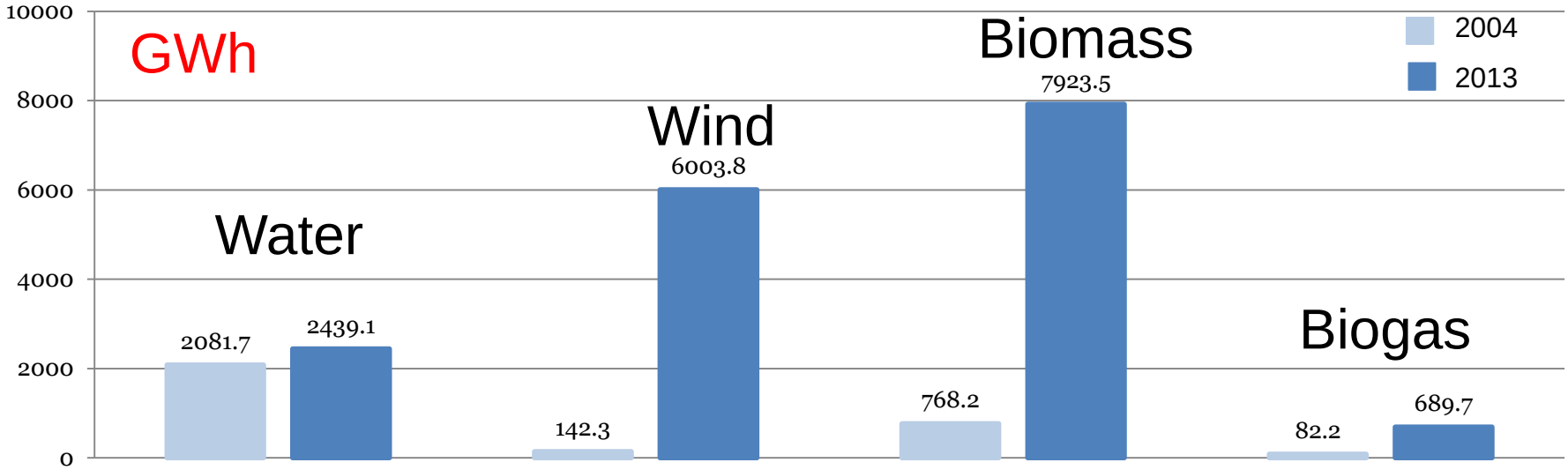
Overview

- Key message
- RES in Poland
  - Impressive development!
  - Where is the hook?
  - Poland has been performing well
- Auctions – description
- Analysis
- Criticism

Key message

- Auctions – a nice idea, cumbersome practice
  - It will take years for all actors to learn this complex tool
  - Auctions will be published only up to 2020
- Poland may miss the RES target for 2020
  - No new capacity till 2017/18
  - Co-firing of biomass will go down if relative prices of biomass go up (biomass is not like wind and solar)
- There was a need for reforms
  - The government could have achieved more and faster by reforming Green Certificates

RES production – impressive development!

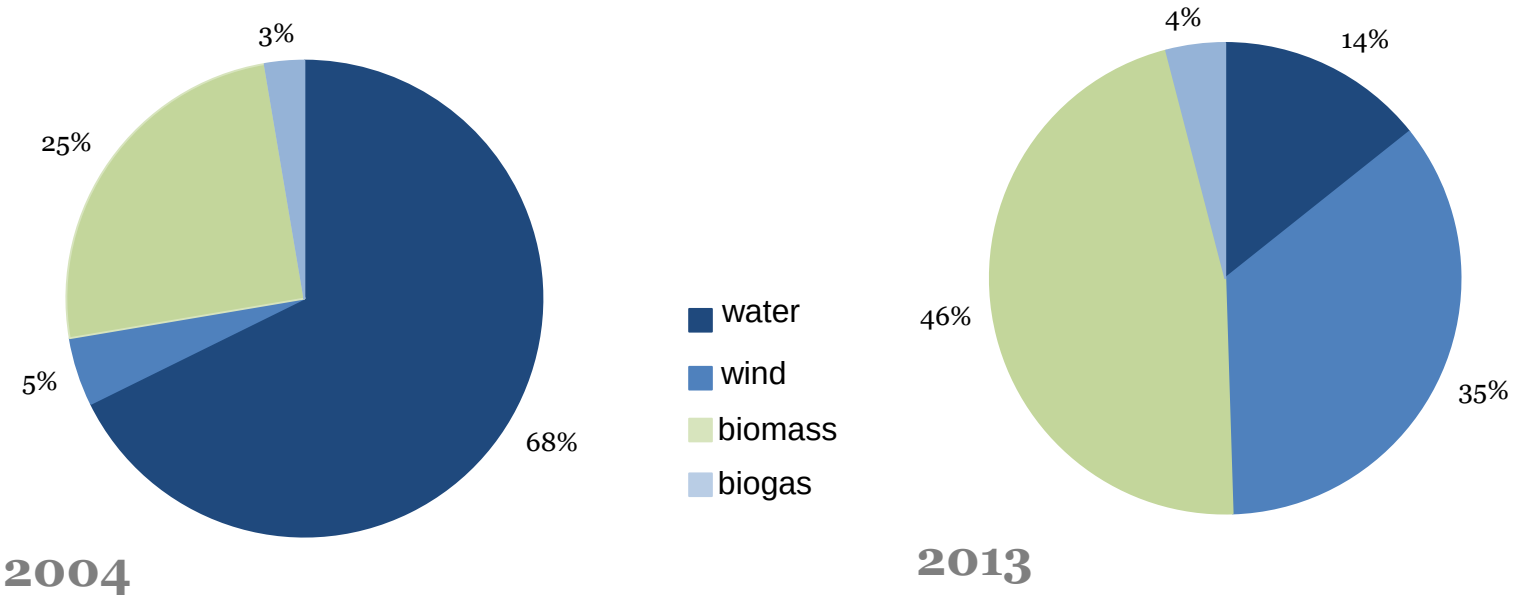


Source: own presentation based on General Statistical Office (2014), Warsaw.

- Co-firing of biomass & coal explains the growth of biomass
- Easy & cheap, while the same premium to all technologies
- Poland has vast wind resources, like Germany
- PV does not exist, as has been too costly vs. other RES

RES mix / electricity – where is the hook?

- Sustainability of biomass – limited; high level of imports
- Economics of biomass – non zero marginal cost



Source: own presentation based on General Statistical Office (2014), Warsaw.

Poland has been performing well!

	2011	2012	2013	2020
Share of RES in heating	13,07%	13,31%	13,89%	15,00%
Share of RES in electricity	8,16%	10,68%	10,73%	15,00%
Share of RES in transport	6,51%	6,09%	6,03%	10,00%

Source: General Statistical Office (2014), Warsaw.

- Poland has achieved a lot in heating & electricity
- Green Certificates have worked well
- Poland has been on track to the EU RES target
- Why did the government decide to reform the system?

Auctions – why ?

- Reduce costs of RES support
- Eliminate overcompensation for some technologies
- Cancel windfall profit for old, large hydro (windfall profit)
- Stop expanding co-firing of biomass
- Develop a more balanced portfolio of RES
- Slow down a rapid roll-out of wind
- Achieve congruence with EU state aid rules

Auctions – brief

1. The Law on RES enters into force in April 2015.
2. All bidders submit sealed offers (electronic platform).
3. Regulator picks up offers, starting from the cheapest one.
4. The highest offer, accepted by Regulator, cannot exceed a volume limit assigned for the auction.
5. Winners get project specific Feed-in-Tariffs for 15 years.
6. Each winner has a different price for electricity.
7. Winners conclude contracts with obliged traders (a trading company that prevails in terms of sales on area, where a given RES installation is located)
8. Obliged traders pay compensation to RES operators (winners of an auction).
9. Public agency (a special vehicle to be established under The Law on RES) covers differences between compensation of RES operators & wholesale market prices.
10. Public agency gets revenue from a fee imposed upon electricity consumers.

Auctions – max value & volume

RES developer can submit a formal application to express interest in coming auctions, to notify Regulator and to undergo formal checks

10 Apr 2015

RES law is in force

+ 30 days

Council of Ministers sets for 2016:
(1) max value & volume
(2) a limit for units up to 4000 h/a

30 Jun 2015

Regulator confirms that an installation is eligible

Auctions – pools

	Below 4000 hours / year	Above 4000 hours / year
< 1 MW	At least 25%	
> 1 MW	Not more than 75%	

Source: own presentation based on The Law on RES, Poland.

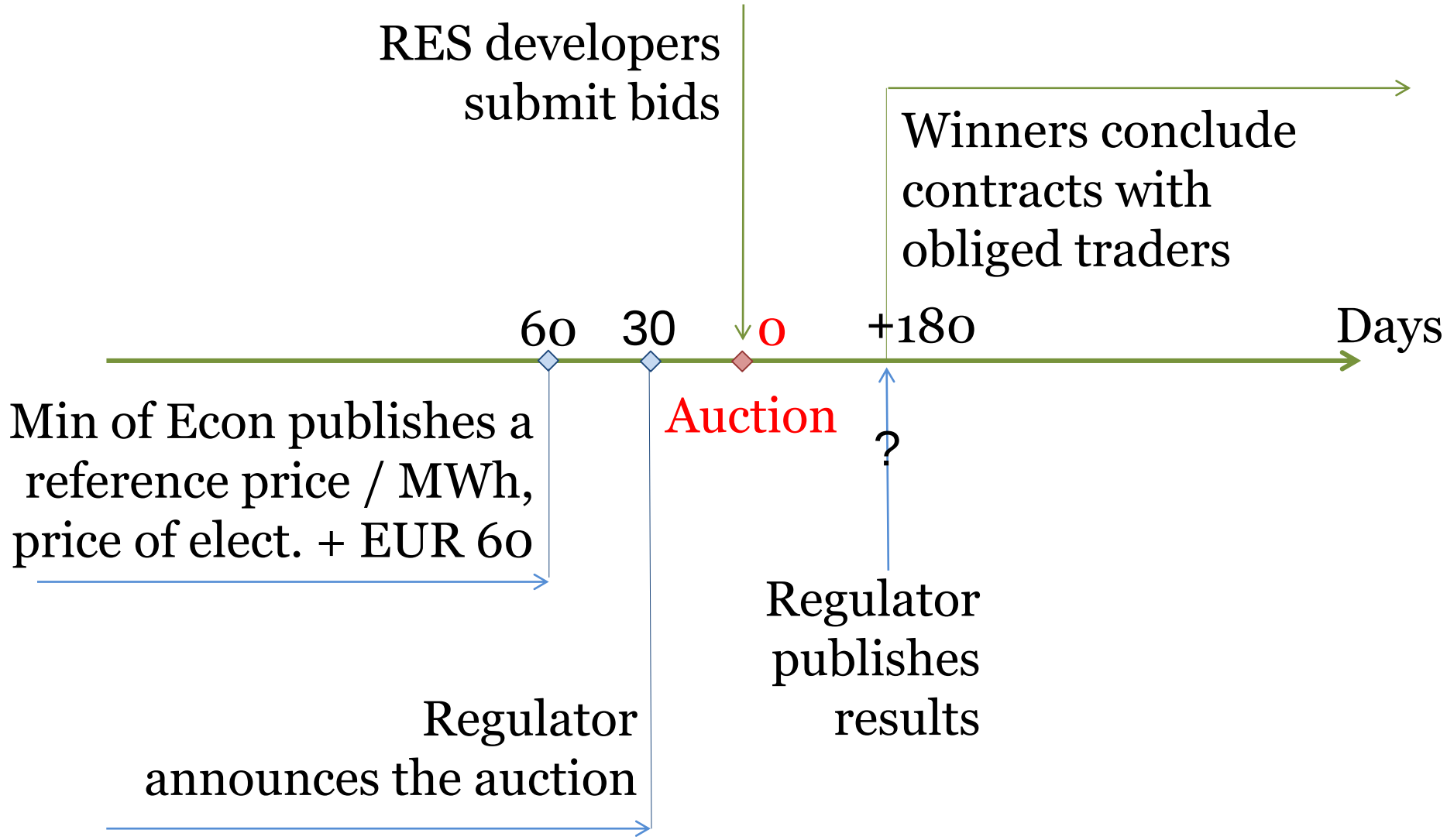
Facts:

- At least 25% of production go to installations below 1 MW.
- The government has a right to put a constraint on installations below 4000 hours. Takes a decision each year.

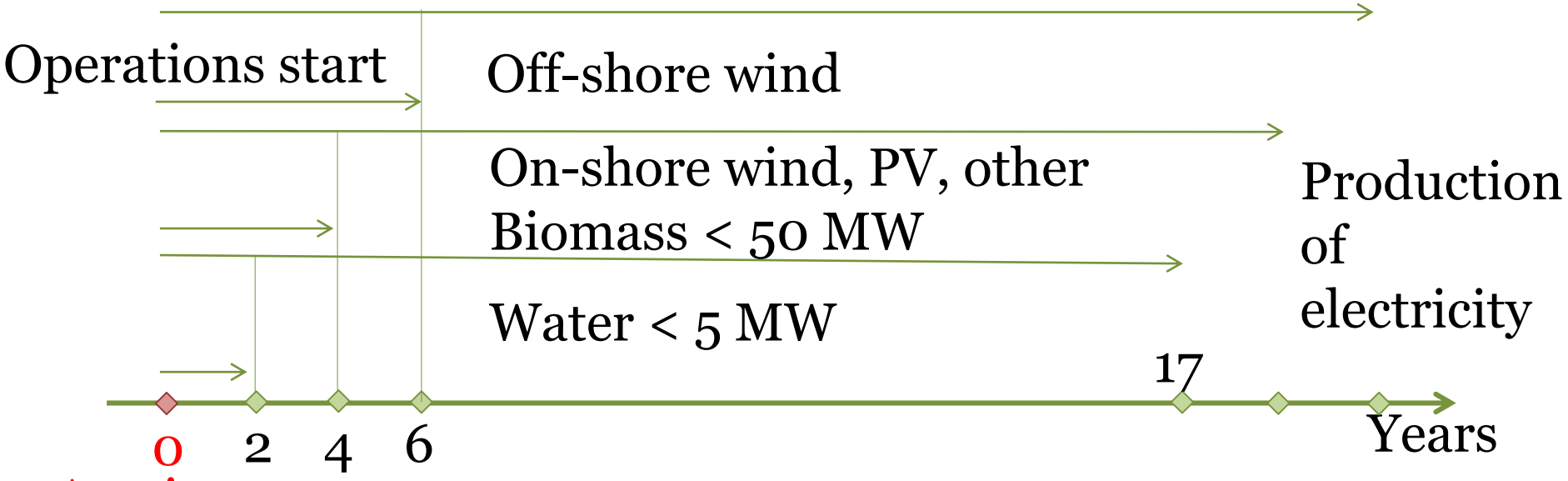
Conclusion:

- Government has a tool to limit roll-out of intermittent RES.
- However, it is additional risk for wind and PV developers.

Auctions – organisation



Auctions – execution of contracts



The public agency pays through an obliged trader:

- Project specific Feed-in-Tariff for 15 years
- No payment for excess production over the volume, the operator had declared in its offer
- Penalty for supplies below 85% of the volume

Auctions – an application & bid

- Technology
- Location
- Environmental decision issued by public authority after Environmental Impact Assessment
- Construction permit
- Permit for getting a connection to the grid
- Time schedule & investment costs
- Quantity to be produced in 15 years
- Price per MWh

Auctions – EU state aid rules

Bidders

- Are subject to EU state aid rules
- Can combine various sources of aid
- Who had received aid from other sources (for capex), can compete away other bidders

Analysis – biomass & small hydro

- Units that can work longer than 4000 hours per year – biomass & small hydro – are welcomed by decision-makers.
- Such installations integrate better with the system as supplies from them are predictable.
- There is very limited potential for small hydro in Poland, while biomass is subject to a risk of input supplies / prices.
- Contracts offered through auctions fix both the volume of electricity production and the price.
- It is difficult to get a stable price for biomass supplies for 18-19 years ahead (3-4 years of development plus 15 years of operations) as biomass is, mainly, imported not produced at home.
- Conclusion: the government favours biomass and small hydro but market may fail to deliver enough of such capacity.

Analysis – wind and PV

- Wind faces two volume constraints.
  - The government has a right to limit a pool available for units that work less than 4000 hours per year.
  - A requirement to forecast electricity supplies for for 18-19 years ahead (it does not get remuneration for excess supplies while It pays penalties for supplies 15% below the forecast).
- PV is well positioned to expand as it has reasonable economics for small & medium installations. It is a likely winner in a pool for installations below 1 MW.

Conclusion:

- Wind is the loser although Poland has vast wind resources.
- Poland will start a moderate roll-out of PV due to auctions.

Analysis – biomass co-firing and large hydro

- Biomass co-firing is not eligible for auctions. It does not mean that is deprived of any support. The existing installations will continue to receive Green Certificates (up to 15 years from a date of starting operations).
- Large hydro is not eligible for auctions either. It was a major flaw of the Green Certificate support scheme that has been allocating certificates to large old hydro.
- These installations were constructed from public funds many years ago and were profitable anyway. It was a clear windfall profit for incumbent companies.

Conclusion:

- These are good decisions of the government.

Analysis – an investment gap

- There is a gap (that may widen) between expiration of Green Certificate System (Dec 2015) and effective assignment of contracts under the new regime (2016).
- Green Certificates are assigned after completion of an investment, while contracts are concluded before starting an investment process.
- The first new installations, selected in auctions, will start operations in 2017/18.

Criticism

- Favours incumbents / large companies (deposits, upfront costs & time to get support, high risks)
- Slows down development of wind, which is abundant in Poland
- Advantage to technologies with a limited potential in Poland (dedicated biomass installations, small hydro)
- Gap in providing support to RES (Green Certificates not available for new installations after Dec 2015, contracts assigned in 2016 but will bring new capacity in 2017/8 the earliest)
- Does not open the market, keeps it under control of officials & politicians

About RAP

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- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

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