

Coal in Türkiye: Phasing-out or **NOT**?

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Key takeaways

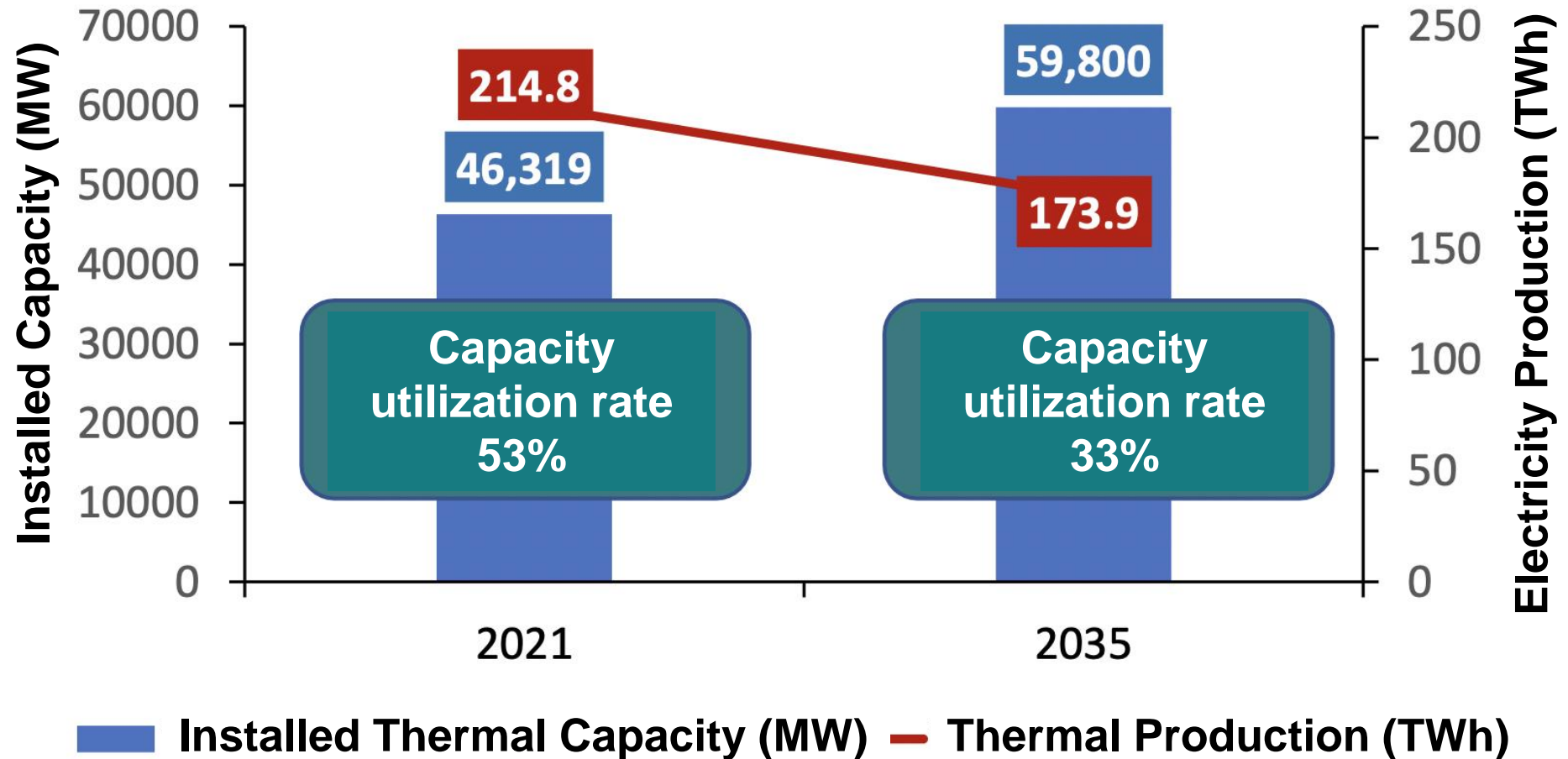
- **Officially** → There is no coal phase-out agenda
- **Technically** → It is possible
- But it requires comprehensive **PLANNING!!**

National Energy Plan

- By 2030
 - A new coal plant with a 1.7 GW capacity will be added
- Between 2030-2035
 - An additional 1.5 GW coal capacity will be realized

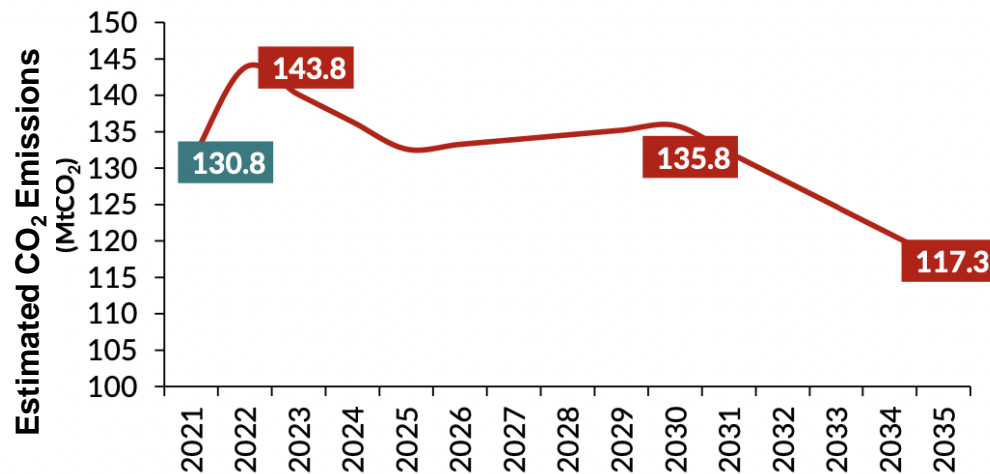
3.2 GW of **NEW coal capacity** is projected

Phasing-down without “phasing-down”



Comparability with 2053 net-zero target?

- CCUS is not cost effective even with a reasonable decrease in the prices is projected (~1% annually)
 - No new coal plants with CCS is realized until 2035
 - coal fleet with no CCS??

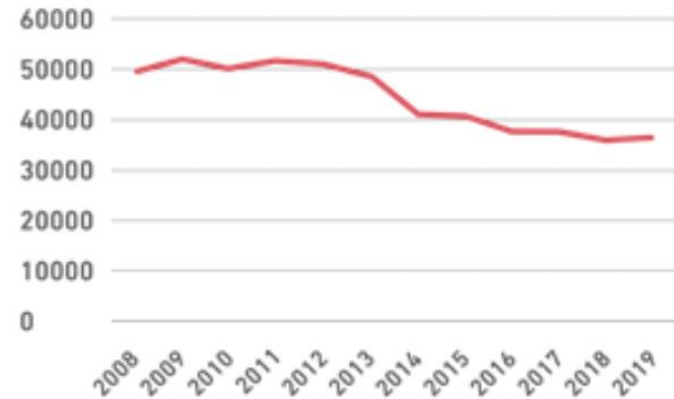


- 10% decrease in electricity emissions in 15 years
 - Mostly due to low capacity utilization
 - Considerable but not sufficient for net-zero
- Total carbon cost = \$9.5 billion
 - Who is going to pay?

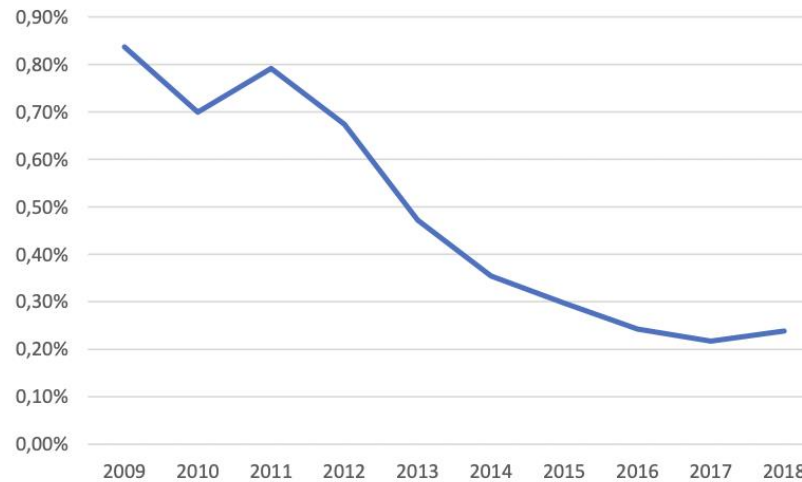
What is the outlook on coal economy?

- Decreasing employment

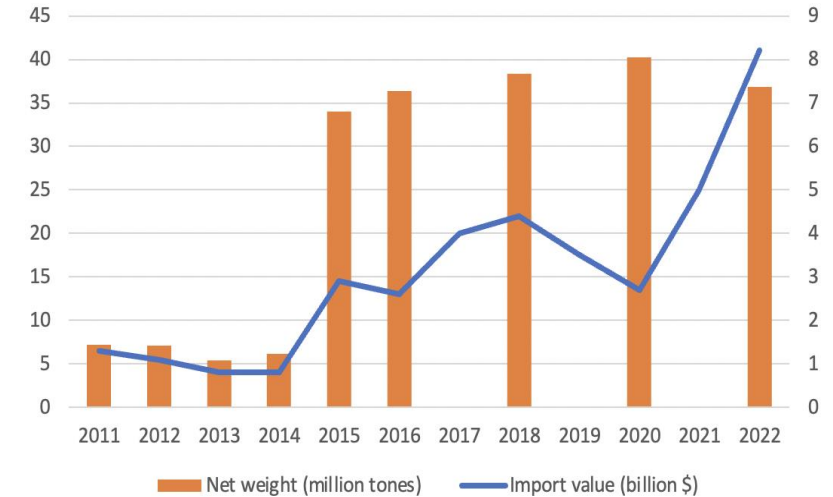
Loss of 15,000 jobs in coal mining in 10 years (~30%)



- Decreasing value added

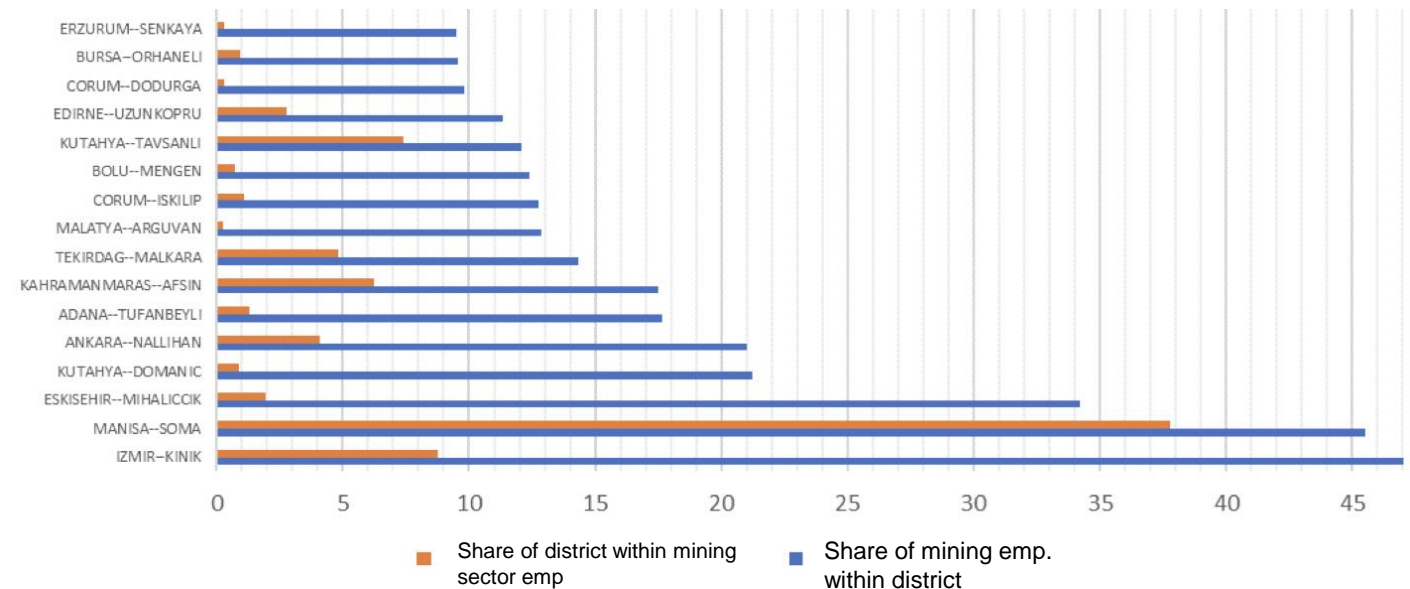
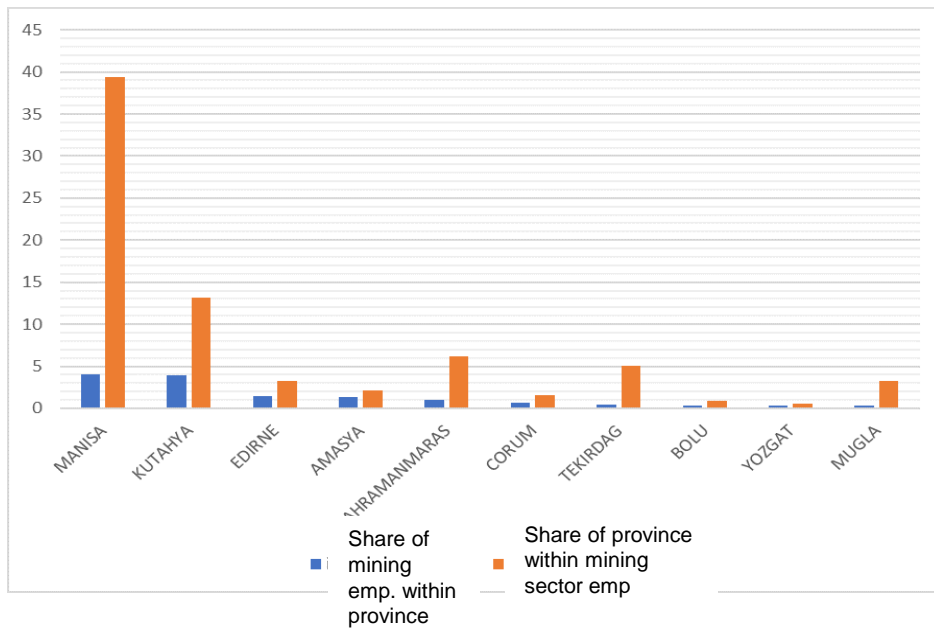


- Increasing imports & vulnerability to price hikes



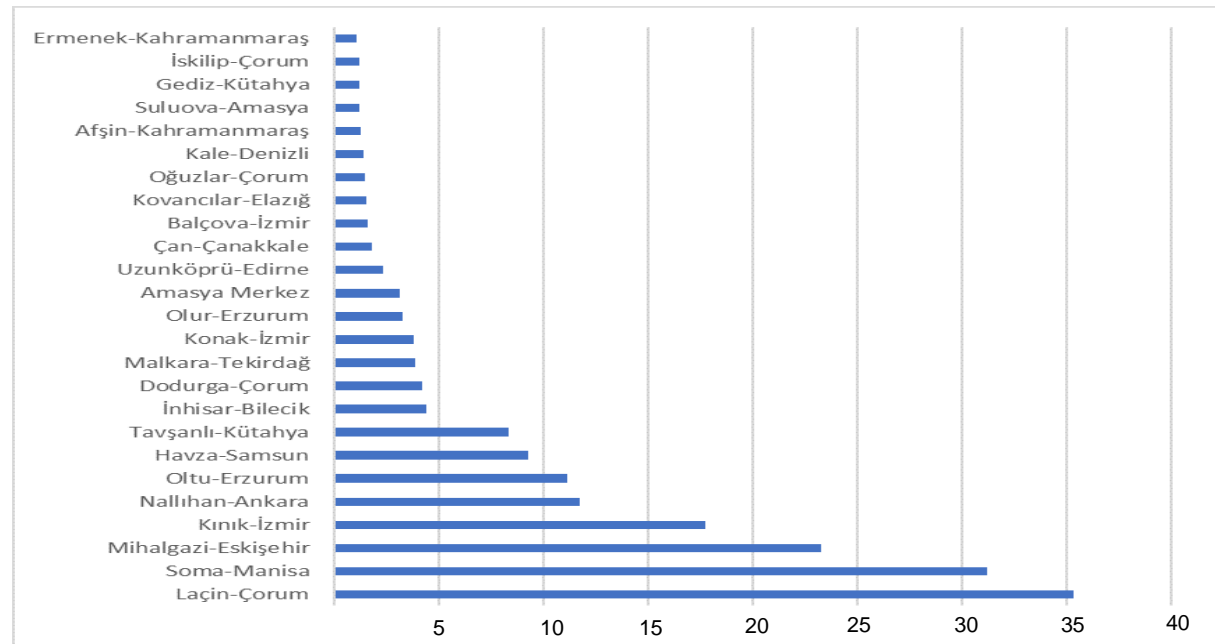
What are we risking?

- A chance for preparing a comprehensive just transition plan – it is not easy but inevitable



What are we risking?

- And... it is not only the direct employment that is at risk

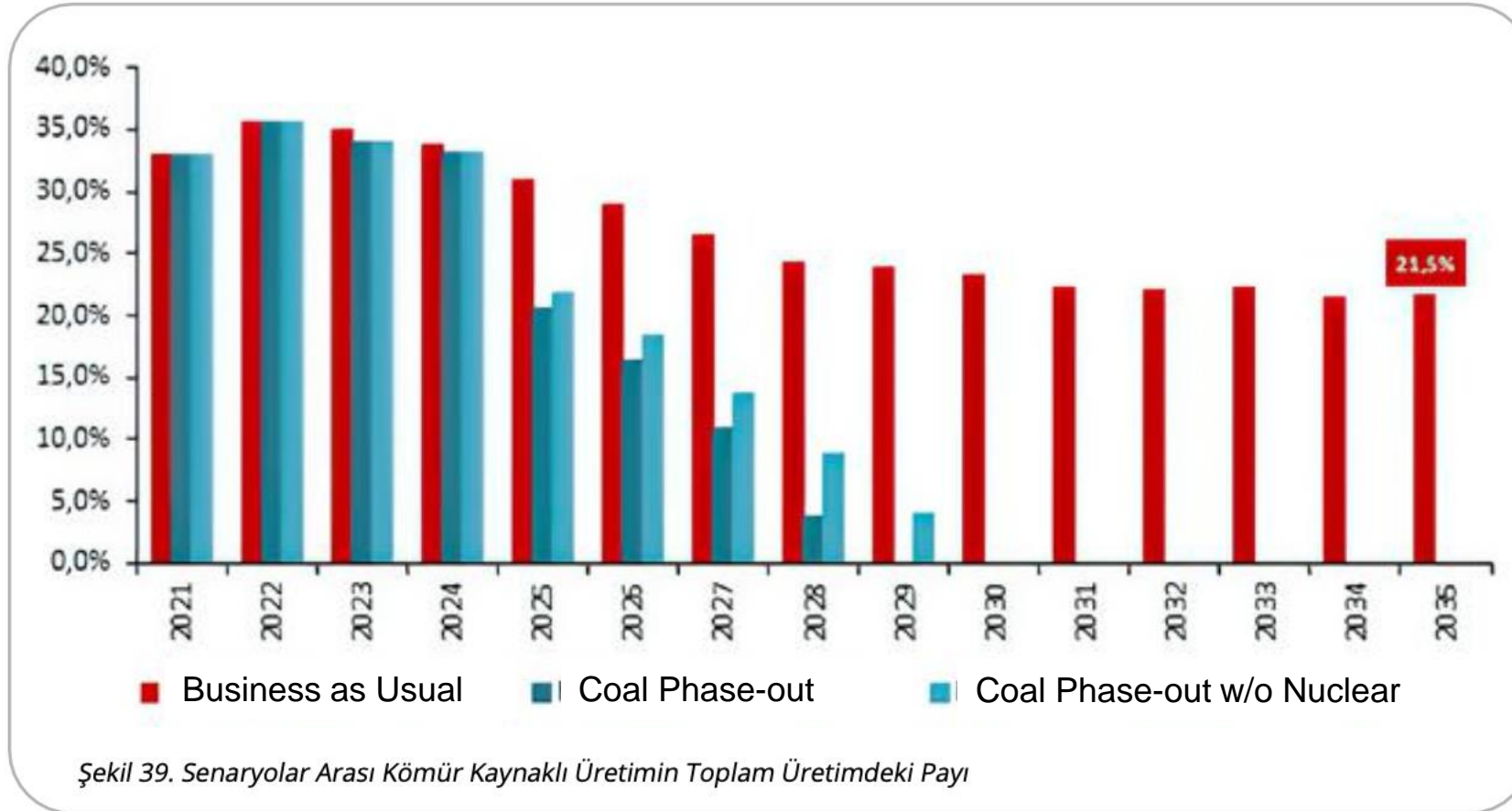


Share of indirect mining employment within district

Is it technically possible to phase-out of coal?

- Yes
 - Climate Coalition by 2030
 - IPM by 2035
 - SHURA by 2035
 - World Bank (CCDR) by 2040 (with CCS)

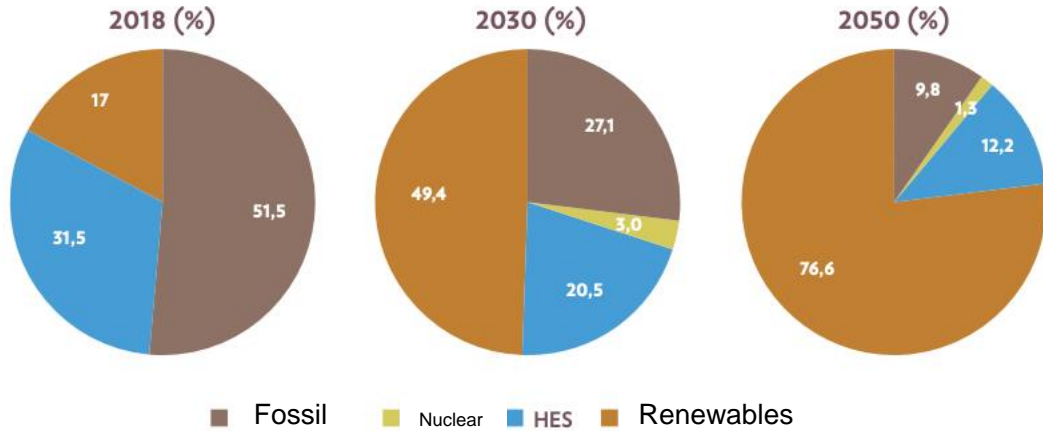
Coal phase-out by 2030



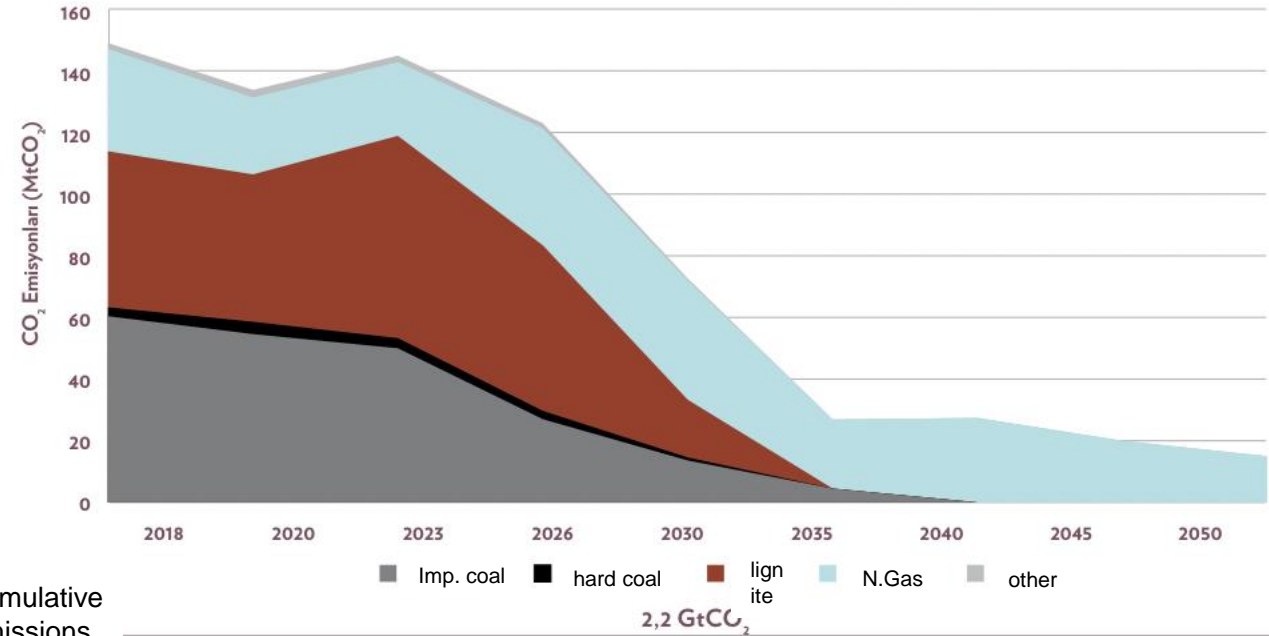
Sonuçlar	Mevcut Durum Senaryosu	Kömürden Çıkış Senaryosu	Nükleersiz Kömürden Çıkış Senaryosu
2035 Sonu Toplam Kurulu Güç (MW)	147.615	168.657	174.781
2035 Sonu Batarya Kurulu Gücü (MWh)	-	136.000	136.000
2035 Sonu Toplam Rüzgâr ve Güneş Kurulu Gücü (MW)	60.254	101.154	112.078
2035 Yılı Güneş ve Rüzgârın Üretimdeki Payı (%)	%28,8	%51,7	%56,4
2035 Yılı Üretimdeki Yenilenebilir Enerji Payı (%)	%49,4	%73,6	%78,4
2035 Yılı Yerli Elektrik Üretimi Payı (%)	%59,2	%73,6	%78,4
2035 Yılı Elektrik Üretimi Kaynaklı Sera Gazı Emisyonları (milyon ton CO ₂ Eşdeğeri)	139,42	27,63	33,62
2022-2035 Arası Ortalama Elektrik Üretim Birim Fiyatı ⁷ (USD _{Reel 2021} /MWh)	50,39	59,08	62,76
2022-2035 Arası Toplam Yatırım Maliyeti (Milyar USD _{Reel 2021})	68,46	118,24	88,74
2022-2035 Arası Toplanan Karbon Vergisi Miktarı (Milyar USD _{Reel 2021})	-	24,8	30,3

Coal phase-out by 2035

Installed capacity shares by sources under net-zero scenario (%)



Installed capacity shares by fossil sources under net-zero scenario (%)



Coal phase-out by 2035

Figure 6: Electricity generation by technology

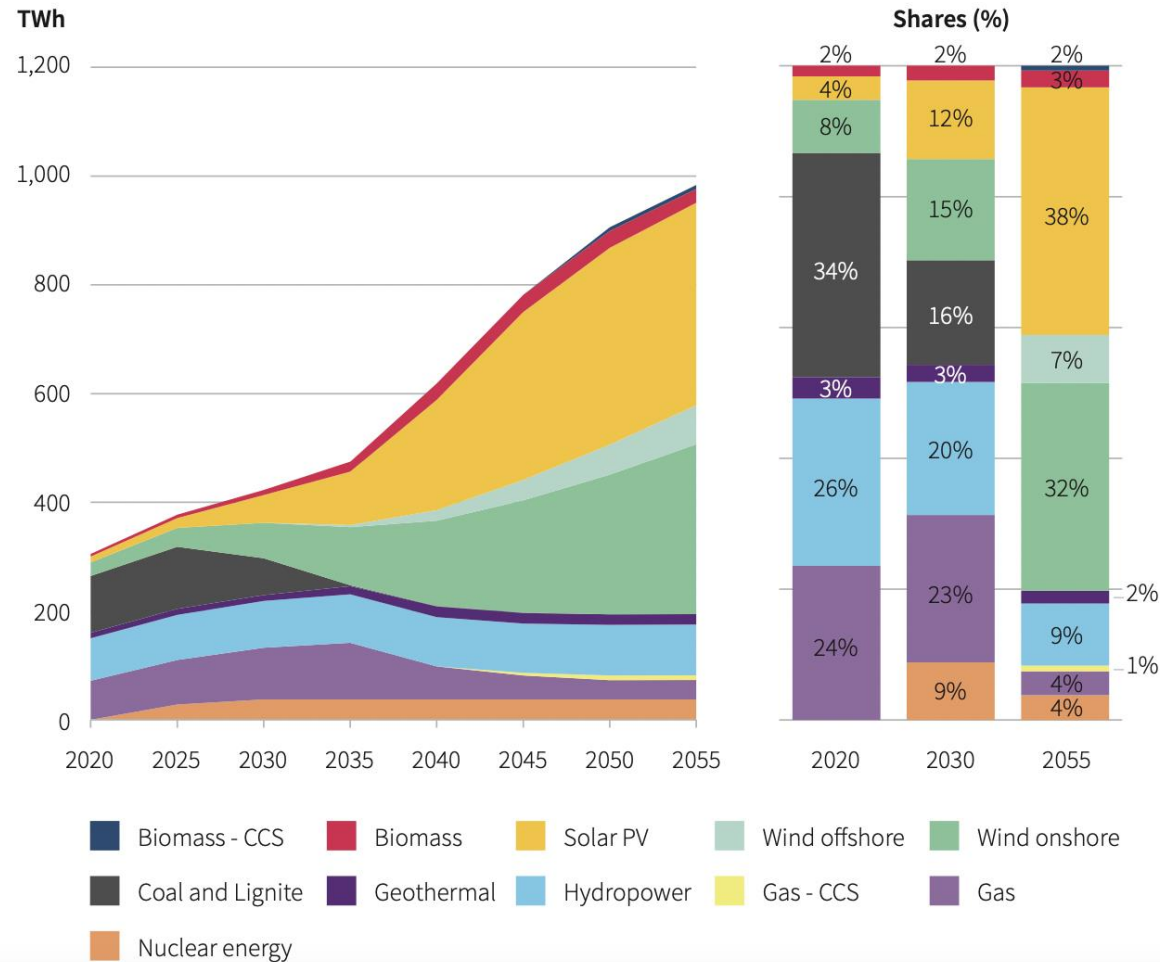
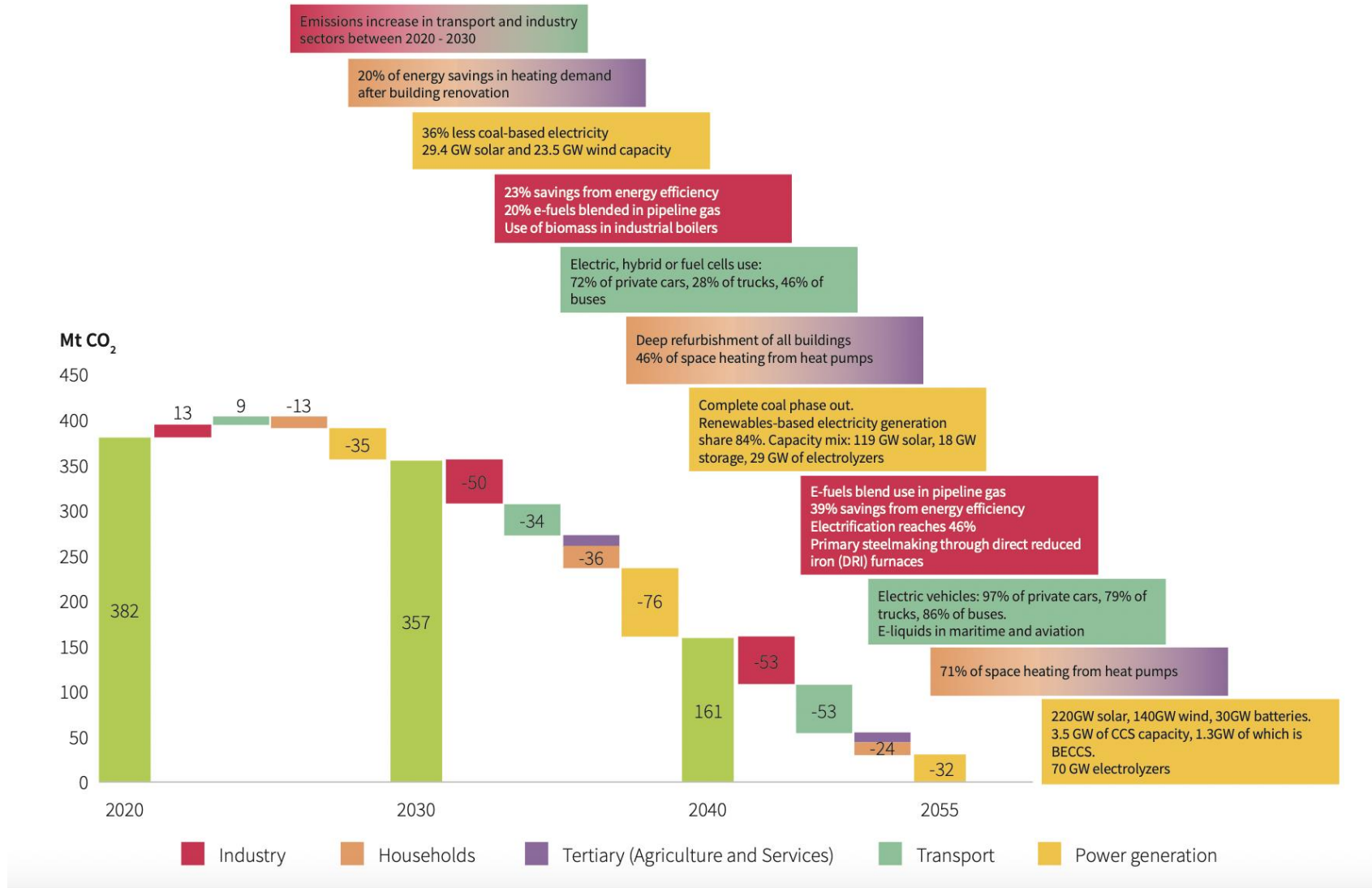
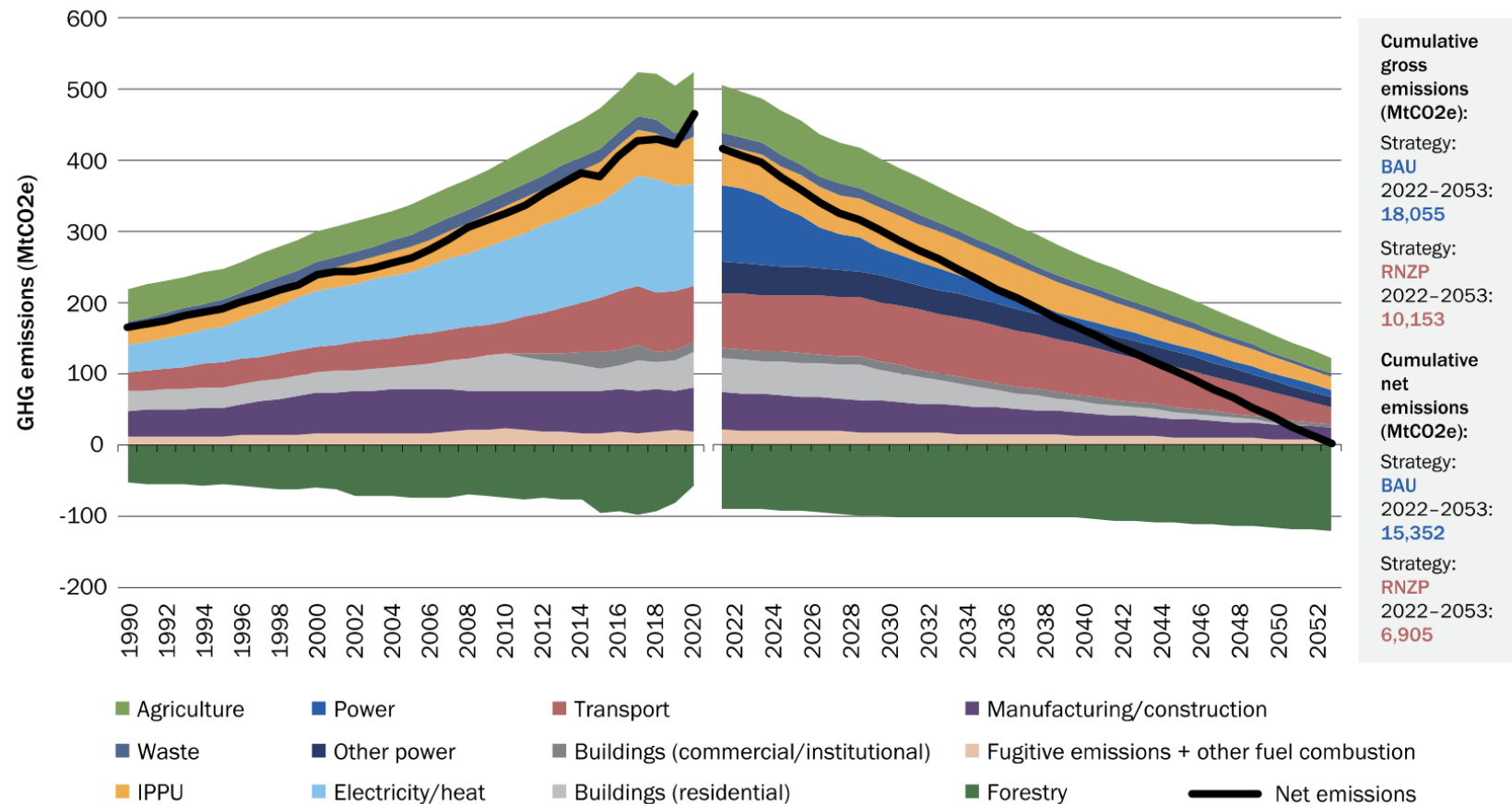


Figure 4: NZ2053 scenario CO₂ emission reduction projections



Coal phase-out by 2040

Figure 3.1: Historical emissions (left) and RNZP emissions, consistent with the 2053 target (right)



Key takeaways. Again...

- **Officially** → There is no coal phase-out agenda
- **Technically** → It is possible
- Avoiding the conversation = Risking an unplanned phase-out



Thank you!!

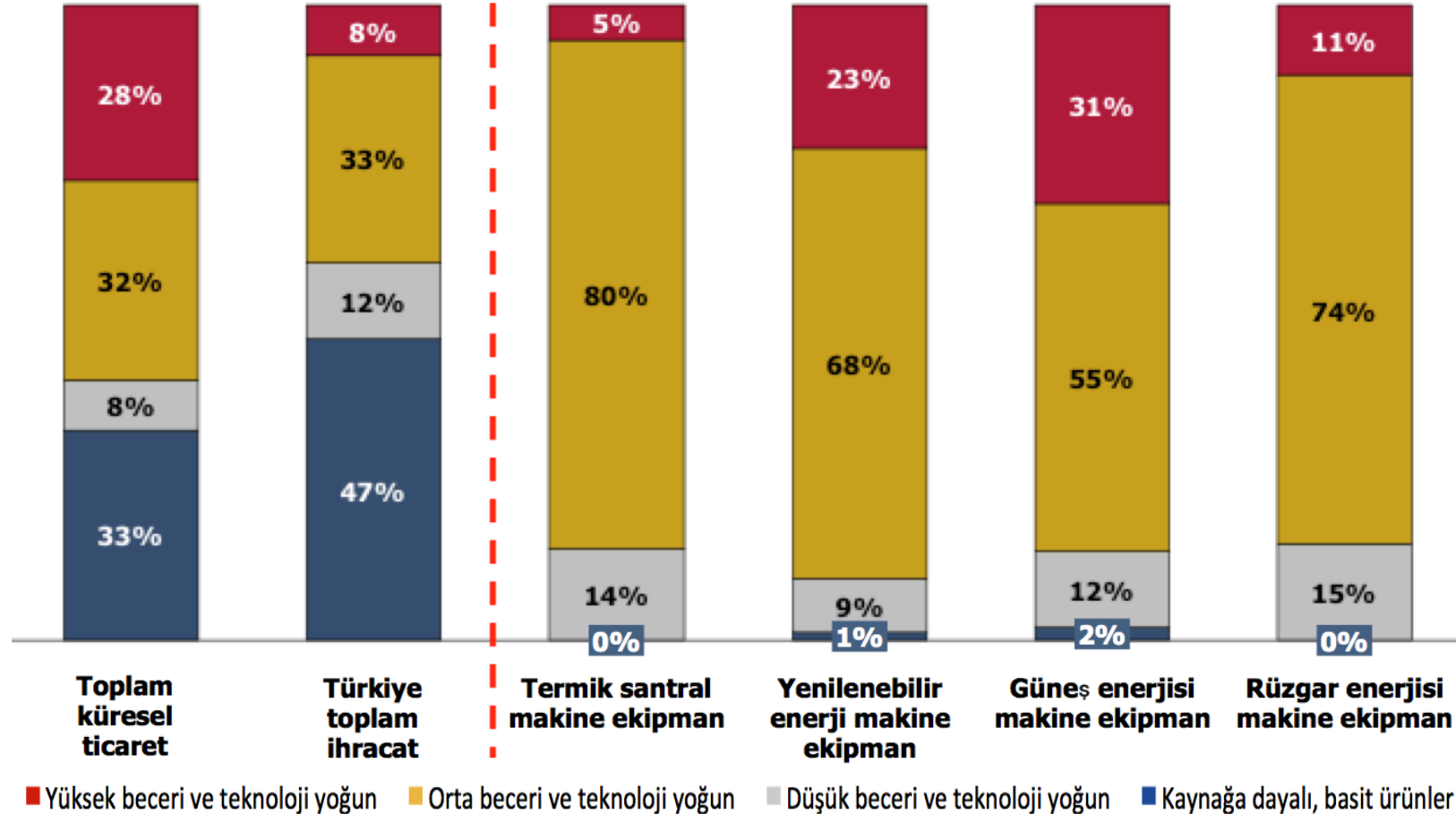
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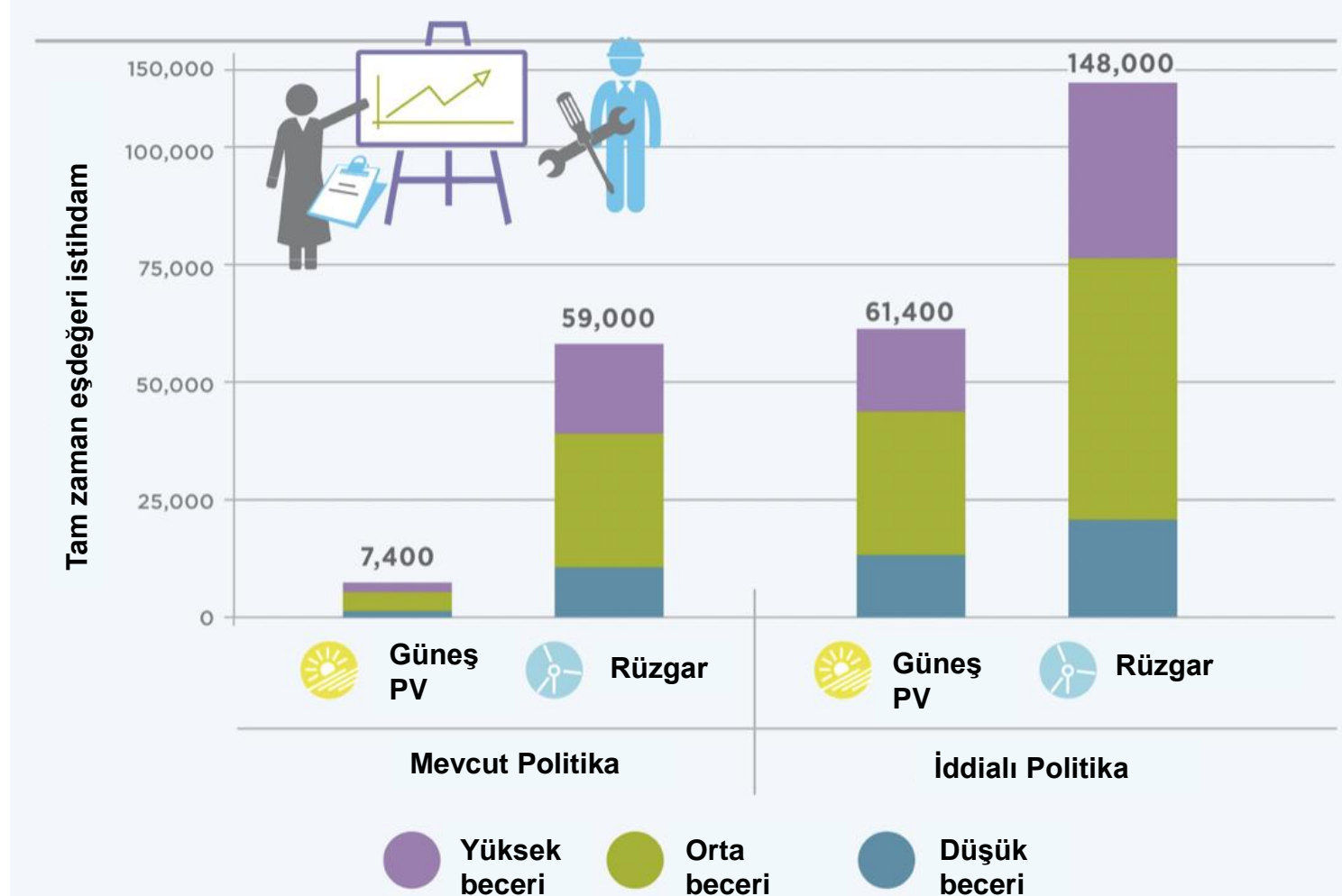
Enerji Dönüşümünü nasıl hızlandırabiliriz?

- Enerji dönüşümünü bütünün parçası haline getirmek:
 - Sanayi politikası
 - İstihdam politikası
 - Enflasyonla mücadele politikası
 - ...
 - ...
 - Sağlık politikası

Yenilenebilir yatırımları daha yüksek katma değer sunabilir



Yenilenebilir enerji daha nitelikli istihdam sağlayabilir



Yenilenebilir enerji, enerji maliyetlerini düşürebilir

Gerçekleşen ve Yenilenebilir Enerji Senaryosu Altında Tahmin Edilen Piyasa Takas Fiyatı ve YEKDEM Birim Maliyeti Toplamı

