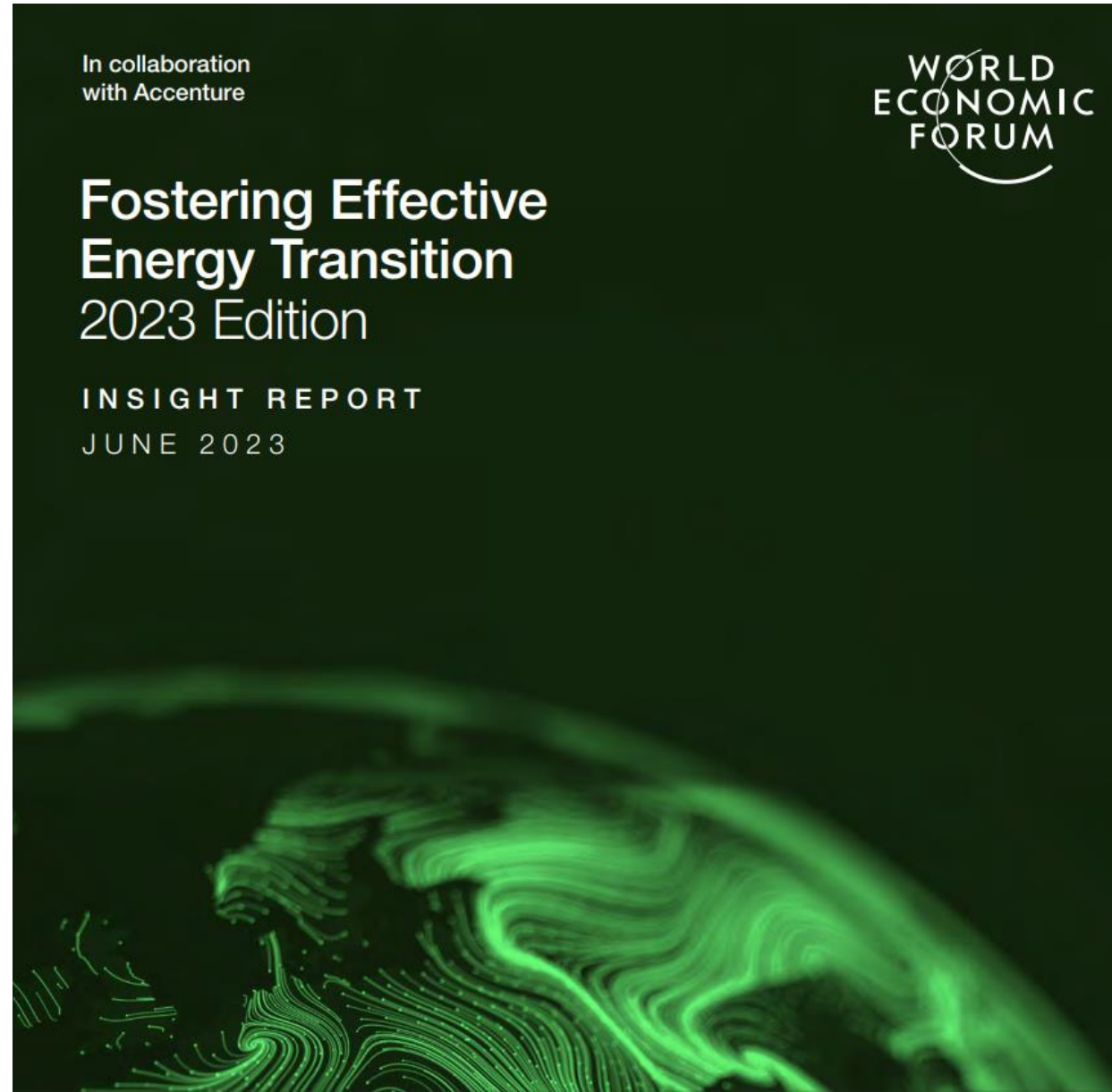


# **Enerji keçidi üzrə beynəlxalq qiymətləndirmə və Azərbaycanın reytingi**

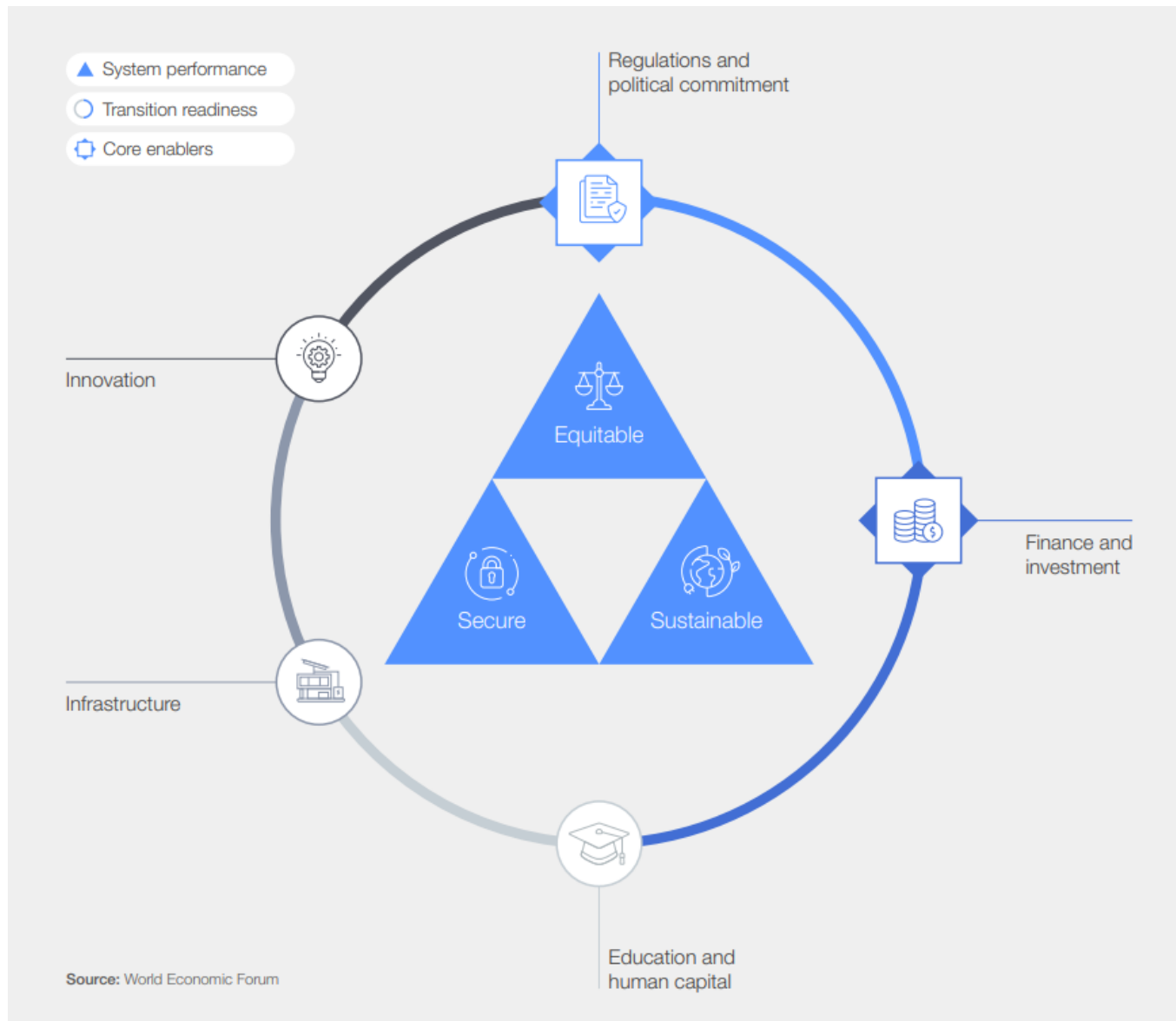
**Inqilab Əhmədov**

23 yanvar 2024-cü il

# Effektiv enerji keçidinin təşviqi



# Enerji Keçid İndeksi – performans və hazırlıq



# Enerji Keçidi İndeksi - 2023

Rank	Country	(2014–2023)	ETI score	('23)	('23)	Rank	Country	(2014–2023)	ETI score	('23)	('23)
1	Sweden		78.5	81.0	74.8	61	Malta		54.9	61.5	45.1
2	Denmark		76.1	73.7	79.8	62	Georgia		54.8	64.0	41.0
3	Norway		73.7	77.3	68.3	63	United Arab Emirates		54.6	58.7	48.3
4	Finland		72.8	68.9	78.6	64	Ukraine		54.5	63.2	41.5
5	Switzerland		72.4	75.7	67.4	65	Turkey		54.3	58.9	47.4
6	İsveç		70.6	73.9	65.6	66	Sri Lanka		54.3	63.5	40.6
7	France		70.6	73.3	66.5	67	India		54.3	61.4	43.6
8	Austria		69.3	69.2	69.5	68	Mexico		54.1	64.9	37.8
9	Netherlands		68.8	65.7	73.5	69	Montenegro		54.0	62.4	41.5
10	Estonia		68.2	74.2	59.2	70	Singapore		53.7	51.2	57.6
11	Germany		67.5	64.6	71.9	71	Jordan		53.7	58.4	46.7
12	United States		66.3	68.4	63.2	72	Armenia		53.6	60.0	44.1
13	United Kingdom		66.2	67.7	64.0	73	Tajikistan		53.6	66.4	34.4
14	Brazil		65.9	68.9	61.3	74	Bolivia		53.5	66.0	34.7
15	Portugal		65.8	66.7	64.5	75	Cote d'Ivoire		53.1	64.0	36.9
16	Spain		65.0	65.1	64.7	76	Kazakhstan		53.0	61.1	40.9
17	China		64.9	65.0	64.8	77	Serbia		52.9	61.1	40.5
18	Hungary		64.3	68.8	57.5	78	Ecuador		52.8	67.8	30.2
19	Canada		64.2	66.7	60.3	79	Egypt, Arab Rep.		52.4	62.5	37.2
20	Luxembourg		64.2	61.5	68.2	80	Macedonia, FYR		52.3	61.4	38.7
21	Albania		63.7	71.6	51.8	81	Cameroon		52.2	65.4	32.4
22	New Zealand		63.7	68.2	56.9	82	South Africa		52.2	56.6	45.5
23	Uruguay		63.6	71.5	51.8	83	Lao PDR		52.1	59.2	41.6
24	Australia		63.6	63.1	64.3	84	Cambodia		52.1	59.9	40.4
25	Costa Rica		63.5	74.5	46.9	85	Argentina		52.0	63.1	35.5
26	Latvia		63.4	69.0	55.1	86	Algeria		51.9	64.8	32.6
27	Japan		63.3	63.7	62.9	87	Guatemala		51.9	65.2	32.0
28	Israel		62.7	67.3	55.7	88	Ghana		51.5	63.1	34.1
29	Slovenia		62.6	68.0	54.4	89	Tunisia		51.4	58.1	41.5
30	Chile		62.5	63.4	61.3	90	Oman		51.3	58.6	40.3
31	Korea, Rep.		62.3	60.3	65.3	91	Kyrgyz Republic		50.6	61.7	34.1
32	Azerbaijan		62.0	69.6	50.7	92	Iran, Islamic Rep.		50.4	61.6	33.6
33	Croatia		62.0	67.0	54.4	93	Dominican Republic		50.3	55.4	42.7
34	Paraguay		61.9	72.9	45.3	94	Philippines		50.2	61.5	33.2
35	Malaysia		61.7	70.0	49.3	95	Ethiopia		49.8	61.1	32.7
36	Lithuania		61.2	62.0	60.1	96	Gabon		49.5	64.7	26.8
37	Greece		60.9	60.3	61.7	97	Nepal		49.2	58.2	35.7
38	Italy		60.6	63.9	55.6	98	Trinidad and Tobago		48.3	56.8	35.7
39	Colombia		60.5	65.6	53.0	99	Angola		48.1	64.0	24.4
40	Poland		59.7	63.0	54.7	100	Honduras		48.0	59.6	30.5
41	İrlanda		59.3	61.3	56.3	101	Republic of Moldova		47.0	55.7	36.1
42	Belgium		59.2	59.6	58.5	102	Kuwait		47.8	51.3	42.5
43	Viet Nam		58.9	60.3	56.9	103	Venezuela		47.7	64.3	22.7
44	Slovak Republic		58.8	64.9	49.7	104	Senegal		47.6	53.8	38.3
45	Czech Republic		58.6	66.2	47.2	105	Brunei Darussalam		47.3	55.0	35.7
46	Kenya		57.8	65.9	45.6	106	Botswana		46.9	54.9	34.9
47	El Salvador		57.3	72.2	35.1	107	Pakistan		46.9	55.2	34.5
48	Bulgaria		57.2	62.8	48.9	108	Nigeria		46.0	58.4	27.5
49	Romania		56.8	65.8	43.3	109	Mozambique		46.0	58.1	27.8
50	Bosnia and Herzegovina		56.7	60.3	51.4	110	Bahrain		45.7	52.0	36.3
51	Panama		56.4	66.2	41.7	111	Mongolia		45.4	56.3	29.0
52	Cyprus		56.4	61.7	48.4	112	Lebanon		45.2	50.1	37.9
53	Peru		56.4	70.7	34.9	113	Bangladesh		45.0	56.8	27.3

# Enerji Keçidi İndeksi - 2023: Azərbaycan

## Energy Transition Index (ETI) | Country Overview



Select a Country Azerbaijan



Select a Year 2023



### Azerbaijan

ETI rank: **32/120**

ETI 62.0

System Performance 69.6

Transition Readiness 50.7

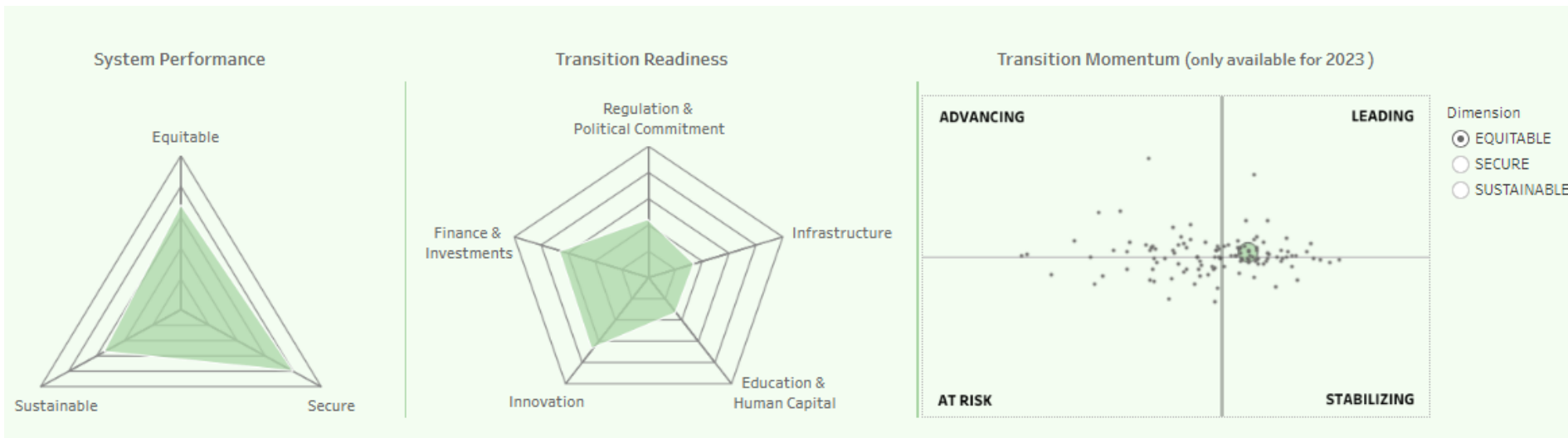
### Key Macroeconomic and ETI Data

Population (millions)	10.1	Energy consumption per capita (GJ/capita)	64.5
GDP (US\$ trillions)	0.05	Energy intensity (MJ/\$2017 PPP GDP)	4.69
Net energy imports (% of Total Energy Supply)	-273.8	CO2 Intensity of Total Energy Supply (kg/GJ)	50.61

### Country ETI, System Performance & Transition Readiness, 2014 - 2023



# Enerji Keçidi İndeksi - 2023: Azərbaycan



## System Performance

 Equitable +	69.1
 Secure +	82.8
 Sustainable +	56.8

## Transition Readiness

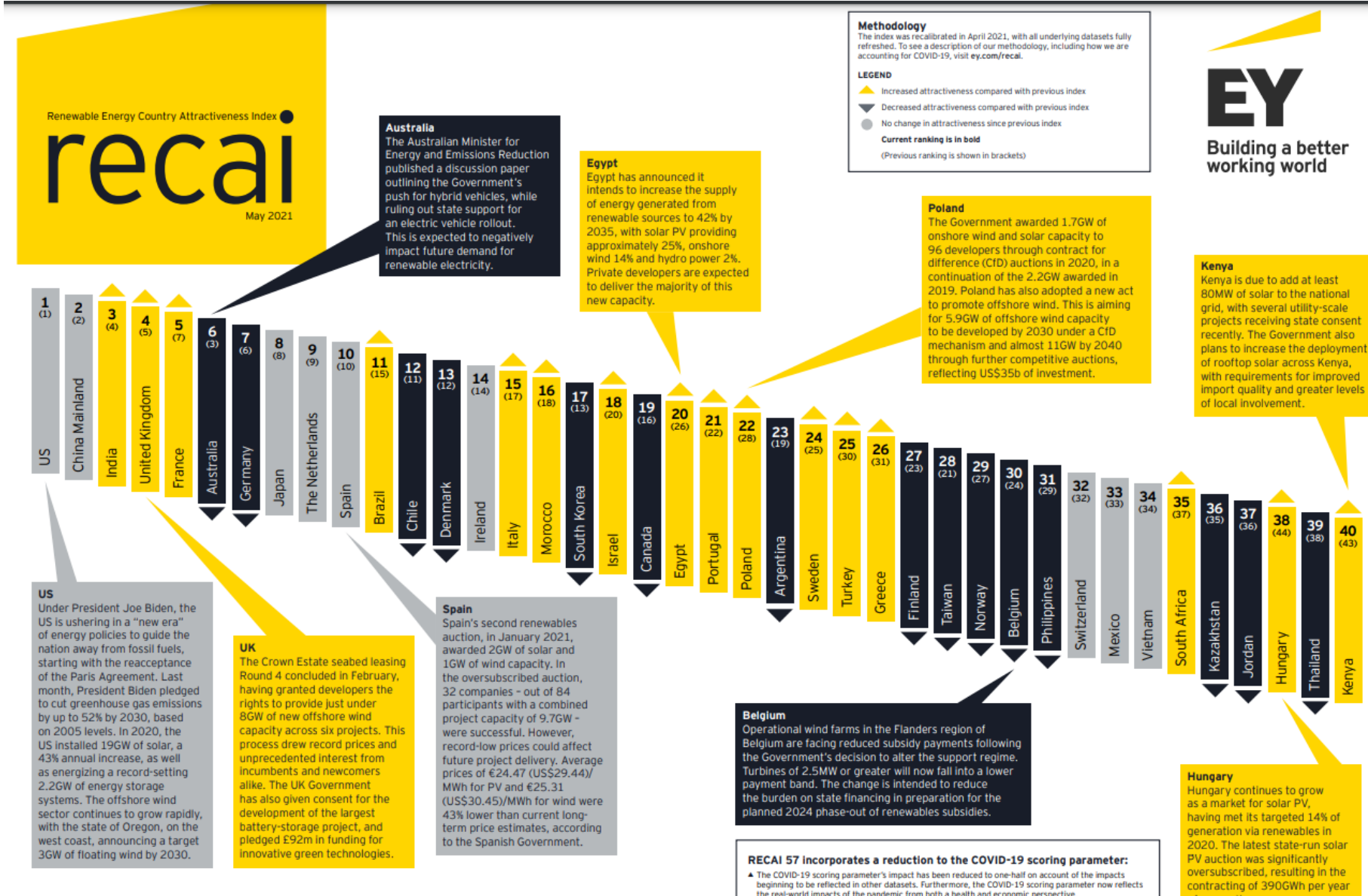
 Regulation & Political Commitment +	45.3
 Infrastructure +	34.8
 Education & Human Capital +	33.8
 Innovation +	68.2
 Finance & Investments +	66.1

# Son 3 ildə dayanıqlı ölçü göstəricilərində irəliləyiş

Country	Energy intensity	CO <sub>2</sub> intensity	CO <sub>2</sub> per capita	Share of electricity	Renewable capacity
Sweden	●	●	●	●	●
Denmark	●	●	●	●	●
Norway	●	●	●	●	●
Finland	●	●	●	●	●
Switzerland	●	●	●	●	●
Iceland	●	●	●	●	●
France	●	●	●	●	●
Austria	●	●	●	●	●
Netherlands	●	●	●	●	●
Estonia	●	●	●	●	●
Germany	●	●	●	●	●
United States	●	●	●	●	●
United Kingdom	●	●	●	●	●
Brazil	●	●	●	●	●
Portugal	●	●	●	●	●
Spain	●	●	●	●	●
China	●	●	●	●	●
Hungary	●	●	●	●	●
Canada	●	●	●	●	●
Luxembourg	●	●	●	●	●
Albania	●	●	●	●	●
New Zealand	●	●	●	●	●
Uruguay	●	●	●	●	●
Australia	●	●	●	●	●
Costa Rica	●	●	●	●	●
Latvia	●	●	●	●	●
Japan	●	●	●	●	●
Israel	●	●	●	●	●
Slovenia	●	●	●	●	●
Chile	●	●	●	●	●
Korea, Rep.	●	●	●	●	●
Azerbaijan	●	●	●	●	●
Croatia	●	●	●	●	●
Paraguay	●	●	●	●	●
Malaysia	●	●	●	●	●

Country	Energy intensity	CO <sub>2</sub> intensity	CO <sub>2</sub> per capita	Share of electricity	Renewable capacity
Malta	●	●	●	●	●
Georgia	●	●	●	●	●
United Arab Emirates	●	●	●	●	●
Ukraine	●	●	●	●	●
Turkey	●	●	●	●	●
Sri Lanka	●	●	●	●	●
India	●	●	●	●	●
Mexico	●	●	●	●	●
Montenegro	●	●	●	●	●
Singapore	●	●	●	●	●
Jordan	●	●	●	●	●
Armenia	●	●	●	●	●
Tajikistan	●	●	●	●	●
Bolivia	●	●	●	●	●
Cote d'Ivoire	●	●	●	●	●
Kazakhstan	●	●	●	●	●
Serbia	●	●	●	●	●
Ecuador	●	●	●	●	●
Egypt, Arab Rep.	●	●	●	●	●
Macedonia, FYR	●	●	●	●	●
Cameroon	●	●	●	●	●
South Africa	●	●	●	●	●
Lao PDR	●	●	●	●	●
Cambodia	●	●	●	●	●
Argentina	●	●	●	●	●
Algeria	●	●	●	●	●
Guatemala	●	●	●	●	●
Ghana	●	●	●	●	●
Tunisia	●	●	●	●	●
Oman	●	●	●	●	●
Kyrgyz Republic	●	●	●	●	●
Iran, Islamic Rep.	●	●	●	●	●
Dominican Republic	●	●	●	●	●
Philippines	●	●	●	●	●
Ethiopia	●	●	●	●	●

# Bərpa Olunan Enerji Ölkələrinin Cəlbedicilik İndeksi (RECAI)



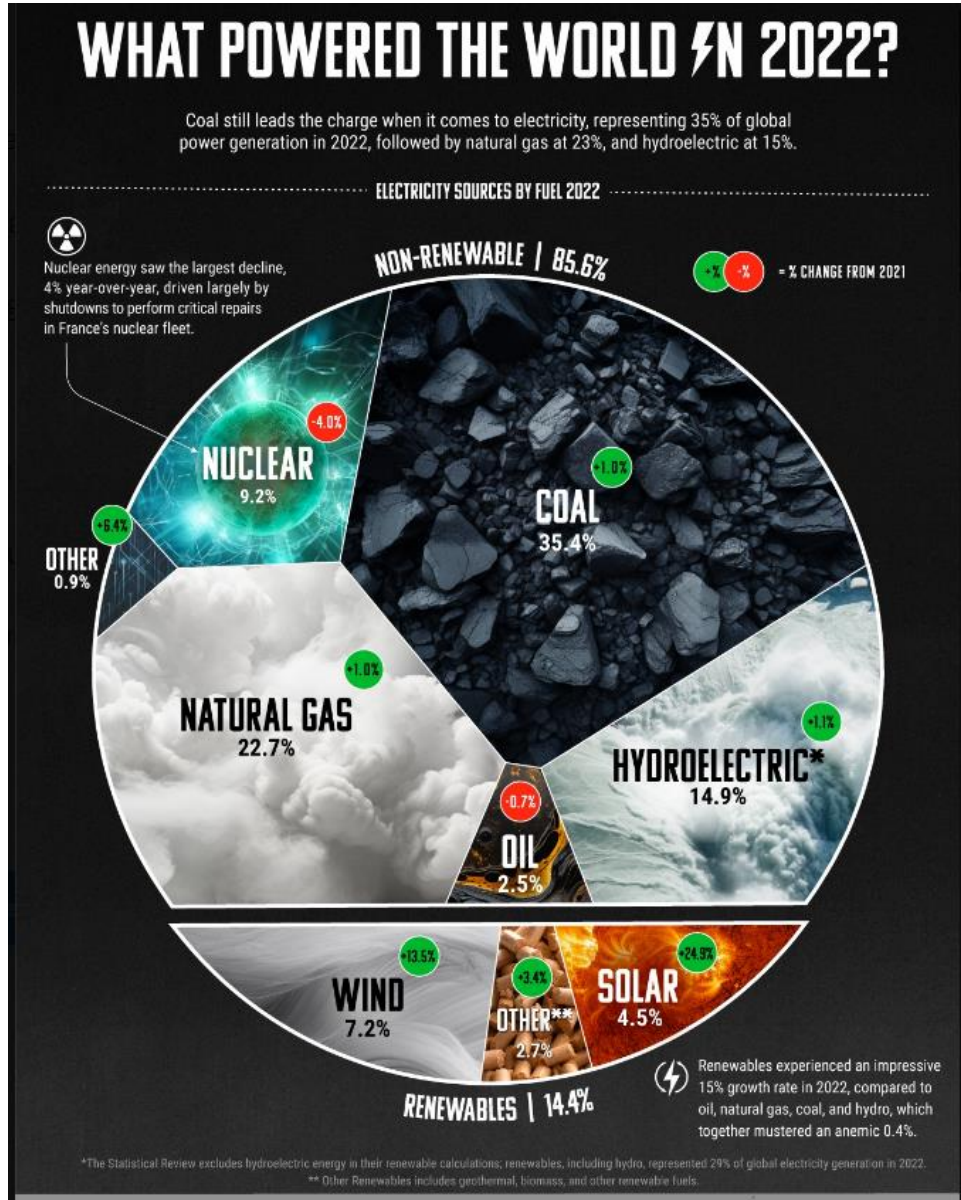


# Bərpa Olunan Enerji Ölkələrinin Cəlbedicilik İndeksi (RECAI)

Rank	Previous rank	Movement on previous index	Country/region	RECAI score	Technology-specific scores						
					Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermal	Hydro
1	1	●	US	70.7	58.1	60.6	57.6	46.2	45.3	46.0	40.8
2	2	●	China Mainland	68.7	55.7	55.6	60.3	54.3	52.8	31.7	54.5
3	4	▲	India	66.2	54.2	28.6	62.7	49.2	47.4	23.2	46.4
4	5	▲	United Kingdom	65.0	57.5	61.9	46.9	11.2	56.8	30.0	36.9
5	7	▲	France	64.8	55.1	53.5	53.3	22.4	48.4	37.3	43.9
6	3	▼	Australia	64.6	53.9	30.6	56.1	35.8	40.8	17.9	42.1
7	6	▼	Germany	63.8	49.0	51.5	53.0	11.5	51.2	37.2	42.9
8	8	●	Japan	61.7	50.8	52.4	47.8	19.5	56.6	50.2	47.5
9	9	●	The Netherlands	58.9	49.7	45.4	46.3	10.7	46.3	18.6	21.4
10	10	●	Spain	58.6	48.7	27.5	50.7	28.0	38.2	14.6	32.7
11	15	▲	Brazil	58.3	53.8	32.1	51.8	25.9	49.8	12.7	45.7
12	11	▼	Chile	58.2	49.9	20.4	48.2	54.0	40.9	47.5	43.6
13	12	▼	Denmark	58.2	50.1	49.7	43.8	11.1	41.2	14.6	18.4
14	14	●	Ireland	58.0	48.7	42.0	44.2	10.9	44.1	18.5	32.6
15	17	▲	Italy	56.7	45.1	30.2	48.7	36.3	50.3	42.2	44.5
16	18	▲	Morocco	56.6	45.8	17.5	50.8	49.7	26.9	14.1	34.1

17	13	▼	South Korea	56.4	40.7	41.0	50.1	18.3	50.0	14.2	32.2
18	20	▲	Israel	55.8	40.6	14.3	53.9	39.8	30.6	13.8	34.2
19	16	▼	Canada	55.4	52.1	26.8	43.9	13.9	38.7	18.0	46.9
20	26	▲	Egypt	54.5	48.6	15.2	54.4	49.9	28.6	11.9	18.1
21	22	▲	Portugal	54.4	42.7	22.6	46.7	36.5	40.5	23.1	41.8
22	28	▲	Poland	54.3	44.0	35.0	47.8	9.3	44.1	17.0	33.2
23	19	▼	Argentina	54.3	49.8	20.8	49.1	32.3	38.0	18.3	36.8
24	25	▲	Sweden	54.0	49.2	37.4	40.1	10.1	42.4	17.1	36.0
25	30	▲	Turkey	53.5	47.1	21.3	47.6	28.3	39.8	46.0	44.0
26	31	▲	Greece	53.2	46.4	22.6	45.4	40.6	40.3	24.6	41.9
27	23	▼	Finland	53.2	55.6	30.6	33.2	10.3	52.6	14.8	32.4
28	21	▼	Taiwan	53.0	41.0	46.0	45.6	17.7	35.8	26.6	29.6
29	27	▼	Norway	52.8	50.4	40.1	37.5	9.2	28.1	16.2	43.4
30	24	▼	Belgium	52.7	46.9	27.9	40.6	13.4	42.4	20.9	26.3
31	29	▼	Philippines	51.9	41.8	17.8	46.4	20.1	41.0	43.6	42.2
32	32	●	Switzerland	51.8	41.5	18.1	42.5	13.5	40.2	18.9	42.0
33	33	●	Mexico	50.9	42.7	19.0	47.6	23.8	38.4	42.6	34.4
34	34	●	Vietnam	50.9	42.7	42.6	46.1	16.5	38.5	12.8	44.8
35	37	▲	South Africa	50.6	45.9	17.4	47.4	43.9	32.4	11.8	24.6
36	35	▼	Kazakhstan	49.6	43.5	13.7	44.9	17.5	27.1	14.5	36.6
37	36	▼	Jordan	49.1	41.6	14.0	44.2	30.5	20.1	13.5	24.2
38	44	▲	Hungary	48.4	41.2	10.9	42.1	18.0	35.3	30.2	20.3

# Qlobal və Azərbaycan Elektrik Enerji İstehsalı

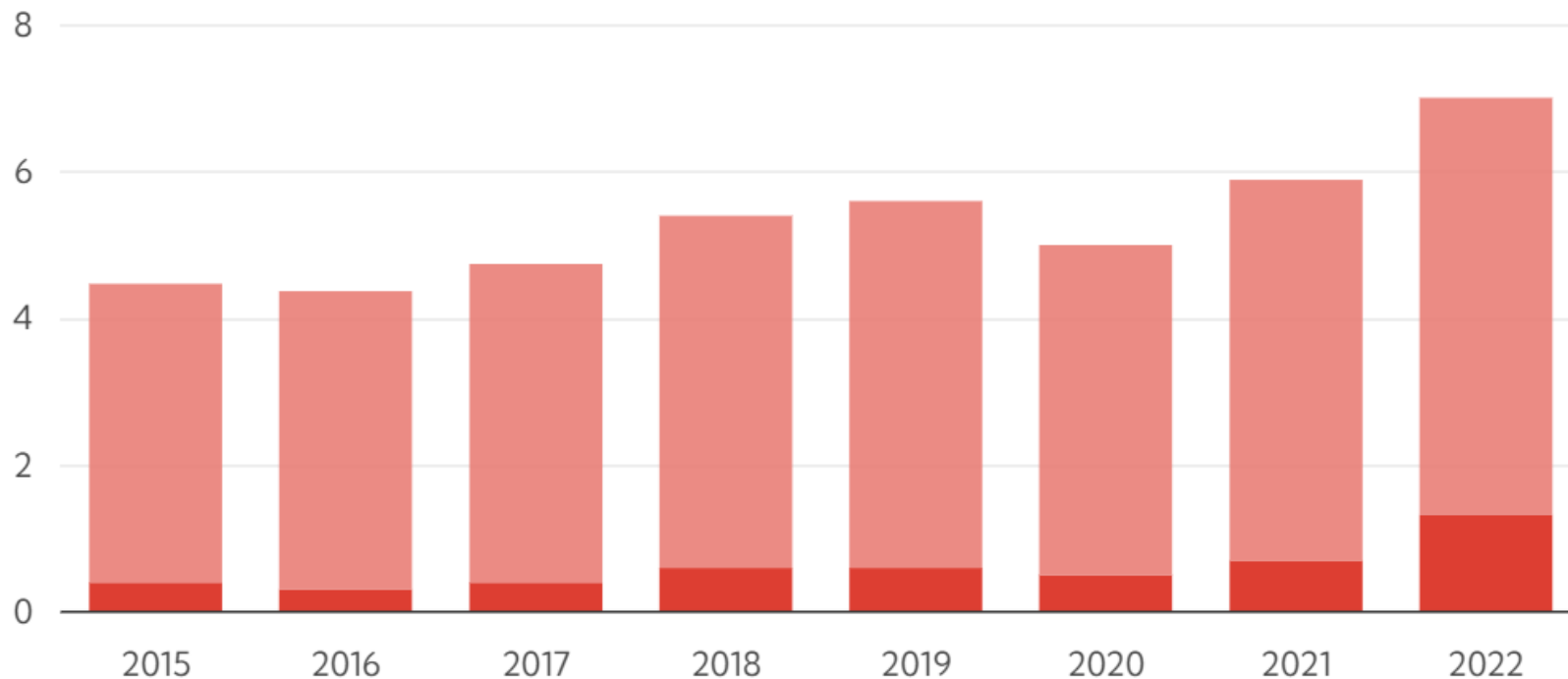


# Global Yanacaq Enerjisinə Subsiya

## Fossil fuel subsidies topped \$7 trillion last year

(total fossil fuel subsidies, trillions of USD)

■ Explicit subsidies ■ Implicit subsidies

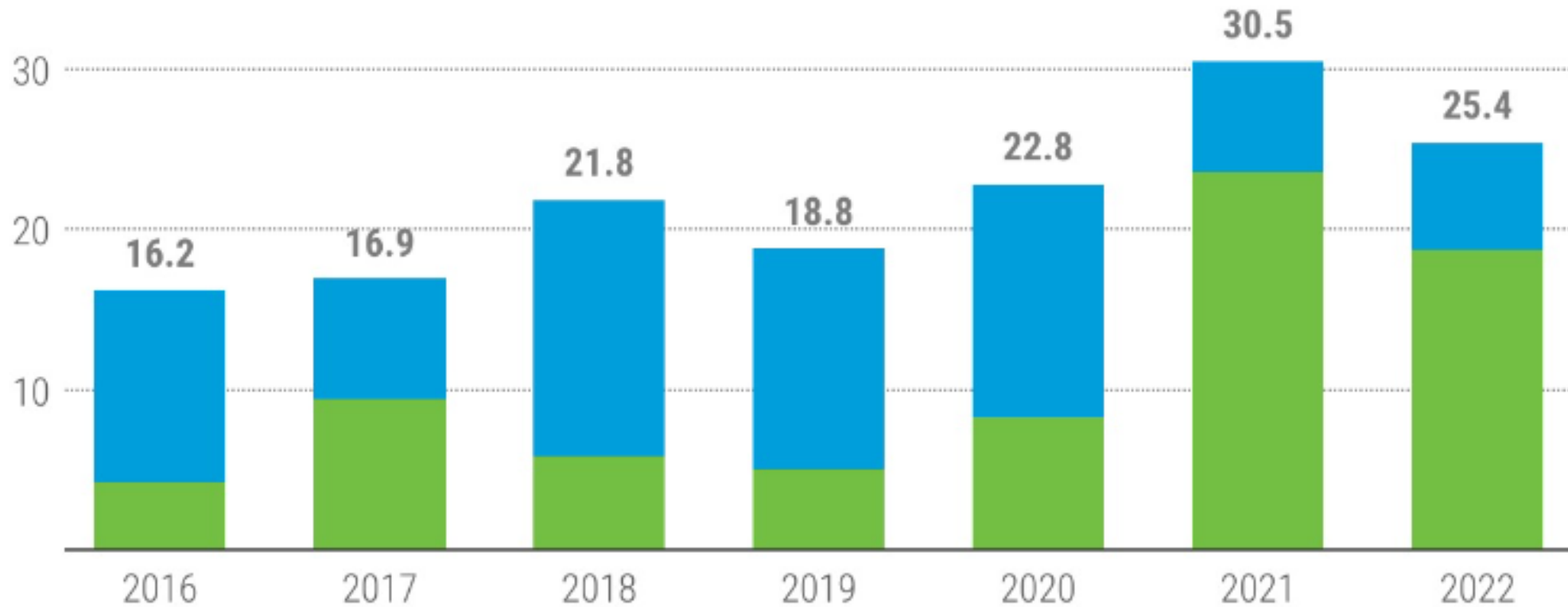


Source: IMF staff calculations.

Note: Figures from 2019 onwards use projections for fuel use. Explicit subsidies: undercharging for supply costs. Implicit subsidies: undercharging for environmental costs and forgone consumption taxes, after accounting for preexisting fuel taxes and carbon pricing.

# SRF-ların yaşıl enerji investisiyaları (mlrd.doll)

■ Green investments ■ Fossil fuels



Source: UNCTAD, based on Global SWF, January 2023.

# Effektiv enerji keçidinə maneələr

## Neft-qaz ölkələrinə xas olan maneələr;

- ✓ Renta amili
- ✓ Mövcud infrastruktura edilmiş investisiyalar (sunk cost)
- ✓ Yanacaq enerjisinə subsidiyalar

## İdarəetmə ilə bağlı maneələr;

- ✓ Mülkiyyət hüquqları və investisiyaların qorunması
- ✓ Rəqabət
- ✓ İfrat təmərküzləşmə
- ✓ Şəffaflıq və hesabatlılıq

# Mənbələr

<https://www.weforum.org/publications/fostering-effective-energy-transition-2023/>

[https://www.ey.com/en\\_es/recai](https://www.ey.com/en_es/recai)