

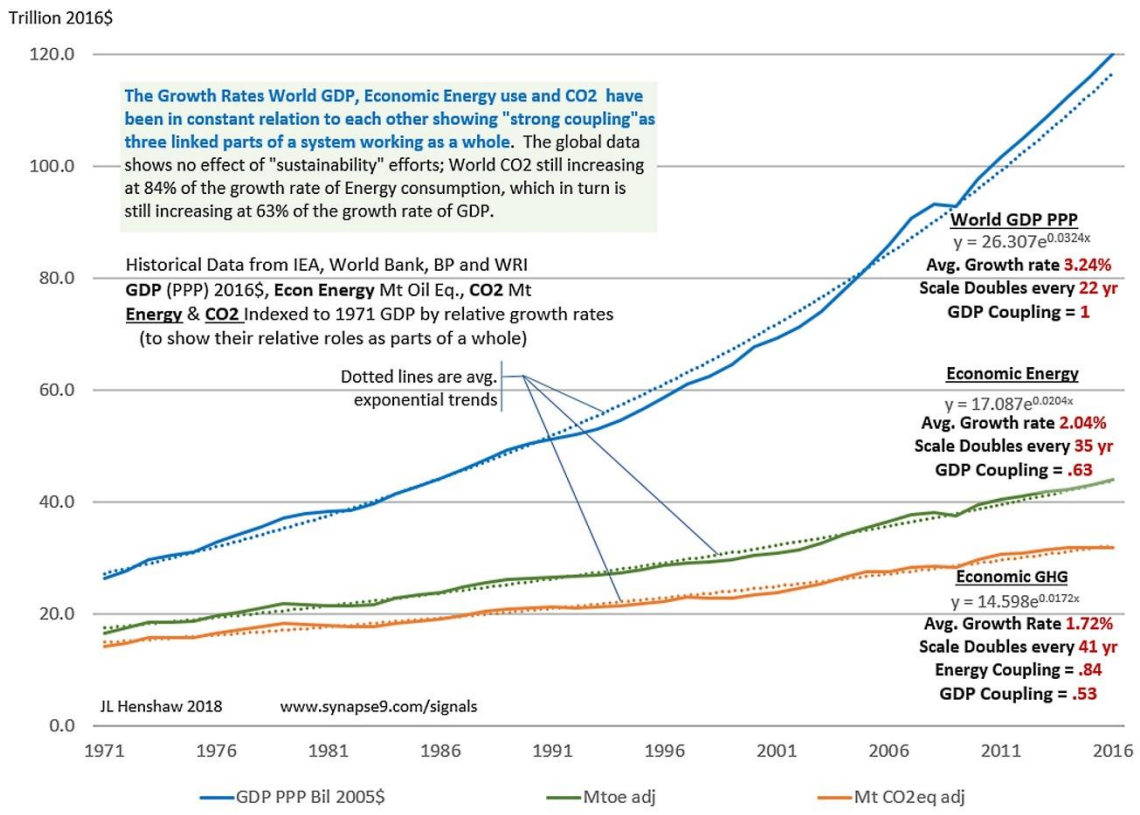
# Güneş Enerjisi Perspektifinden Enerji Sektörünün Geleceğine Bakış

Mehmet KAPUSUZ  
Enerjisa Müşteri Çözümleri A.Ş.  
2018

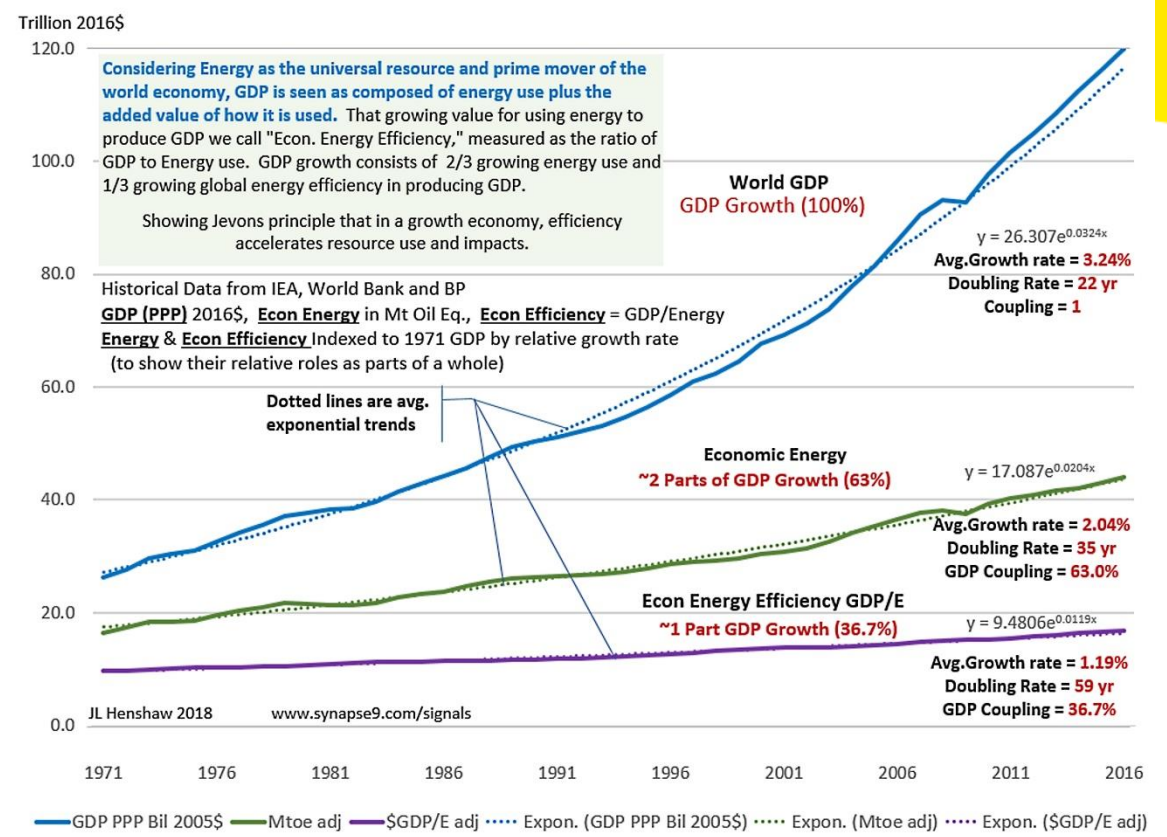
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# GSH (GDP) ve Enerji Tüketimi

The Coupling of World GDP (PPP) growth to, Energy Use & CO2  
46 year Constant Dollar GDP (PPP), 1971 to 2017



The World GDP as - part Energy & part Economic Energy Efficiency  
GDP growth rate = 2 Parts Energy growth rate + 1 Part Energy Efficiency (GDP/E) growth rate



# DAĞITIMIN AĞIRLIK MERKEZİNDE DEĞİŞİM

Changing power generation balance

## Power generation

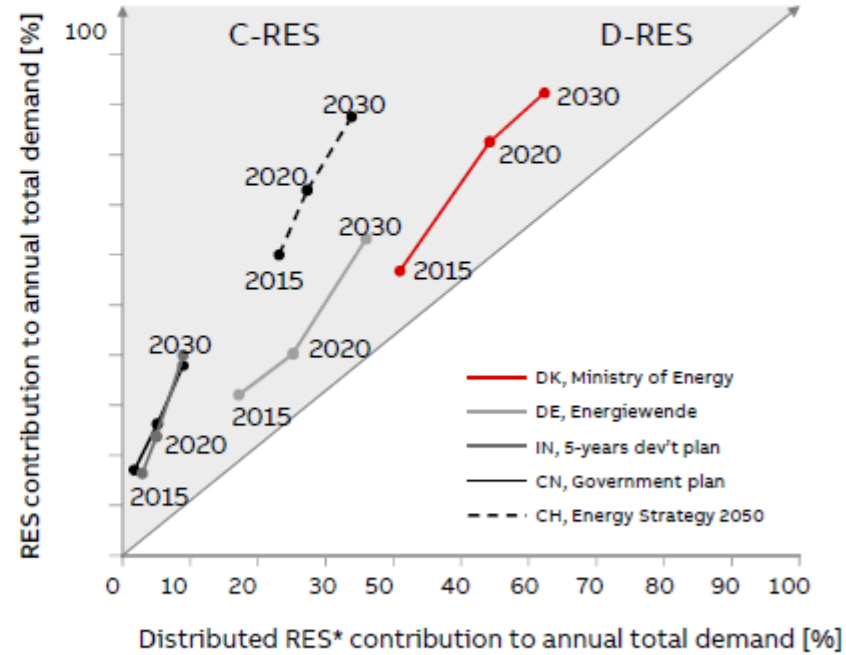
Power balance tipping towards renewables, driven by policy & disruptive technology cost reduction

Main growth in variable renewables such as wind and solar

Two growth paths

- Mainly centralized renewables
- Mainly distributed renewables

## Centralized vs decentralized



Renewables expected to be dominant source for electrical power generation

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**ENERJISA**

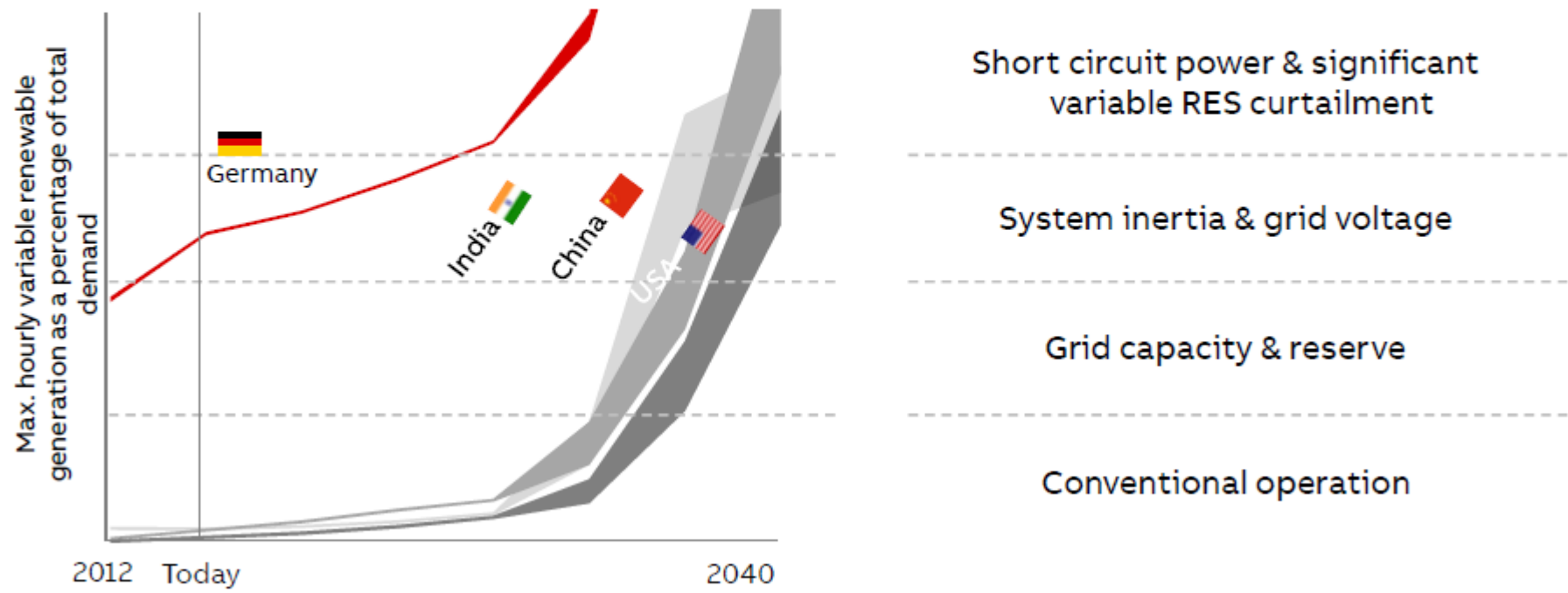
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SABANCI Hizmet Özel

# ŞEBEKEDA ZORLUKLAR

Grid – enabler or bottleneck ...

## Technical challenges countries encounter



Grid investments and technologies required to address challenges

# GÜNEŞ ENERJİSİ İŞ MODELLERİ

Problem	Solution	Unique Value Proposition	Unfair Advantage	Customer Segments
High initial costs	Solar parks	Flexibility	Transferable bonds	Green mass market
Technology risk	Subscription options	Subscription	Not necessary to commit	Younger, less educated people
Need for own roof (Property)	Virtual net-metering	Reduced costs		Renters
	<b>Key Metrics</b>		<b>Channels</b>	
Multi-unit housing	Market coverage		Conferences, meetings	Condominium residents
Aesthetic concerns	Number of consumers		Websites	
			Sales representatives	
			Ambassadors	
<b>Cost Structure</b>		<b>Revenue Streams</b>		
Initial infrastructure development	Labour and IT	Sale of solar bonds	State incentives	
Operation and maintenance		Tax benefits	Upfront payments	

## Lejant:

Sarı: Ev sahibi modeli

Yeşil: 3. parti modeli

Mavi: Ev sahibi ve 3. parti modeli

Turuncu: Topluluk Modelleri

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