2018 SDG INDEX AND DASHBOARDS

Guillaume Lafortune
Manager
SDSN

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SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

BertelsmannStiftung

The Sustainable Development Goals

WHAT IS THE SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK (SDSN)?

- Global network of researchers and experts launched in 2012 to mobilize knowledge on the SDGs
- Operates under the auspices of the UN Secretary General
- Directed by Prof. Jeffrey D. Sachs
- Network of 500+ partner institutions
- Purpose:
  - Network
  - Training Center
  - Think Tank

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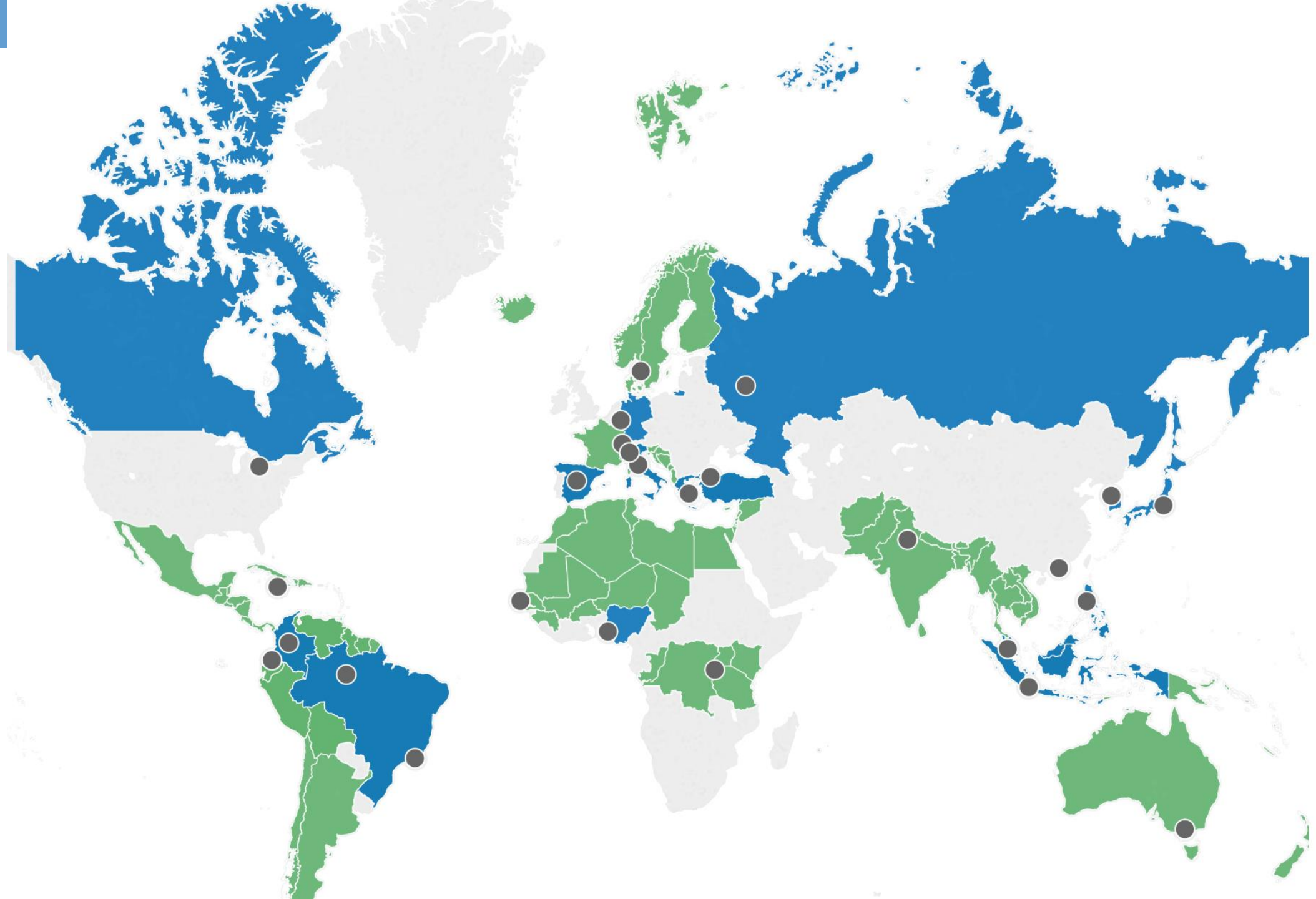


THE SDG INDEX AND DASHBOARDS: OBJECTIVES

- Establish SDGs as a useful, operational tool for policy action.
- Support national debates on prioritization and formulation of SDG implementation strategies.
- Complement efforts to develop a robust SDG monitoring framework by the UN Statistical Commission.
- Identify SDG data gaps, need for investments in statistical capacity & research, new forms of data.

FUNDAMENTAL ASSUMPTIONS

- Monitoring the SDGs requires estimating absolute country performance based on distance to invariant sustainable development targets
- Non-official data help bridge current data gaps (trawling fisheries, adjusted GINI, spillover effects embodied into trade)
- Number of indicators evolves when new evidence become available
- The 17 SDGs are the final overarching framework (no re-clustering of the goals)
- Results need to be accessible for a wide audience

2030 QUANTITATIVE THRESHOLDS – DECISION TREE

- a) Use the absolute quantitative thresholds outlined in the **SDGs and targets** (e.g. gender equality, zero poverty, universal access to water and sanitation etc.)
- b) Where no explicit target is available, set upper bound to **universal access or zero deprivation** for the following types of indicators:
  - i) Measures of extreme poverty (e.g. wasting)
  - ii) Public service coverage (e.g. contraception)
  - iii) Access to basic infrastructure (e.g. mobile phone coverage)
- c) Where **science-based targets** exist that must be achieved by 2030 or later use these to set the 100% upper bound (e.g. full decarbonization)
- d) Where many countries already exceed an SDG target, use the **average of top 5** performers (e.g. child mortality)
- e) For all other indicators use the **average of the top 5 performers**.

METHODOLOGY

- All 193 UN Member States
- 88 Global Indicators (111 for OECD countries)
- Data for each indicator is scaled from 0 to 100, where:
  - The “worst” score (0) = 2.5th percentile.
  - The “best” score (100) = “technical optimum” or average of top 5 performers.
- Min-Max formula:

$$x' = \frac{x - min(x)}{max(x) - min(x)}$$

- Each goal is given equal weight.
- Arithmetic average at the goal and overall SDG Index level– a score of 50 signifies that a country is half way to achieving the SDGs.
- Methodology: http://sdgindex.org/assets/files/2018/Methodological%20Paper_v1_gst_jmm_Aug2018__FINAL_rev10_09.pdf

Rank	Country	Score
1	Sweden	85.0
2	Denmark	84.6
3	Finland	83.0
4	Germany	82.3
5	France	81.2
6	Norway	81.2
7	Switzerland	80.1
8	Slovenia	80.0
9	Austria	80.0
10	Iceland	79.7
11	Netherlands	79.5
12	Belgium	79.0
13	Czech Republic	78.7
14	United Kingdom	78.7
15	Japan	78.5
16	Estonia	78.3
17	New Zealand	77.9
18	Ireland	77.5
19	Korea, Rep.	77.4
20	Canada	76.8
137	eSwatini (fmr Swaziland)	50.7
138	Mozambique	50.7
139	Djibouti	50.6
140	Malawi	50.0
141	Burundi	49.8
142	Mali	49.7
143	Sudan	49.6
144	Angola	49.6
145	Haiti	49.2
146	Sierra Leone	49.1
147	Benin	49.0
148	Niger	48.5
149	Liberia	48.3
150	Nigeria	47.5
151	Afghanistan	46.2
152	Yemen, Rep.	45.7
153	Madagascar	45.6
154	Democratic Republic of Congo	43.4
155	Chad	42.8
156	Central African Republic	37.7

NO COUNTRY IS ON TRACK TO ACHIEVING THE SDGS BY 2030

Source: Sachs and al, 2018

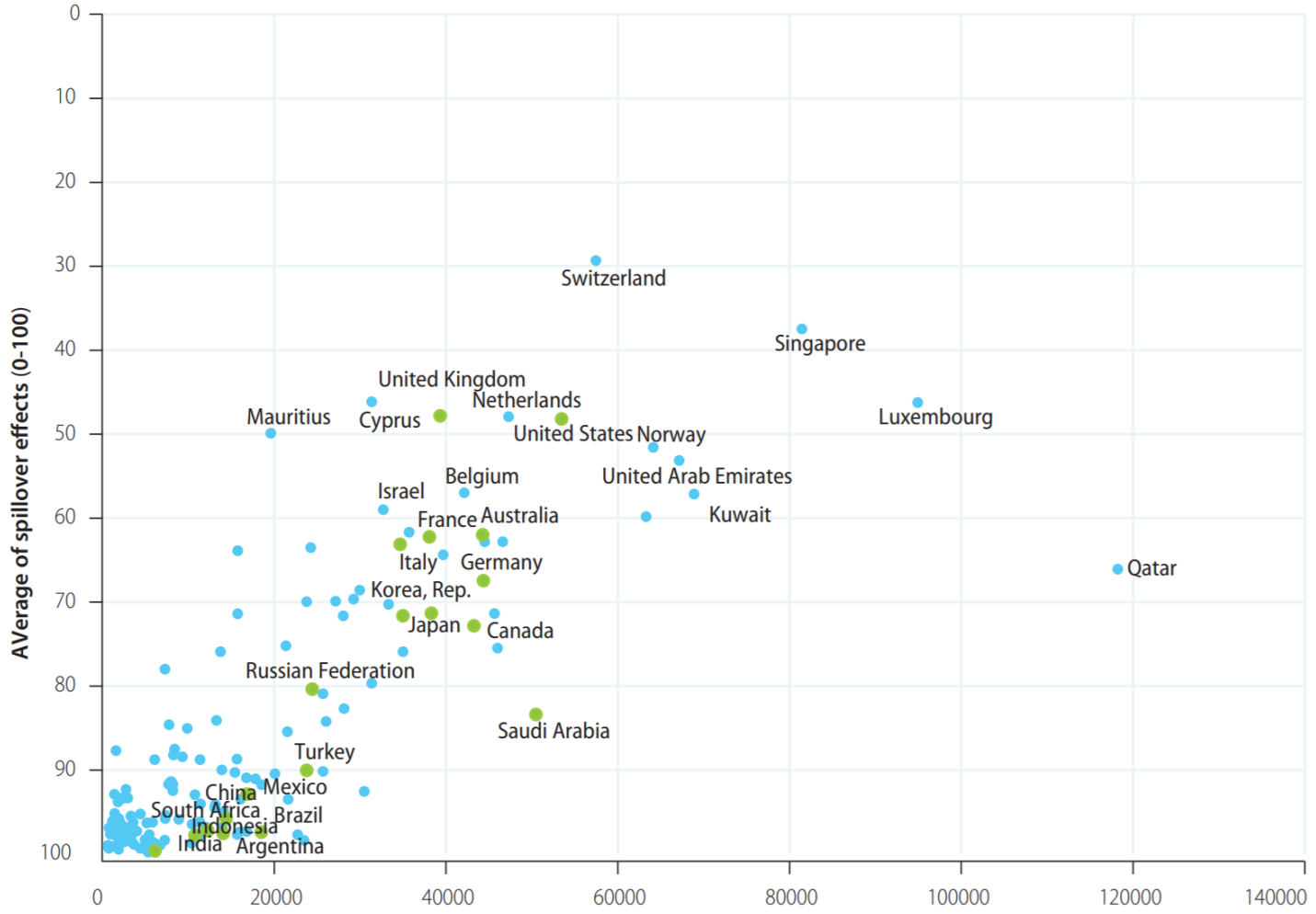
HIGH-INCOME COUNTRIES GENERATE NEGATIVE SPILLOVER EFFECTS

Environment
(e.g. Co2 emissions embodied into trade)

Security
(e.g. weapons export)

Economic
(e.g. tax heavens)

Figure 21 | Average spillover score against Gross Domestic Product (GDP) per capita in purchasing power parity (PPP)



Note: In green, G20 countries.

Source: Authors' analysis

COUNTRY PROFILE: **GERMANY**

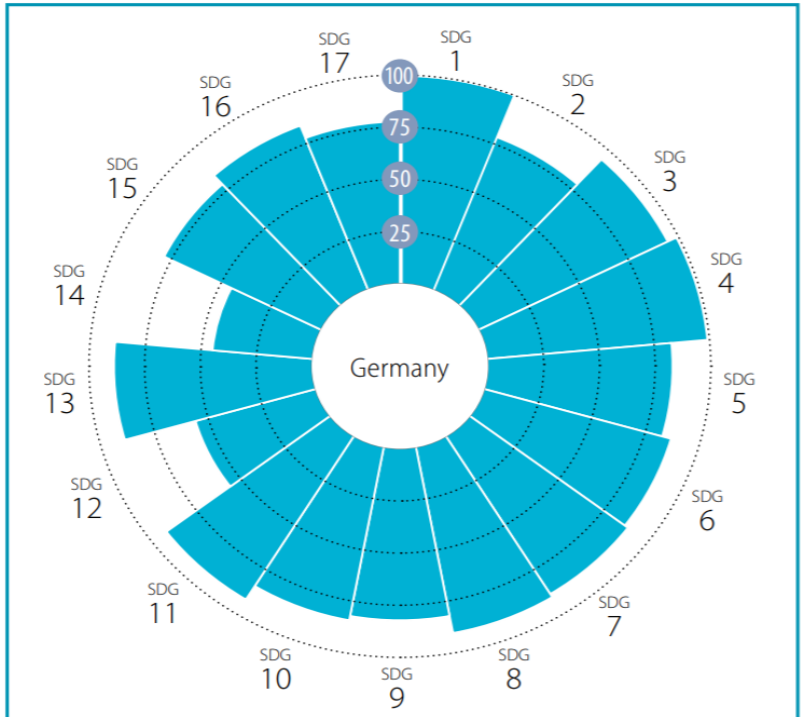
SDG Global rank

4 (OF 156)

CURRENT ASSESSMENT – SDG DASHBOARD

OVERALL PERFORMANCE

Index score	Regional average score
82.3	76.9



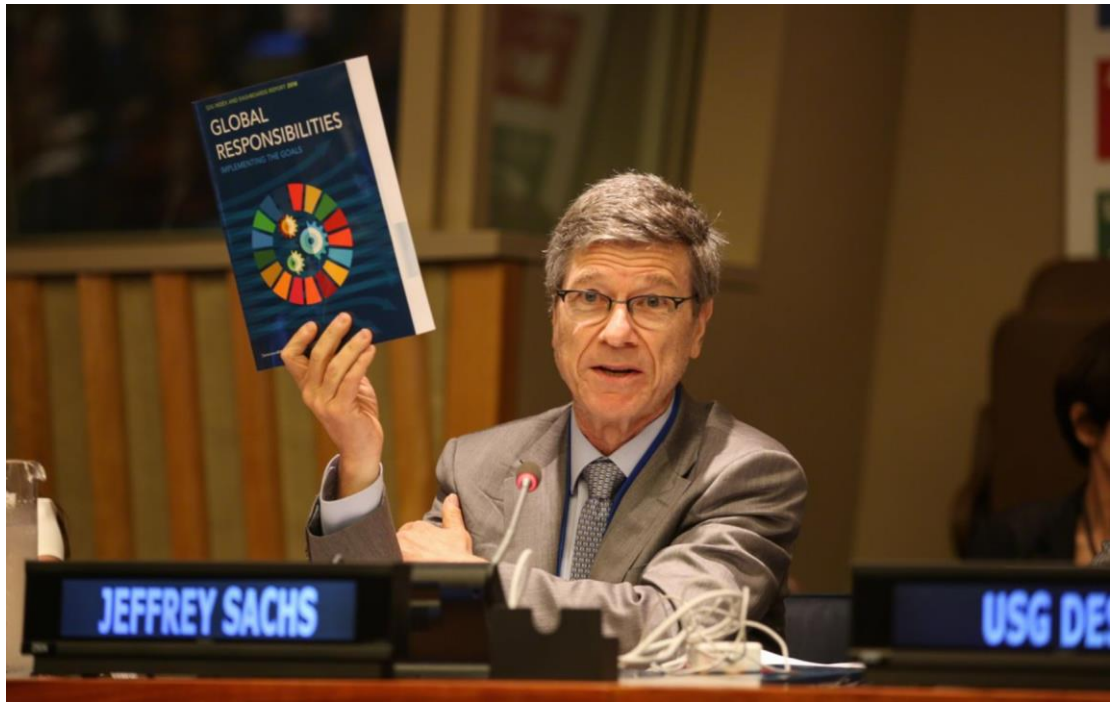
AVERAGE PERFORMANCE BY SDG

Detailed performance by indicator

Performance by Indicator

	Value	Rating	Trend
SDG1 – End Poverty			
Poverty headcount ratio at $1.90/day (% population)	0.1	●	→
Projected poverty headcount ratio at $1.90/day in 2030 (% population)	0.1	●	••
Poverty rate after taxes and transfers, poverty line 50% (% population)	9.5	●	→
SDG2 – Zero Hunger			
Prevalence of undernourishment (% population)	2.5	●	••
Prevalence of stunting (low height-for-age) in children under 5 years of age (%)	1.3	●	→
Prevalence of wasting in children under 5 years of age (%)	1.0	●	→
Prevalence of obesity, BMI ≥ 30 (% adult population)	22.3	●	↓
Cereal yield (t/ha)	7.2	●	→
Sustainable Nitrogen Management Index	0.5	●	••
SDG3 – Good Health and Well-Being			
Maternal mortality rate (per 100,000 live births)	6.0	●	→
Neonatal mortality rate (per 1,000 live births)	2.3	●	→
Mortality rate, under-5 (per 1,000 live births)	3.8	●	→
Incidence of tuberculosis (per 100,000 population)	8.1	●	→
HIV prevalence (per 1,000)	0.1	●	→
Age-standardised death rate due to cardiovascular disease, cancer, diabetes, and chronic respiratory disease in populations age 30–70 years (per 100,000 population)	12.0	●	→
Age-standardised death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	13.2	●	••
Traffic deaths rate (per 100,000 population)	4.2	●	→
Healthy Life Expectancy at birth (years)	81.0	●	→
Adolescent fertility rate (births per 1,000 women ages 15-19)	6.8	●	→
Births attended by skilled health personnel (%)	98.5	●	••
Surviving infants who received 2 WHO-recommended vaccines (%)	95.0	●	→
Universal Health Coverage Tracer Index (0-100)	79.6	●	↑
Subjective Wellbeing (average ladder score, 0-10)	7.1	●	→
Gap in life expectancy at birth among regions (years)	2.6	●	••
Gap in self-reported health by income (0-100)	27.5	●	••
Daily smokers (% population age 15+)	20.9	●	••
SDG4 – Quality Education			
Net primary enrolment rate (%)	98.7	●	↑
Mean years of schooling	13.2	●	→
Literacy rate of 15-24 year olds, both sexes (%)	NA	●	••
Population age 25-64 with tertiary education (%)	28.3	●	→
PISA score (0-600)	508.0	●	••
Variation in science performance explained by students' socio-economic status (%)	15.8	●	••
Students performing below level 2 in science (%)	17.0	●	↓
Resilient students (%)	33.5	●	••
SDG5 – Gender Equality			
Unmet demand for contraception, estimated (% women married or in union, ages 15-49)	12.2	●	→
Female to male mean years of schooling, population age 25 + (%)	94.9	●	••
Female to male labour force participation rate (%)	83.2	●	→
Seats held by women in national parliaments (%)	37.0	●	↑
Gender wage gap (total, % male median wage)	15.5	●	→
SDG6 – Clean Water and Sanitation			
High-income countries: population using safely managed water services (%)	99.2	●	→
Other countries: population using at least basic drinking water services (%)	NA	●	••
High-income countries: population using safely managed sanitation services (%)	95.5	●	→
Other countries: population using at least basic sanitation services (%)	NA	●	••
Freshwater withdrawal as % total renewable water resources	41.5	●	••
Imported groundwater depletion (m^3/year/capita)	6.7	●	••
SDG7 – Affordable and Clean Energy			
Access to electricity (% population)	100.0	●	→
Access to clean fuels & technology for cooking (% population)	100.0	●	→
CO_2 emissions from fuel combustion / electricity output ($MtCO_2$/TWh)	1.2	●	↗
Share of renewable energy in total final energy consumption (%)	14.2	●	↑
SDG8 – Decent Work and Economic Growth			
Adjusted Growth (%)	-0.5	●	••
Slavery score (0-100)	100.0	●	••
Adults (15 years +) with an account at a bank or other financial institution or with a mobile-money-service provider (%)	99.1	●	→
Employment-to-Population ratio (%)	75.3	●	→
Youth not in employment, education or training (NEET) (%)	9.6	●	↑
SDG9 – Industry, Innovation and Infrastructure			
Proportion of the population using the internet (%)	89.6	●	↑
Mobile broadband subscriptions (per 100 inhabitants)	77.0	●	↑
Quality of overall infrastructure (1= extremely underdeveloped; 7= extensive and efficient by international standards)	5.7	●	→
Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)	4.4	●	••
The Times Higher Education Universities Ranking, Average score of top 3 universities (0-100)	74.0	●	••
Number of scientific and technical journal articles (per 1,000 population)	1.3	●	••
Research and development expenditure (% GDP)	2.9	●	••
Research and development researchers (per 1,000 employed)	9.2	●	↑
Triadic patent families filed (per million population)	54.3	●	→
Gap in internet access by income (%)	28.4	●	••
Women in science and engineering (%)	24.7	●	••
SDG10 – Reduced Inequalities			
Gini Coefficient adjusted for top income (1-100)	33.4	●	↓
Palma ratio	1.0	●	↑
Elderly Poverty Rate (%)	9.5	●	••
SDG11 – Sustainable Cities and Communities			
Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5) in urban areas ($\mu g/m^3$)	14.0	●	→
Improved water source, piped (% urban population with access)	100.0	●	→
Satisfaction with public transport (%)	72.0	●	↑
Rent overburden rate (%)	5.1	●	••
SDG12 – Responsible Consumption and Production			
E-waste generated (kg/capita)	21.6	●	••
Anthropogenic wastewater that receives treatment (%)	96.8	●	••
Production-based SO_2 emissions (kg/capita)	7.0	●	••
Net imported SO_2 emissions (kg/capita)	17.5	●	••
Reactive nitrogen production footprint (kg/capita)	42.3	●	••
Net imported emissions of reactive nitrogen (kg/capita)	205.4	●	••
Non-Recycled Municipal Solid Waste (MSW in kg/person/day)	1.1	●	••
SDG13 – Climate Action			
Energy-related CO_2 emissions per capita (tCO_2/capita)	8.9	●	→
Imported CO_2 emissions, technology-adjusted (tCO_2/capita)	-0.5	●	••
Climate Change Vulnerability Monitor (best 0-1 worst)	0.0	●	••
CO_2 emissions embodied in fossil fuel exports (kg/capita)	775.7	●	••
Effective Carbon Rate from all non-road energy, excluding emissions from biomass (€/tCO_2)	25.4	●	••
SDG14 – Life Below Water			
Mean area that is protected in marine sites important to biodiversity (%)	86.4	●	••
Ocean Health Index Goal-Biodiversity (0-100)	93.8	●	→
Ocean Health Index Goal-Clean Waters (0-100)	50.8	●	↓
Ocean Health Index Goal-Fisheries (0-100)	40.9	●	→
Fish Stocks overexploited or collapsed by EEZ (%)	57.3	●	••
Fish caught by trawling (%)	80.6	●	→
SDG15 – Life on Land			
Mean area that is protected in terrestrial sites important to biodiversity (%)	78.7	●	→
Mean area that is protected in freshwater sites important to biodiversity (%)	81.4	●	→
Red List Index of species survival (0-1)	1.0	●	→
Annual change in forest area (%)	4.5	●	••
Imported biodiversity threats (threats per million population)	11.1	●	••
SDG16 – Peace, Justice and Strong Institutions			
Homicides (per 100,000 population)	0.9	●	••
Prison population (per 100,000 population)	78.1	●	••
Population who feel safe walking alone at night in city or area where they live (%)	69.0	●	↓
Government Efficiency (1-7)	5.2	●	→
Property Rights (1-7)	5.6	●	→
Birth registrations with civil authority, children under 5 years of age (%)	100.0	●	••
Corruption Perception Index (0-100)	81.0	●	→
Children 5–14 years old involved in child labour (%)	0.0	●	••
Transfers of major conventional weapons (exports) (constant 1990 US$ million per 100,000 population)	2.0	●	••
SDG17 – Partnerships for the Goals			
Government Health and Education spending (% GDP)	16.2	●	↑
High-income and all OECD DAC countries: International concessional public finance, including official development assistance (% GNI)	0.7	●	→
Other countries: Tax revenue (% GDP)	NA	●	••
Tax Haven Score (best 0-5 worst)	0.0	●	••
Financial Secrecy Score (best 0-100 worst)	59.1	●	••

Global launch at the HLPF



Country events

- **Physical/online launches**
- **Data visualisation**
- **Social medias**

Media interventions

Global media outreach

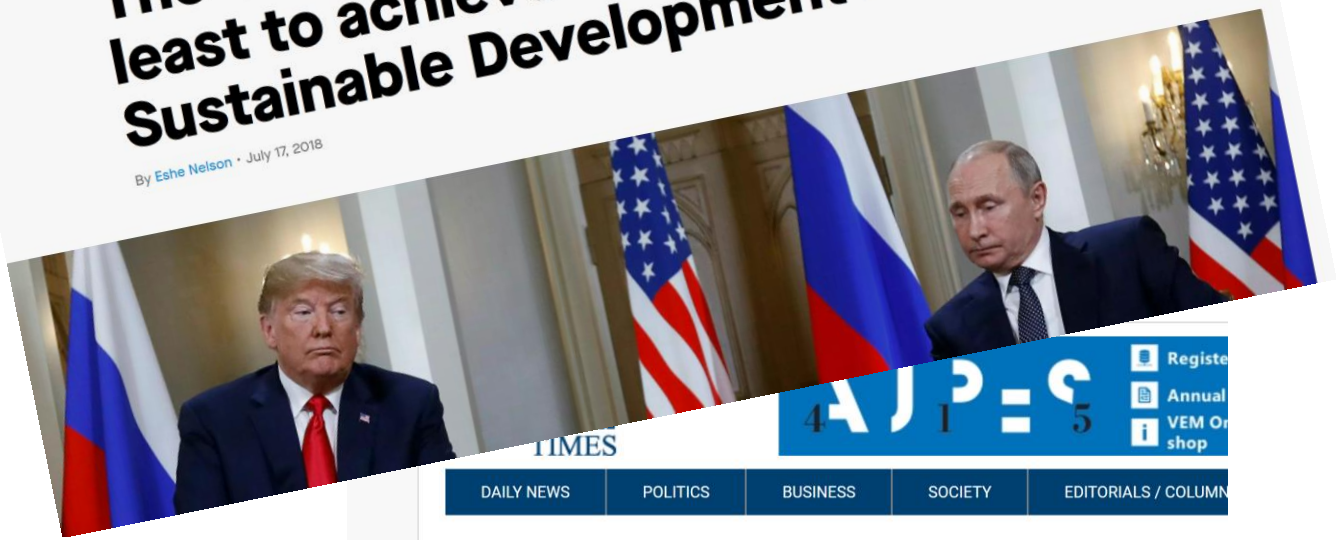
CNN Opinion » Political Op-Eds | Social Commentary Live TV U.S. Edition +

America is falling far behind on key world goals

LAGGARDS

The US and Russia are doing the least to achieve the UN's Sustainable Development Goals

By Eshe Nelson · July 17, 2018



TIMES

DAILY NEWS | POLITICS | BUSINESS | SOCIETY | EDITORIALS / COLUMN

Slovenia 8th in reaching sustainable development

Australia falls further in rankings on progress towards UN Sustainable Development Goals

11 juillet 2018, 07:15 CEST

Canada's sustainability progress held back by eco issues

Canada excels in UN's global ranking on healthcare and education, but garbage habits lower country's overall sustainability score

National institutions/reforms

Spanish Parliament uses SDG Index and Dashboards as National Reference Point

23 Feb 2018

Japan's Voluntary National Review

Report on the implementation of the Sustainable Development Goals

Private/financial sector

Natixis Green & Sustainable Hub's Center of Expertise has published its first flagship report, entitled "Solving the Sustainable Development Goals Rubik's Cube – An impact-based toolkit for issuers and investors".

OTHER EDITIONS

Global editions

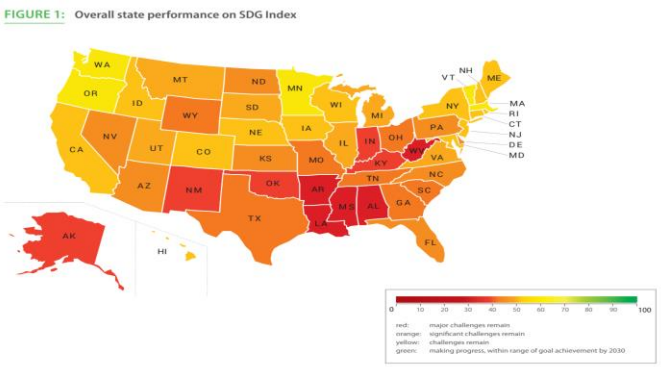
Regional editions

City editions

GUIDELINES TO NETWORKS FOR REGIONAL AND LOCAL SDG INDICES – CORE ELEMENTS

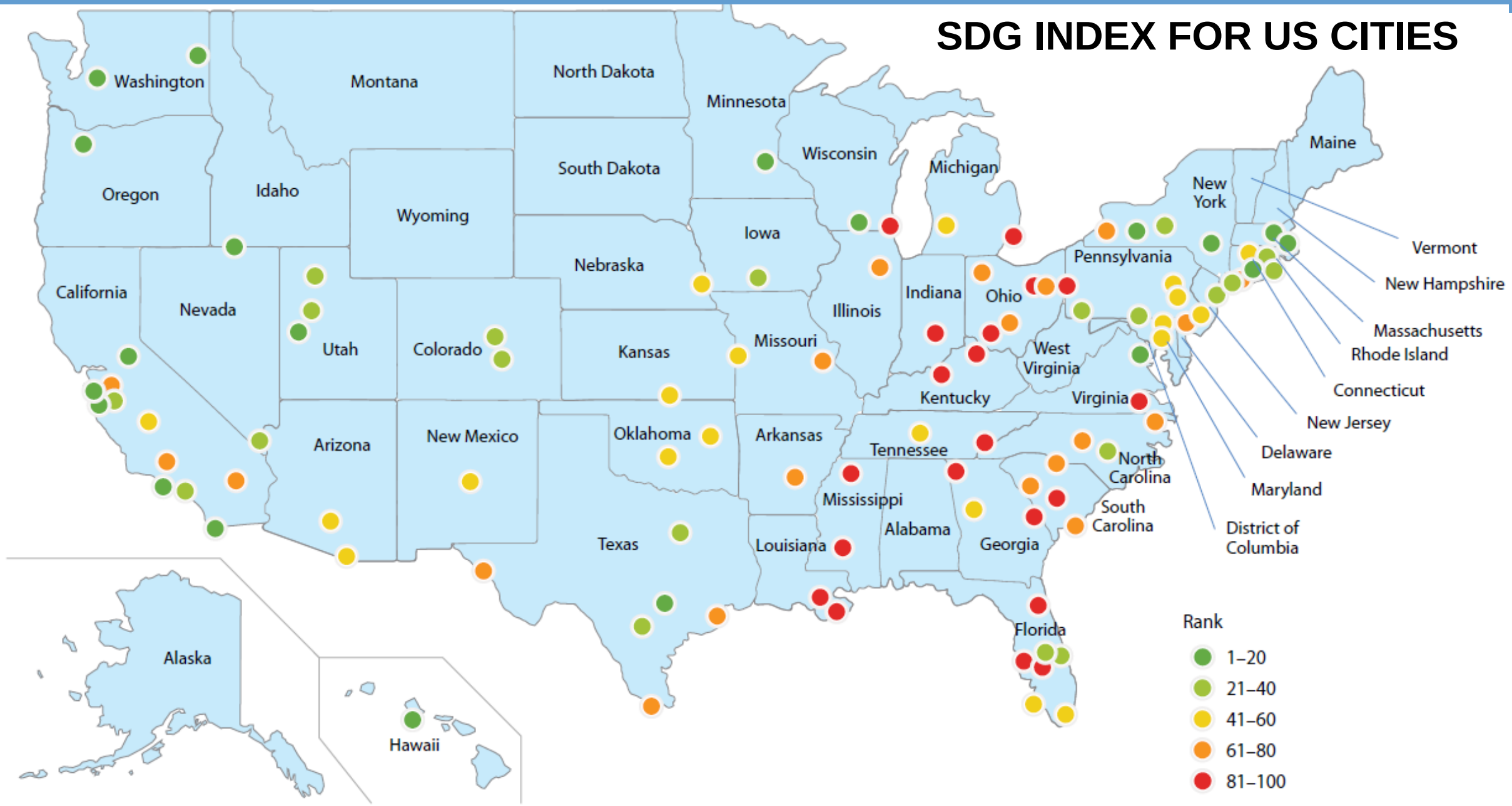
1. Define indicator **targets**
2. Have a clear strategy for dealing with **outliers** at the bottom of the distribution
3. Produce **goal level results**
4. Set clear **data coverage thresholds** for including indicators and entities

SDG INDEX FOR US STATES



Rank	State	Score	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16
1	Massachusetts	61.0															
2	Washington	59.8															
3	Vermont	59.4															
4	Minnesota	58.6															
5	Oregon	58.3															
6	California	55.6															
7	Maine	55.4															
8	Maryland	55.1															
9	New Hampshire	54.9															
10	Connecticut	54.8															
45	Oklahoma	35.2															
46	Arkansas	34.9															
47	Alabama	34.2															
48	West Virginia	33.4															
49	Mississippi	31.6															
50	Louisiana	31.2															

SDG INDEX FOR US CITIES



SPANISH CITY INDEX

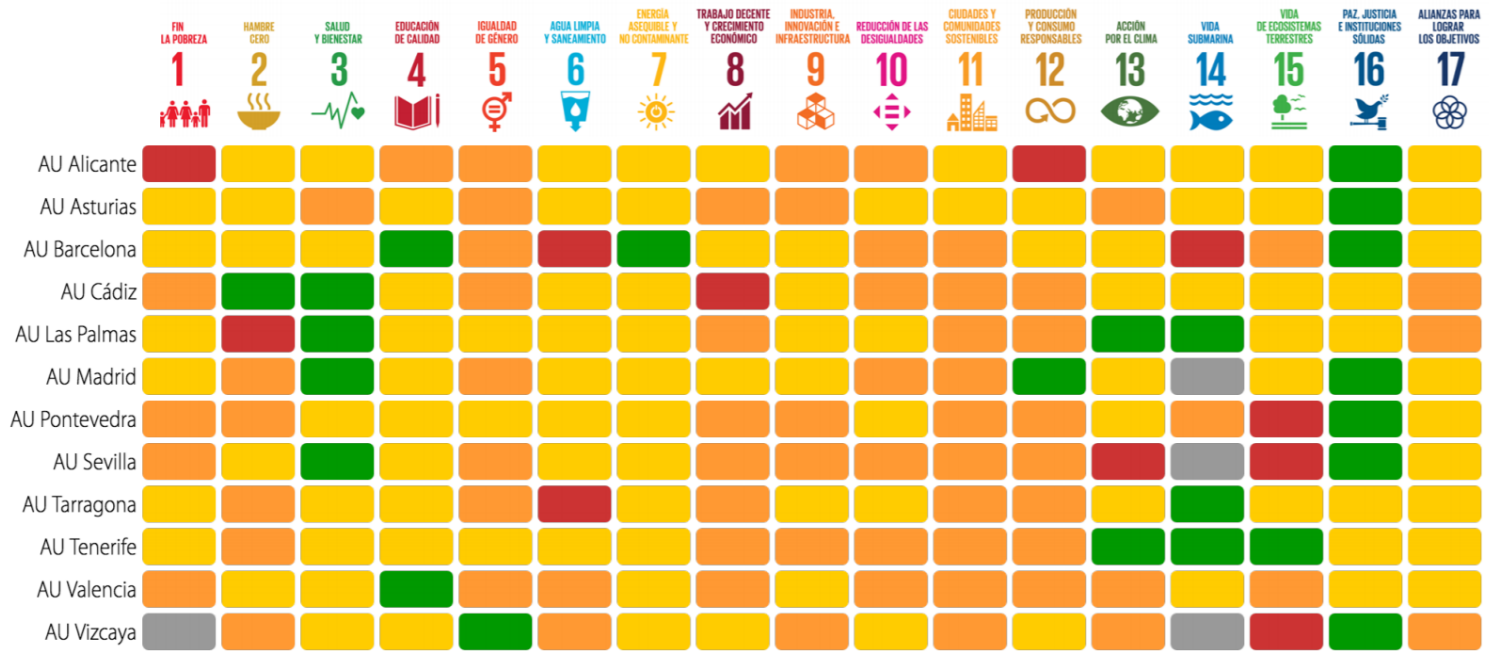
Number of cities and performance on each goals

Figura 1. Número de ciudades por ODS y rango

	Media del rango	Número de ciudades por rango				
16 PAZ, JUSTICIA E INSTITUCIONES SÓLIDAS		61	31	8	0	0
3 SALUD Y BIENESTAR		46	41	10	3	0
14 VIDA SUBMARINA		17	11	5	2	65
6 AGUA LIMPIA Y SANEAMIENTO		27	41	27	5	0
7 ENERGÍA ASEQUIBLE Y NO CONTAMINANTE		10	63	26	1	0
4 EDUCACIÓN DE CALIDAD		15	53	21	3	8
17 ALIANZAS PARA LOGRAR LOS OBJETIVOS		15	49	28	8	0
13 ACCIÓN POR EL CLIMA		19	40	26	15	0
15 VIDA DE ECOSISTEMAS TERRESTRES		13	44	32	11	0
1 FIN DE LA POBREZA		8	43	39	5	5
2 HAMBRE CERO		8	35	48	9	0
9 INDUSTRIA, INNOVACIÓN E INFRAESTRUCTURA		0	44	56	0	0
10 REDUCCIÓN DE LAS DESIGUALDADES		1	48	45	6	0
12 PRODUCCIÓN Y CONSUMO RESPONSABLES		10	36	41	13	0
11 CIUDADES Y COMUNIDADES SOSTENIBLES		0	32	67	1	0
5 IGUALDAD DE GÉNERO		1	32	66	1	0
8 TRABAJO DECENTE Y CRECIMIENTO ECONÓMICO		0	40	44	16	0

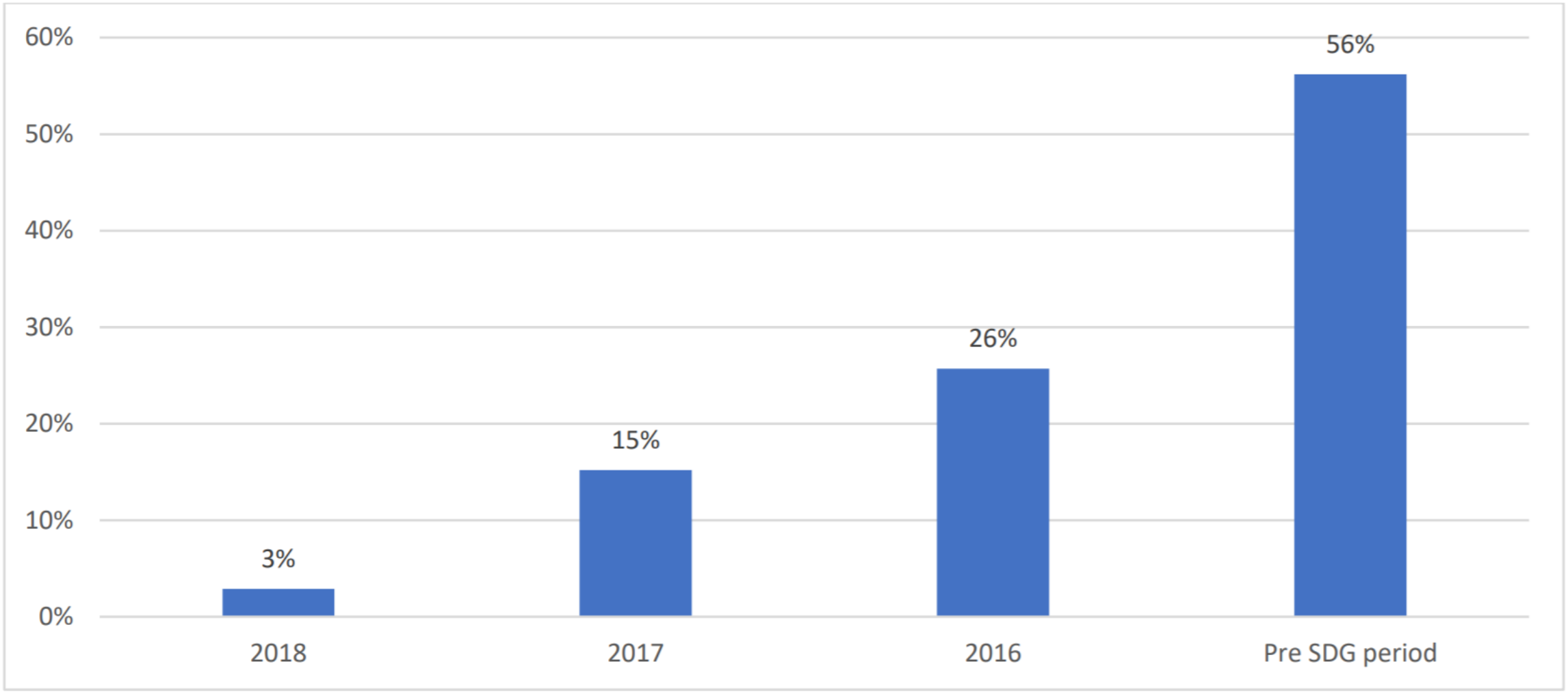
SDG dashboard for large metropolitan areas

Figura 3. Panel de los ODS en las áreas urbanas



CHALLENGES	RESPONSE (OR ATTEMPT TO RESPOND)
"The SDGs are supposed to provide a transformative Agenda yet the top 10 countries are all OECD countries!!!"	Who else? Every country has work to do! (red on at least one goal)
"Our government is doing so MUCH since 2015 on the SDGs but most of your data are pre-SDG period"	Complemented the report with assessment of government efforts since 2015 (strategies, coordination units, official speeches etc.) Other SDSN programmes on strengthening real time data (satellite, censor, telecom)
Communicate granular details including on "Leave-no-one behind" (even in top performing countries) *"Canada performs "green" on overall access to improved water yet a portion of the population (aboriginal community) has level of access to water equivalent to what is observed in sub-Saharan countries"*	Included more data on "gaps" across population groups for OECD countries (unmet care need by income, LE across regions) Subnational work Acknowledge that an Index does not replace a detailed review!
"By the way, we just produced a new national estimate – can you integrate it into your report that will come out next week?...(so that we look much better)"	Invite them to submit their data to international organisations for validation
Spillover effects at subnational levels	Exploring how IO tables can help

Figure 9: Year of reference of indicators used in the 2018 SDG Index and Dashboards Report



Source: Author's analysis. Based on Sachs and al. 2018.

References

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Trends Methodology

Figure 22 | The 5-arrow system for denoting SDG Trends

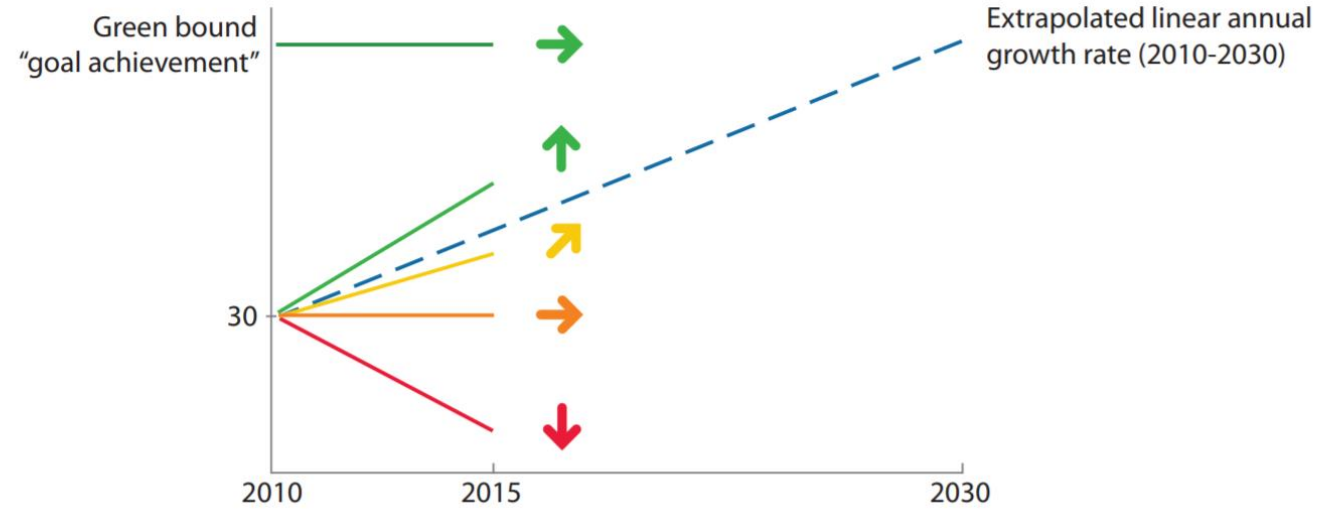
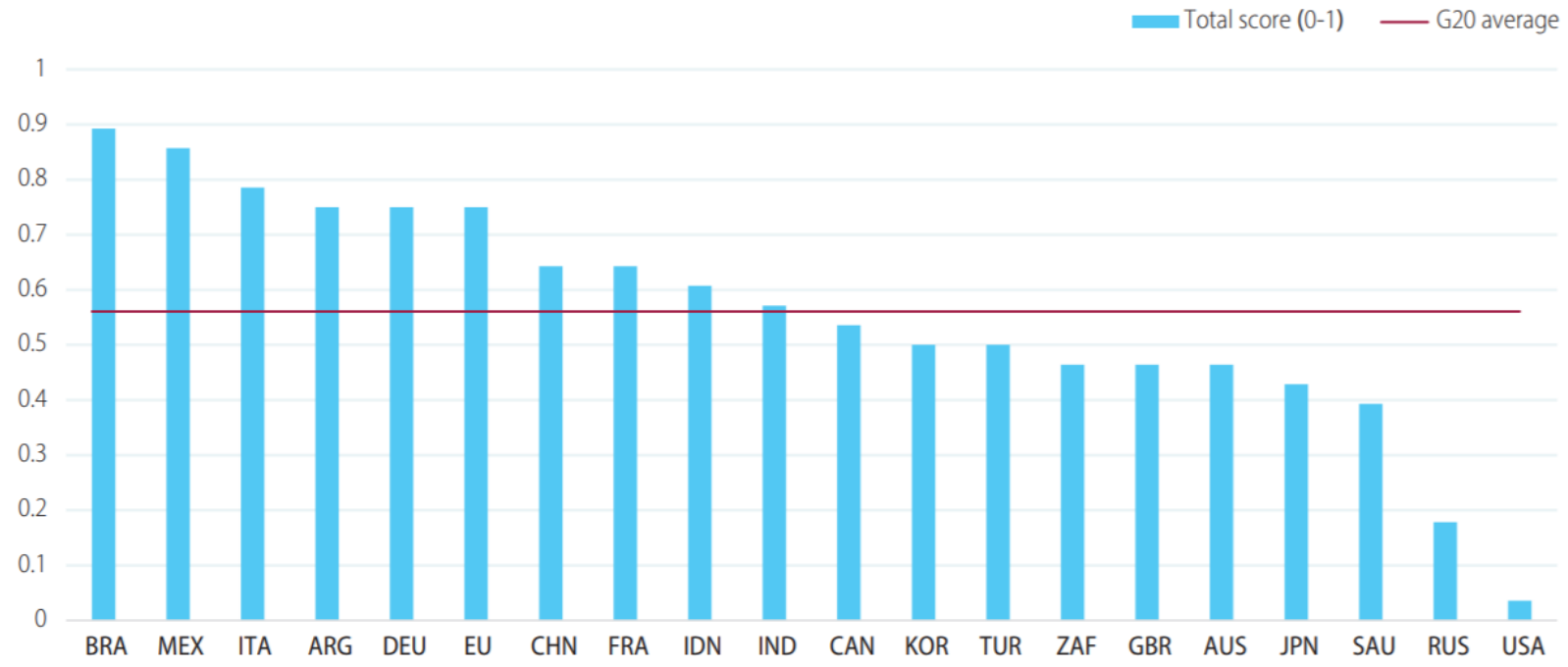


Figure 23 | Graphic representation of the SDG Trends methodology

Most G20 countries have started SDGs implementation, but important gaps remain.

Figure 2 | National coordination and implementation mechanisms for the SDGs in G20 countries, 2018

Composite score from 0 (lowest) to 1 (highest)

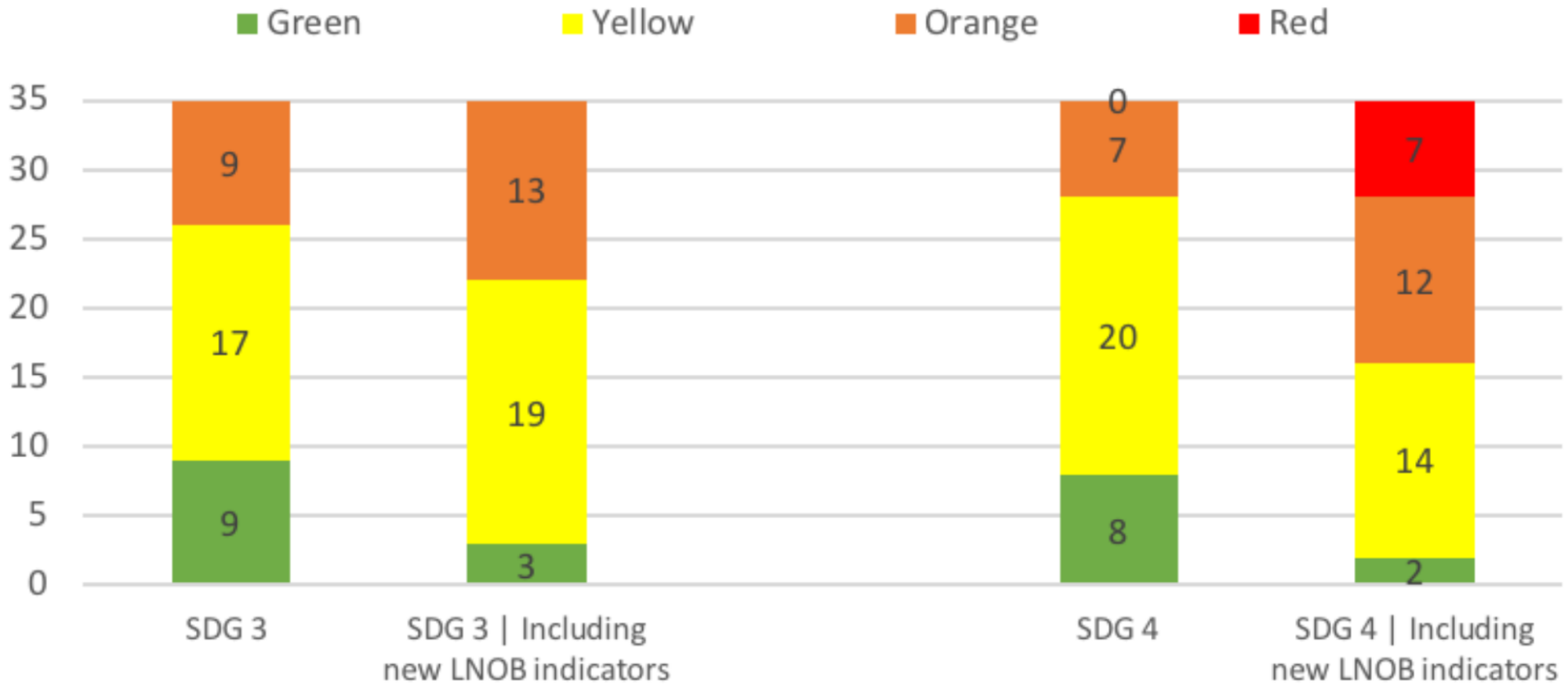


Note: Based on the sum of answers to q1, q2, q3, q4, q5, q6, q6.a, q7, q8, q9, q10, q11, q12, q14. Best response option was allocated 1 point, intermediate response 0.5 points, and worst response 0 points. Responses c omputed on a scale from 0-14 were rescaled on a 0-1 scale. Data reported correspond to the situation as of May 2018.

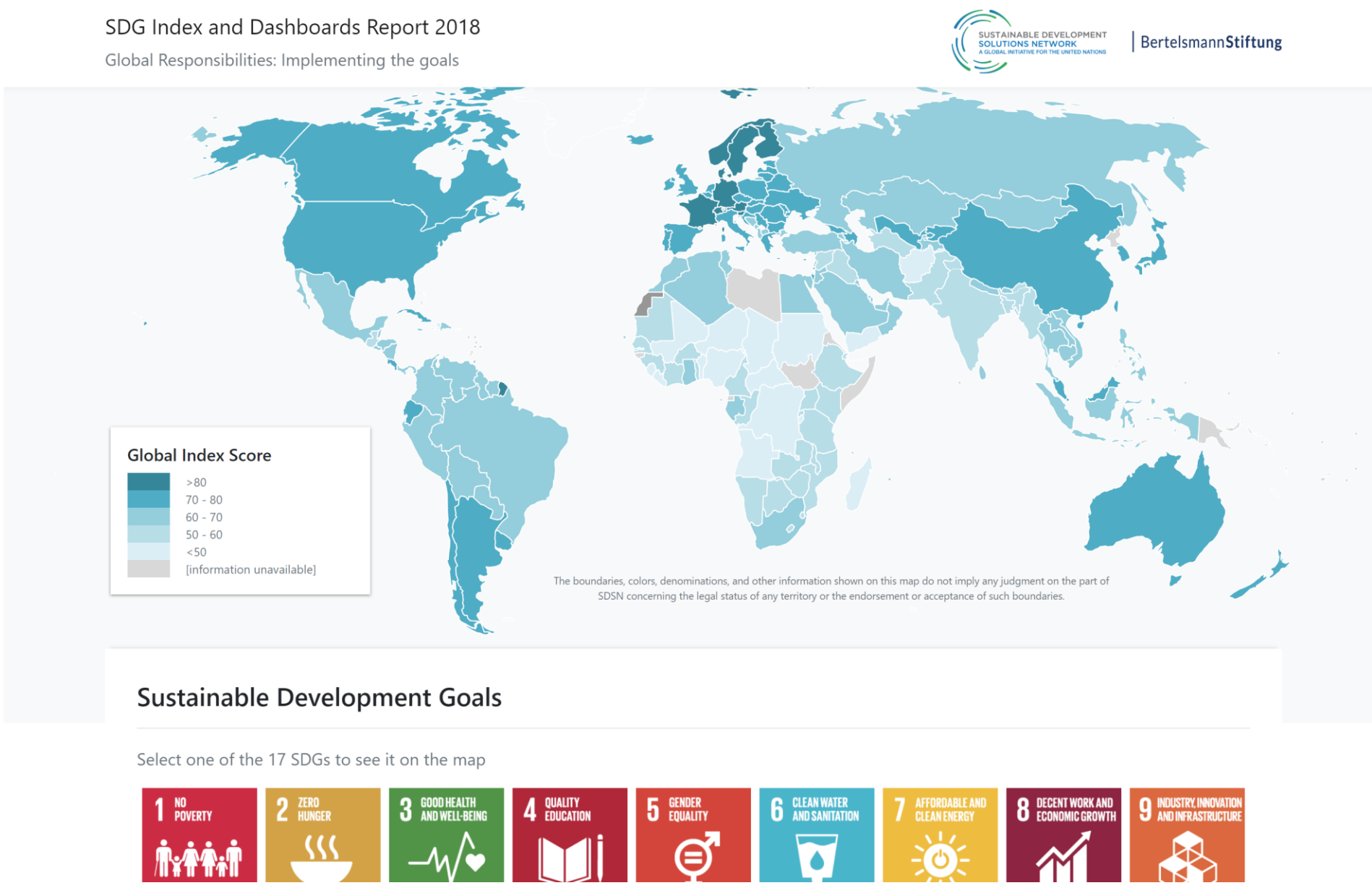
Source: Authors' analysis

Leave no one behind (OECD countries)

Difference in dashboards' color of the 35 OECD countries for SDG 3 (good health and well-being) and SDG 4 (quality education) when excluding and including new equity measures



http://www.sdgindex.org



OTHER PROJECTS

- **Regional SDG indices** (Africa, Southeast Asia, Europe)
- **City level indices** (United-States, Italy, Spain, Europe, China)
- **Sustainable Consumption and Production (SCP) Index** (in collaboration with Yale University)