



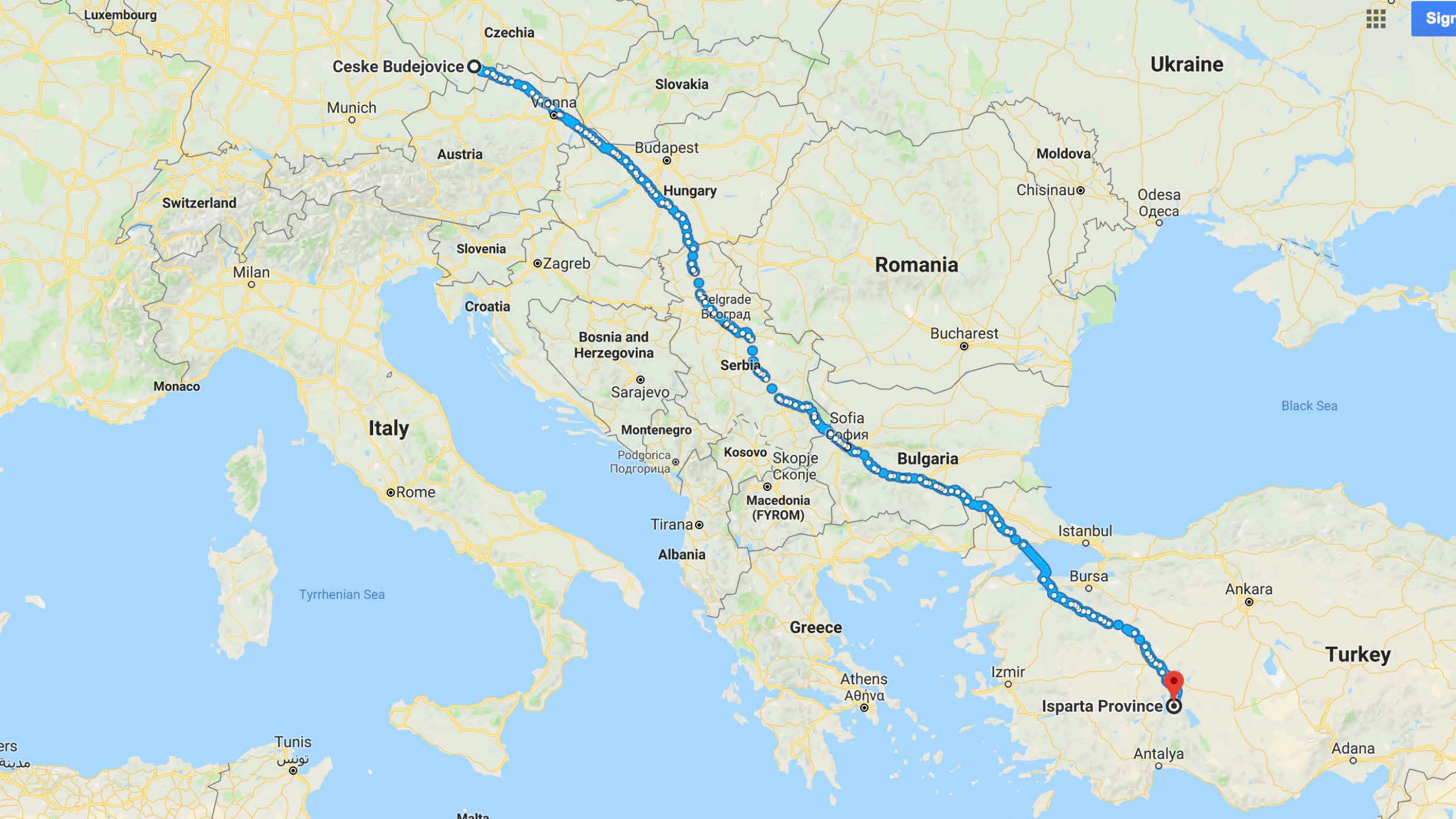
# Possible bio-economy practice in the Turkey

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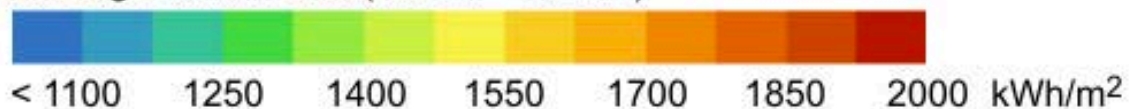
Sign

- World running toward to money, is really our growth ?
- Does money fullfill food self-sufficiency, food security, good health and healthy environment ?
- Bioeconomy is ecology, economic theory and practice to use ecologically and socially on the way of sustainable development
- The agricultural sector is the only place that won or lost that fight for long-term economic development. Bioeconomy is a part of this war (Gunnar Myrdal)

Turkey is one of the richest country in the world in terms of renewable resources. For geothermal energy Turkey is ranked first in Europe and seventh in the world. Installed capacity of wind energy in Turkey is increasing rapidly from 20MW in 2002 to 4503MW in 2015.

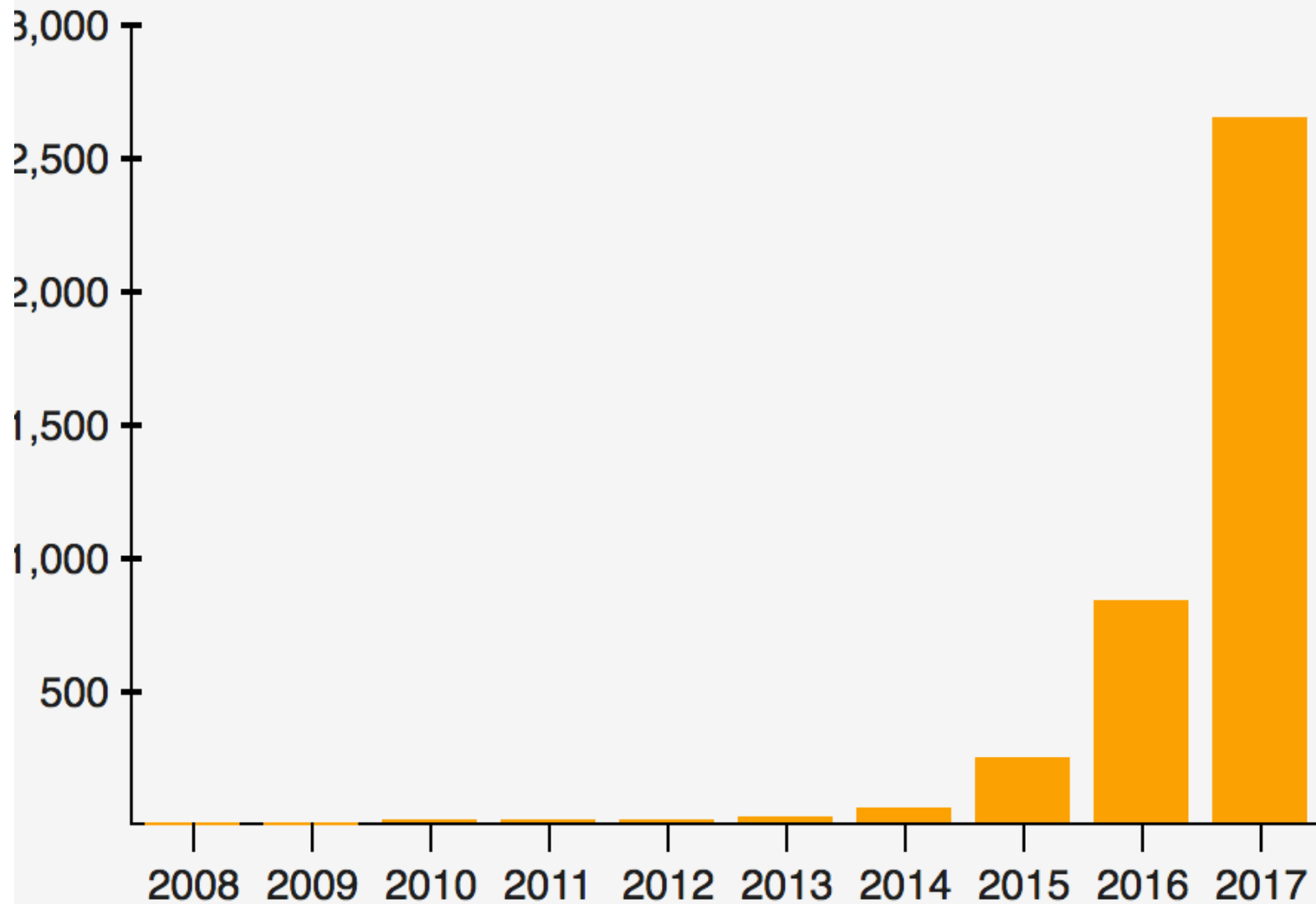


Average annual sum (4/2004 - 3/2010)



0 50 100 km

Solar PV deployment in  $MW_p$



Year	Added PV capacity ( $MW_p$ )	Total ( $MW_p$ )
2008	0.75	4
2009	1	5
2010	1	6
2011	1	7
2012	5	12
2013	6	18
2014	40	58
2015	191	249
2016	583	832
2017	1790	2647

IEA-PVPS, <sup>[15]</sup> previous <sup>[16][17][18][19]</sup>



Bozcaada Wind Farm, Çanakkale province



**Wind farm annual electricity generation and percent of total consumption<sup>[3]</sup>**

<b>Year</b>	<b>GWh</b>	<b>%</b>
1998	6	0.0050
1999	21	0.02
2000	33	0.03
2001	62	0.05
2002	48	0.04
2003	61	0.04
2004	58	0.04
2005	59	0.04
2006	127	0.07
2007	355	0.19
2008	847	0.43
2009	1,495	0.77
2010	2,916	1.39
2011	4,724	2.05
2012	5,861	2.42
2013	7,558	3.04
2014	8,367	3.25
2015	11,652	4.39
2016	15,370	5.59

# CONCLUSION and RECOMMENDATIONS

- **Turkey, as a bioeconomy-strategy should also be cared for, because one can not substitute for the other.**
- **The universities should open Bioeconomy programs, government should develop biopolitics, industrial sector should increase biotechnological budgets,**
- **our agricultural sector should be more brave to organic farming**



Thank you    Tesekkur ederiz  
Dekuji Eucharistó    Merci



# Reference

- [http://www.worldresearchlibrary.org/up\\_proc/pdf/150-145335810644-50.pdf](http://www.worldresearchlibrary.org/up_proc/pdf/150-145335810644-50.pdf)
- <https://www.tandfonline.com/doi/abs/10.3109/07388551.2013.792771?scroll=top&needAccess=true&journalCode=ibty20>
- <https://www.tandfonline.com/doi/full/10.1080/2157930X.2017.1281209>
- [http://biotech2030.ru/wp-content/uploads/docs/int/The%20Bioeconomy%20to%202030\\_OECD.pdf](http://biotech2030.ru/wp-content/uploads/docs/int/The%20Bioeconomy%20to%202030_OECD.pdf)

**Thank You for Attention**