

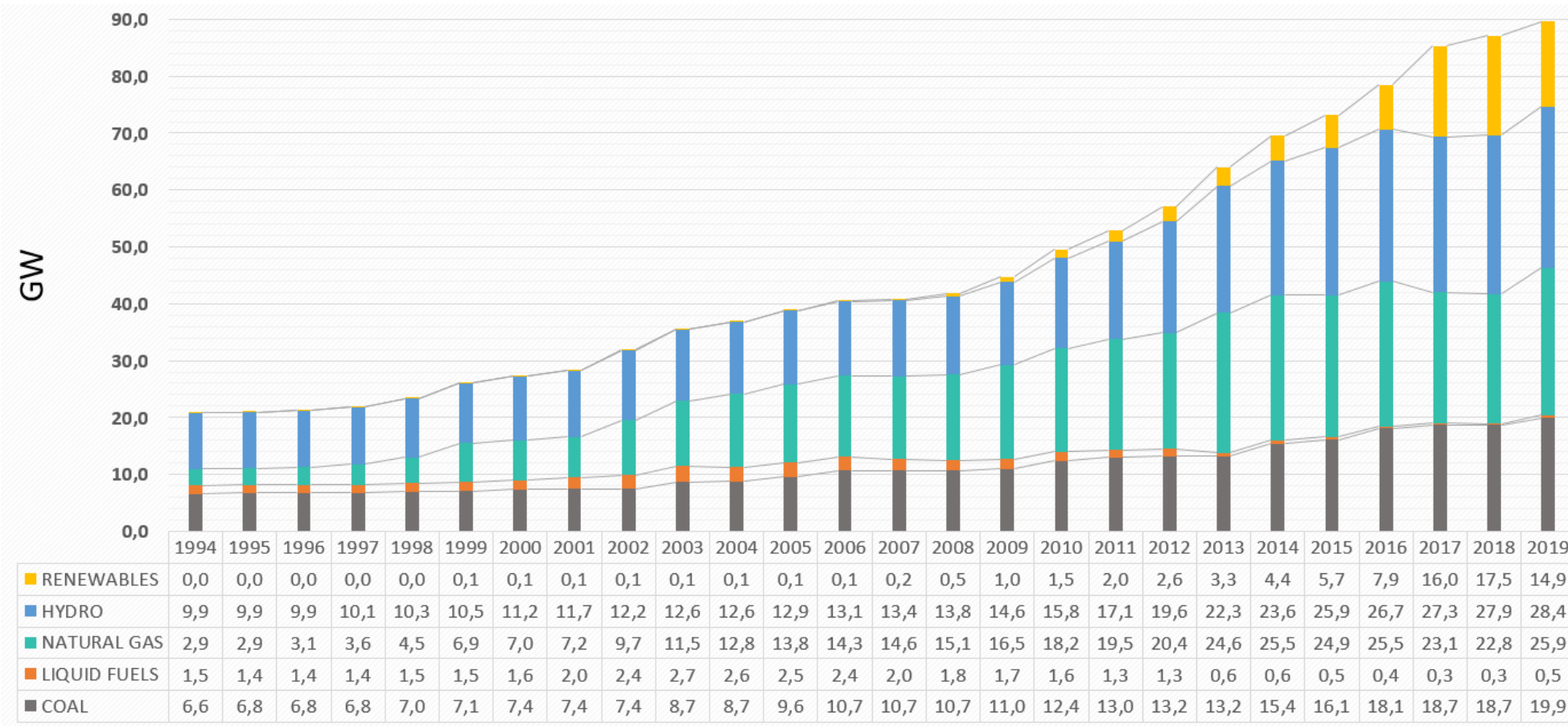
Role of YEKA Model in Energy Transition in Turkey

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Renewable Energy in a Nutshell in Turkey:

- Incremental growth in renewable installed capacity since 2007
- Rapid growth in Solar since 2014



* Data about 2019 consist of first six months of the year

- Differentiation in production according to license type
- Installed capacity under 1MW categorized as *Unlicensed*
- Installed capacity above 1MW categorized as *Licensed*
- Dominant share of Solar in unlicensed capacity
- Current installed capacity of renewables is 26.586 MW in Licensed + Unlicensed total which are benefited from feed-in-tariff mechanism

Distribution of Licensed and Unlicensed Capacity in Renewable Energy:

Source	Licensed Installed Capacity (MW)	Unlicensed Installed Capacity (MW)	Total (MW)*
Wind	6.698,74	51,95	6.750,69
Reservoir	6.437,35	-	6.437,35
Run-of-River	6.303,67	21,02	6.324,69
Solar	-	5.016,99	5.016,99
Geothermal	1.305,62	-	1.305,62
Biomass	327,60	79,18	406,78
Other	-	118,19	126,25
Biogas	98,43	23,24	121,67
LFG	104,01	-	104,01
Total	21.275,41	5.310,57	26.585,98

- Well distributed share of different kind of renewable energy sources
- Decrease dependency on same kind of sources
- Increase flexibility in case of outages

* Total distribution of renewable energy capacity benefited from feed-in-tariff mechanism

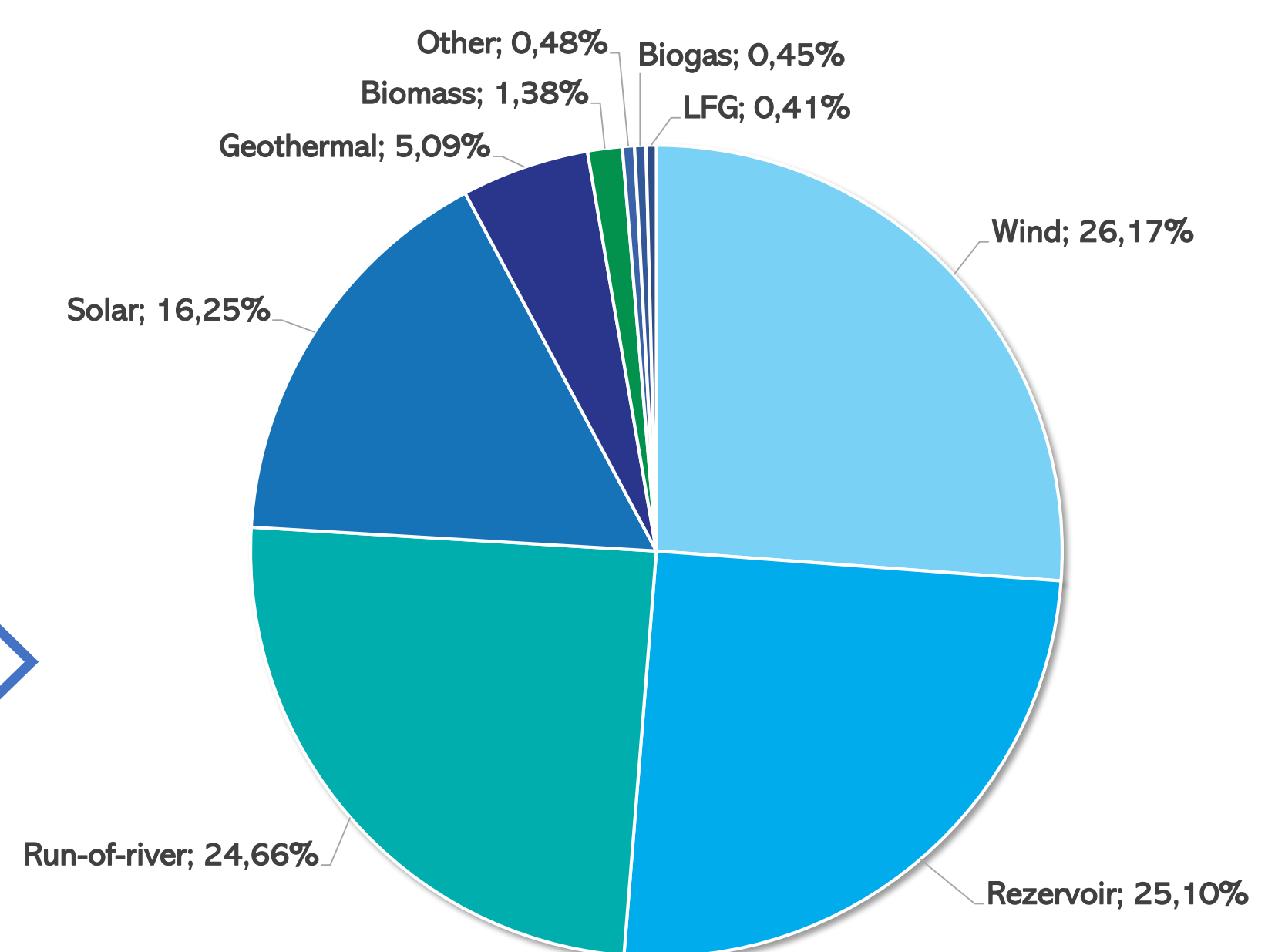
The Role of YEKA Model

- Well distributed renewable energy projects
- Make TSO-DSO collaboration vital
- More integration of renewable to the system nation wide
- Reducing current account deficit of Turkey through locally manufactured content requirement
- Creating new employment opportunities into the region
- Providing new business opportunities to small and medium-sized enterprises



Recommendation

Next auctions must have more focus on micro level capacity allocation to increase TSO-DSO collaboration more than current one so as to manage with system congestions.



Reference Materials

- Alparslan Bayraktar (2018), Energy Transition in Turkey, Turkish Policy Quarterly
- EPIAŞ Transparency Platform:
<https://seffaflik.epias.com.tr/transparency/uretim/yekdem/kurulu-guc.xhtml>

Keywords

YEKA, renewable energy, energy transition, Turkey

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