POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH

Analysis of Potentials for Wind Electricity Production using the REMIND Model

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Workshop on Improving the Representation of Renewables in IAMs
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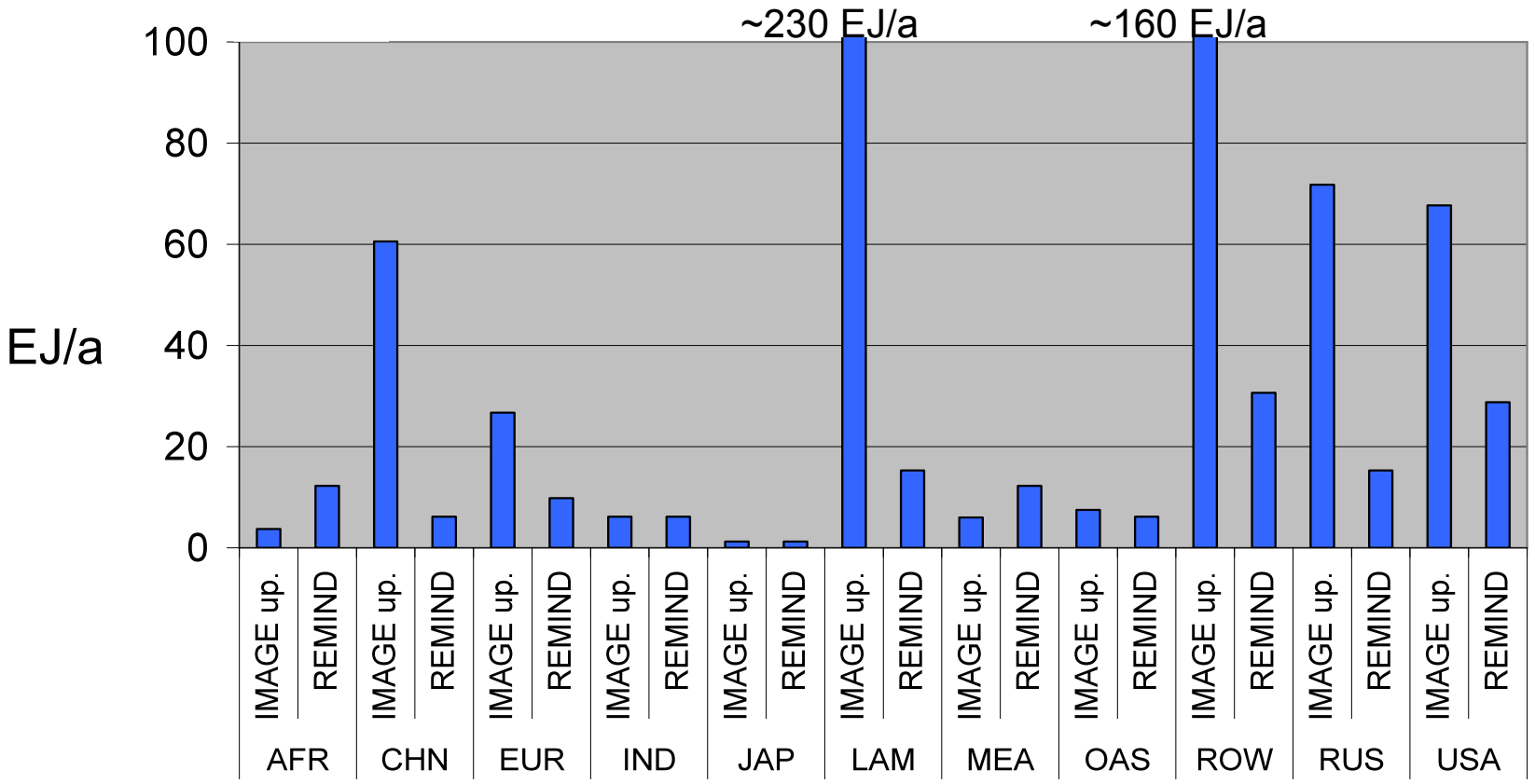
Leibniz Gemeinschaft

Potsdam Institute for Climate Impact Research
Research Domain Sustainable Solutions

Comparison with default REMIND-R potentials

	REMIND	IMAGE re-scaled
Global wind energy potential (EJ/a):	144	637



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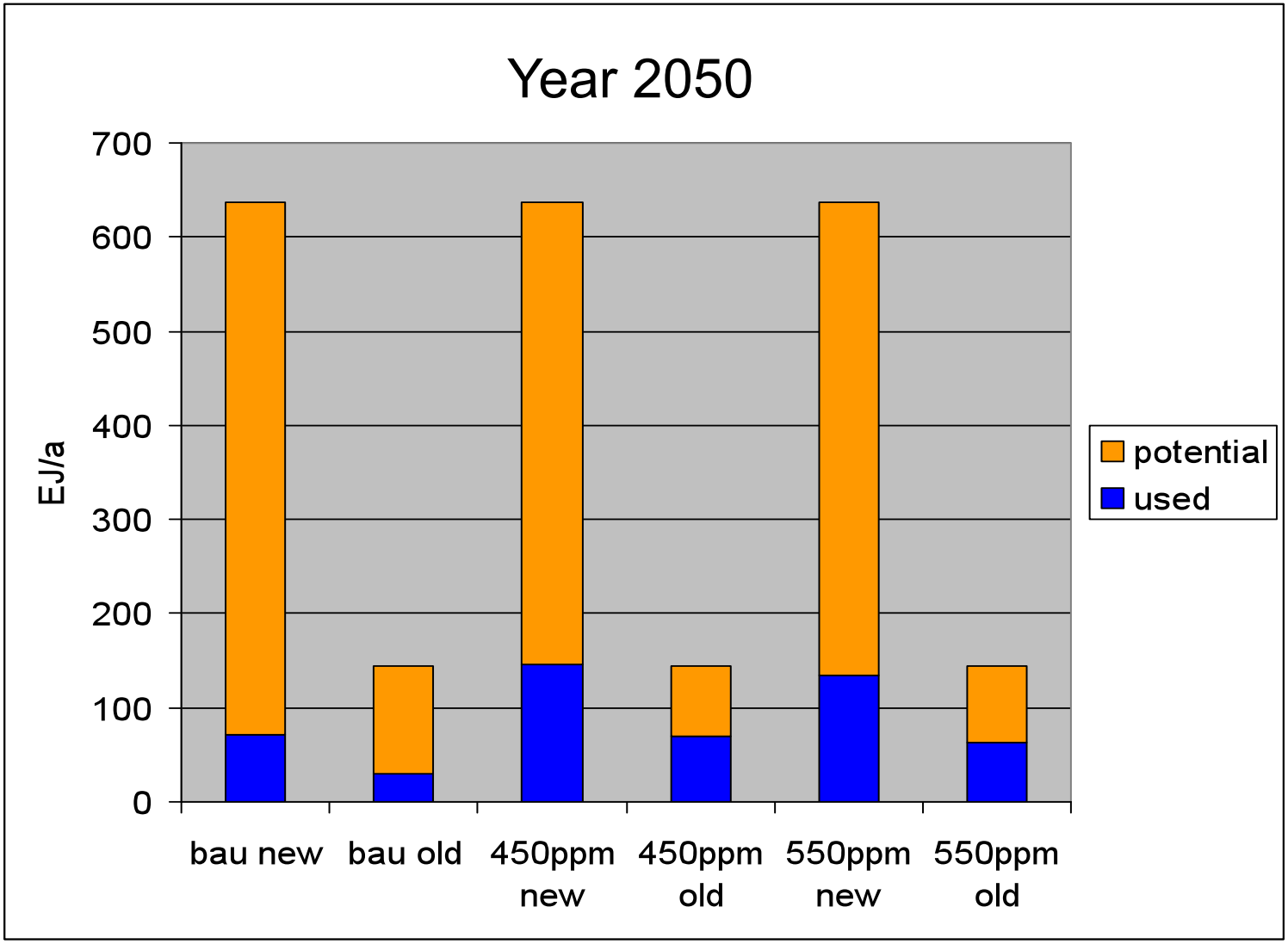
Wind energy used vs. potential



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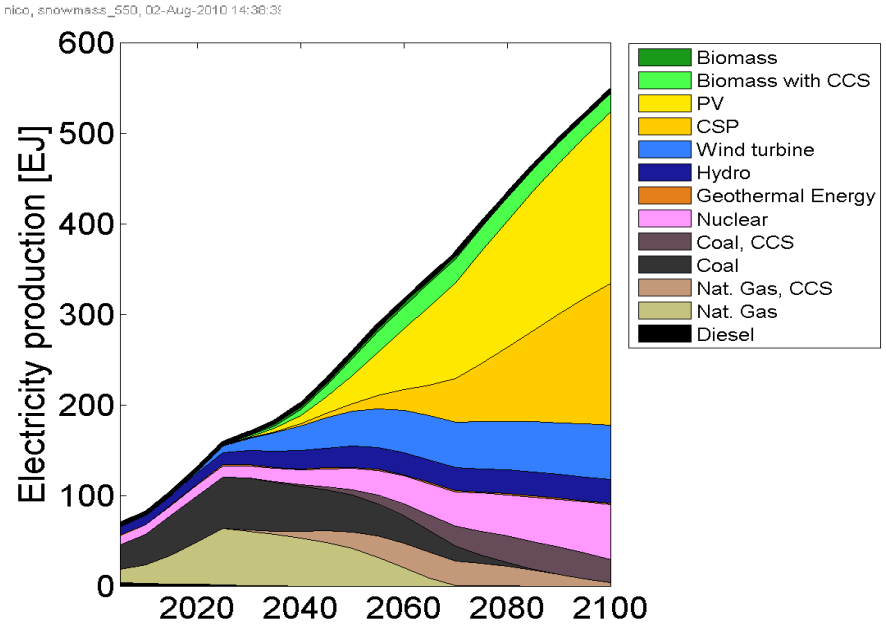
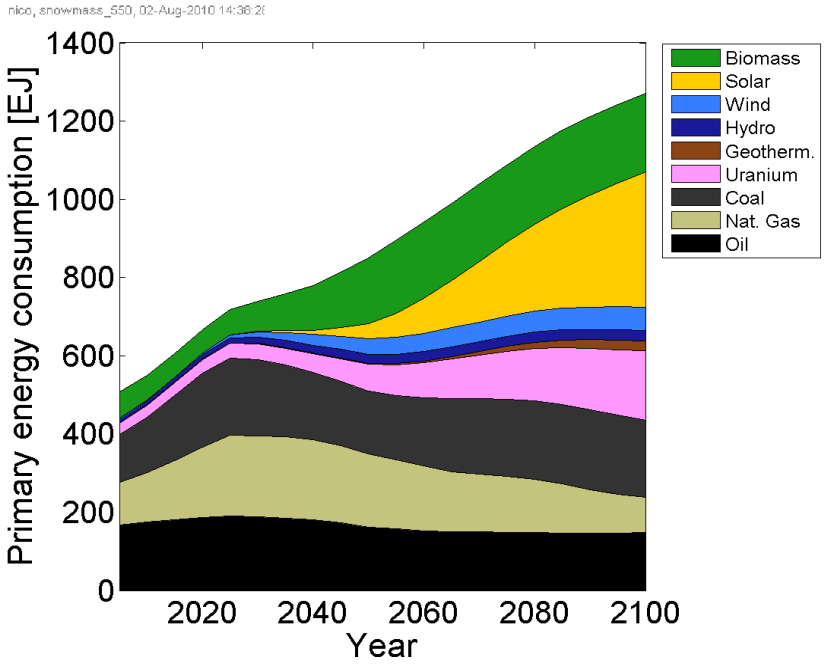
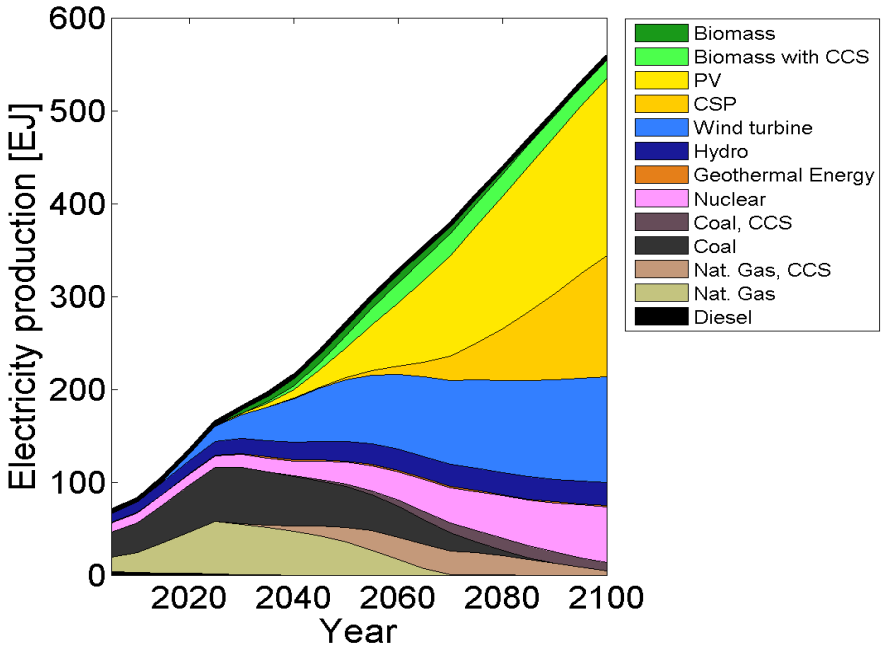
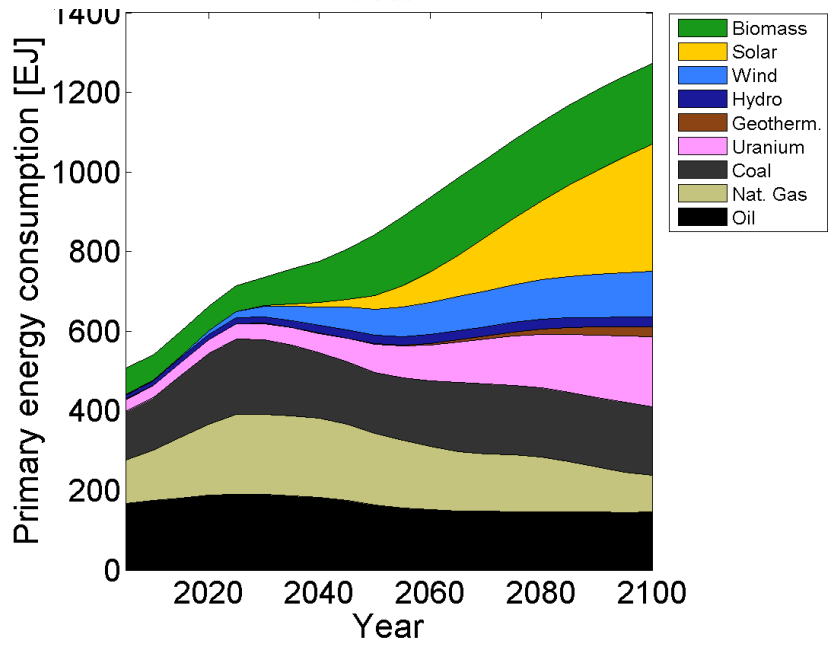
Comparison for 550ppm policy

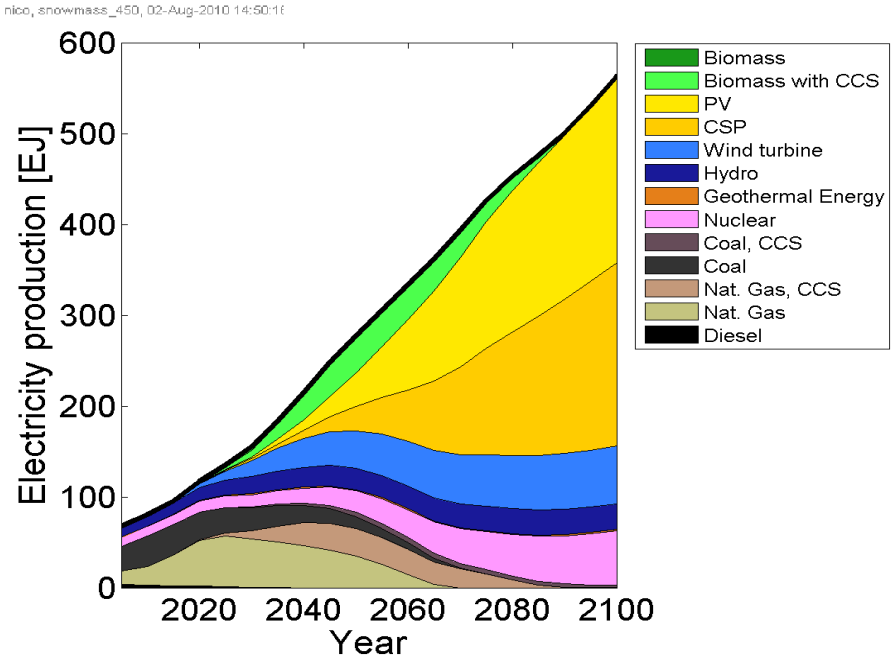


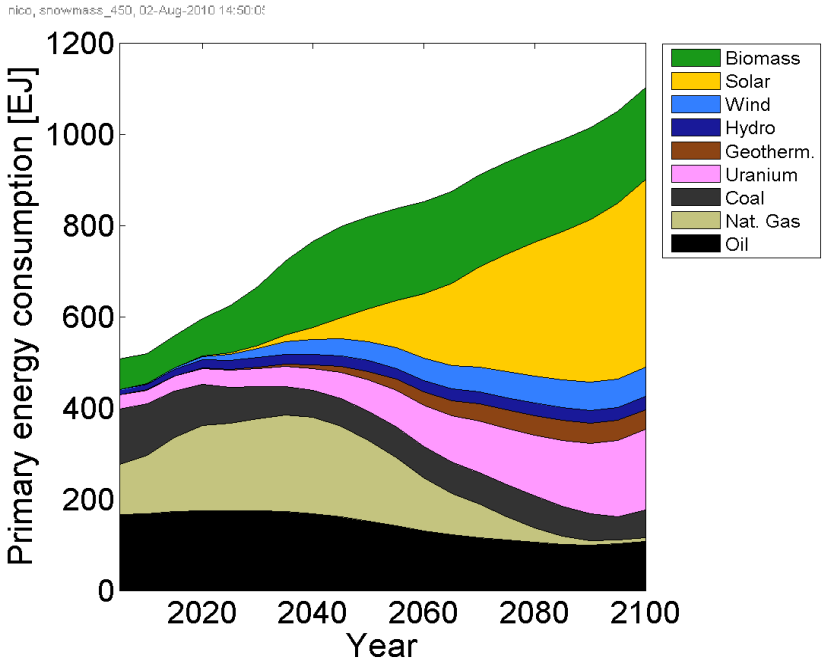


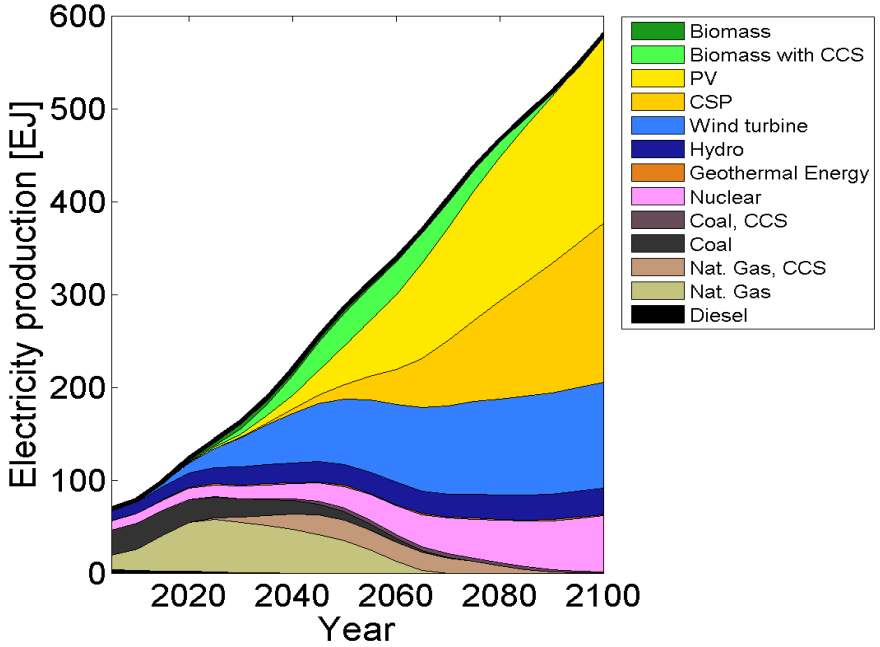


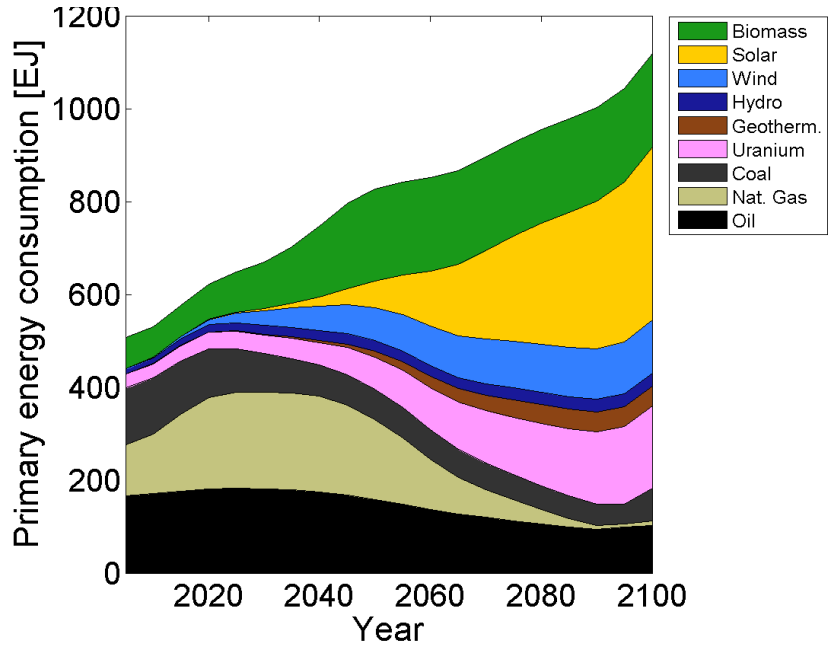


Comparison for 450ppm policy

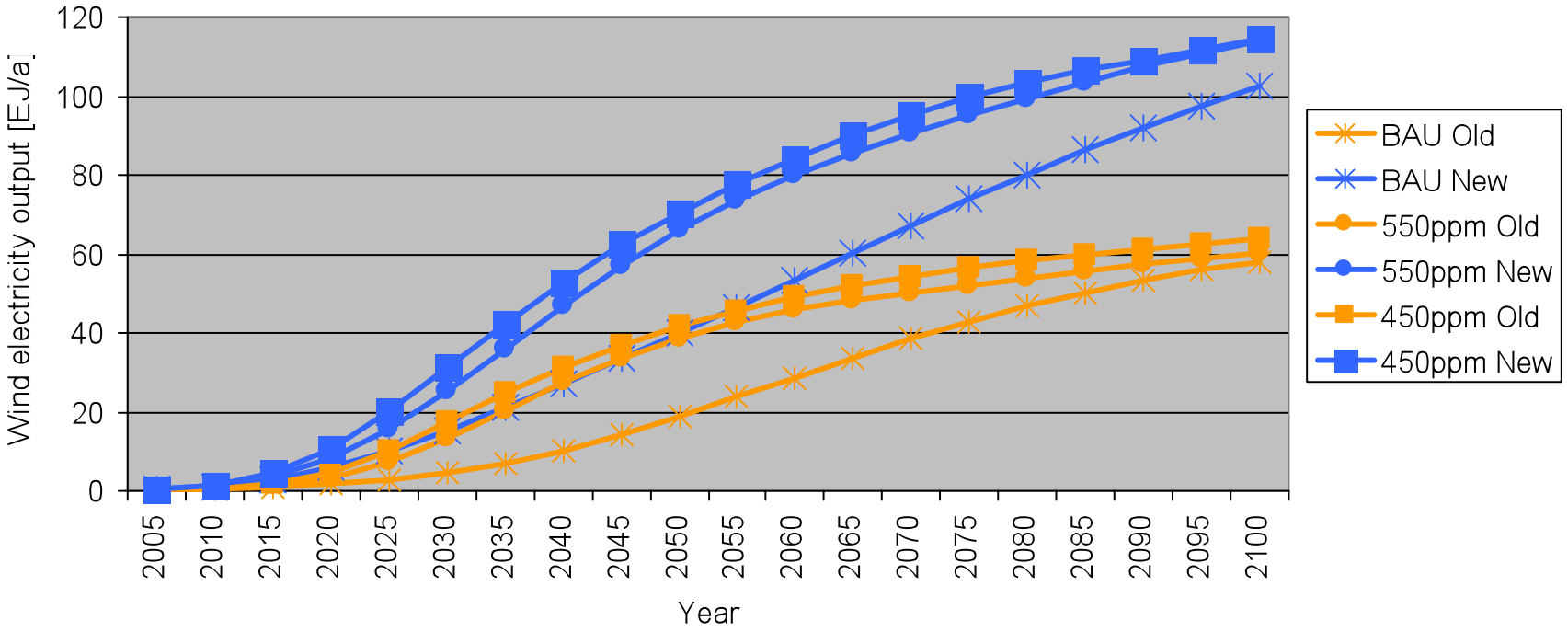








Comparison of wind energy use



Short run: Scenario & potential are important

Long run: potential is more important than scenario

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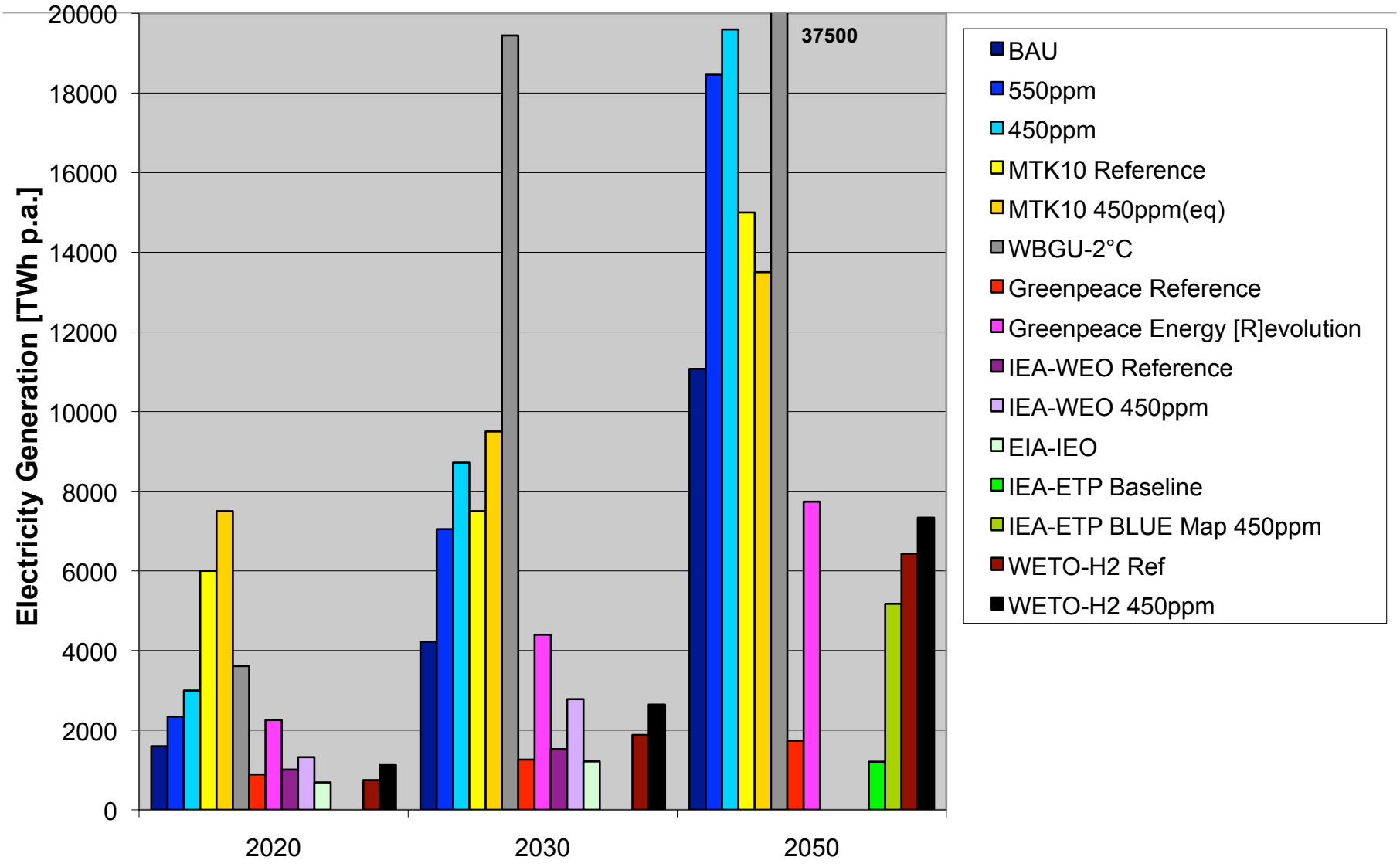
Comparison of wind energy use



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Mitigation costs

		Climate target	
		550ppm	450ppm
Renewable Potential	Old	0.73%	2.00%
	New	0.66%	1.80%

Differences of discounted cumulative consumption relative to the BAU with the same potential; discount rate is 3%.

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