



Energy, Climate and Resilience for the SDGs achievement

SDG 7 ENERGY



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- Access to **affordable, reliable** and **sustainable** energy is crucial to achieving many of the Sustainable Development Goals – from poverty eradication via advancements in health, education, water supply and industrialization to mitigating climate change. **Energy access**, however, varies widely across countries and the current rate of progress falls short of what will be required to achieve the Goal. Redoubled efforts will be needed, particularly for countries with large **energy access deficits and high energy consumption**.

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TARGETS	INDICATORS
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1 Proportion of population with access to electricity 7.1.2 Proportion of population with primary reliance on clean fuels and technology
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP
7.A By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.A.1 Mobilized amount of United States dollars per year starting in 2020 accountable towards the \$100 billion commitment
7.B By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	7.B.1 Investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services

PROGRESS OF GOAL 7 IN 2018

- From 2000 to 2016, the proportion of the global population with access to electricity increased from 78 per cent to 87 per cent, with the absolute number of people living without electricity dipping to just below 1 billion.
- In the least developed countries, the proportion of the people with access to electricity more than doubled between 2000 and 2016.
- In 2016, 3 billion people (41 per cent of the world's population) were still cooking with polluting fuel and stove combinations.
- The share of renewables in final energy consumption increased modestly, from 17.3 per cent in 2014 to 17.5 per cent in 2015. Yet only 55 per cent of the renewable share was derived from modern forms of renewable energy.
- Global energy intensity decreased by 2.8 per cent from 2014 to 2015, double the rate of improvement seen between 1990 and 2010.

Sustainable Energy is essential for achieving Sustainable Development

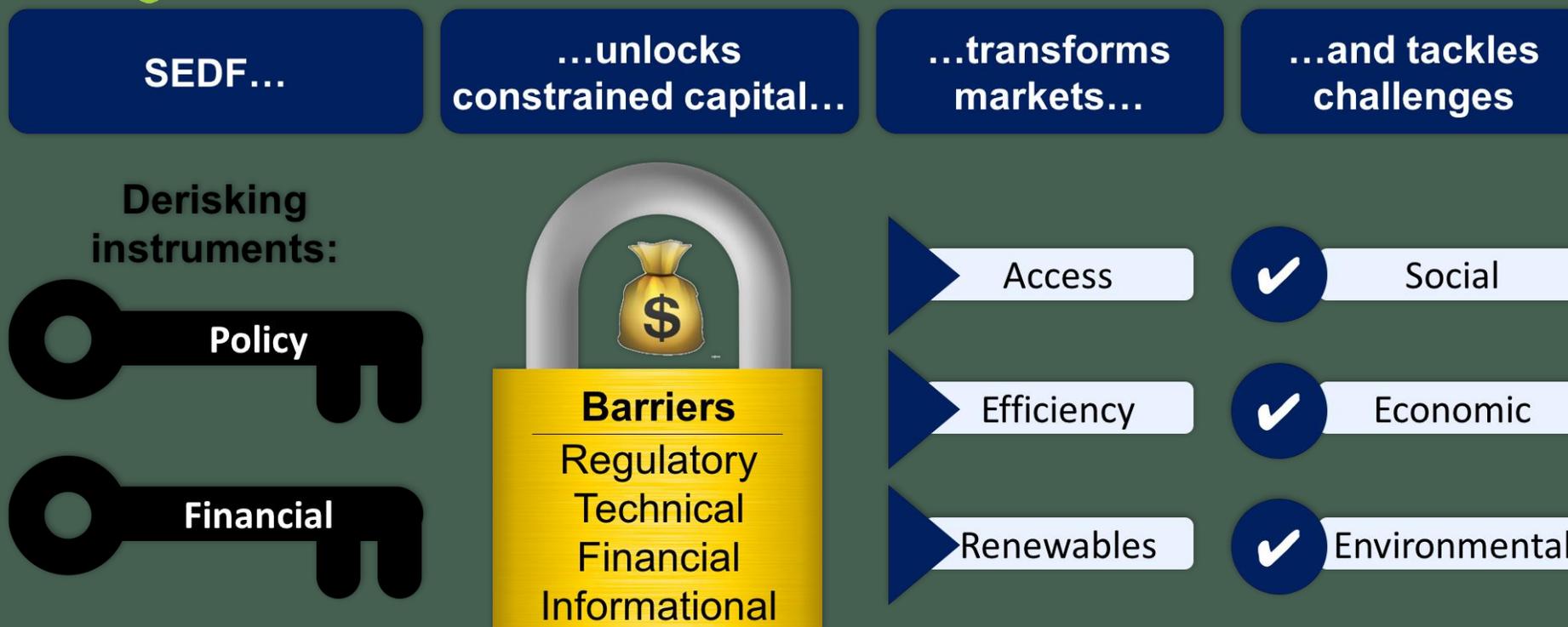


*Percentage of UNDP's on-going Energy projects contributing to achieve individual SDGs

Sustainable Energy Strategy, 2017-2021

- New strategy – fully aligned with SDG 7
- Focus on Energy Access; Energy Efficiency; Renewable Energy
- Strong link with Climate Change agenda
- Also covers sustainable transport and sustainable cities

UNDP's approach/theory of change



UNDP IN ACTION for SDG 7

CURRENTLY

259 sustainable energy projects



Being implemented or developed in

113
countries



with over **US\$ 1 billion** in grant financing

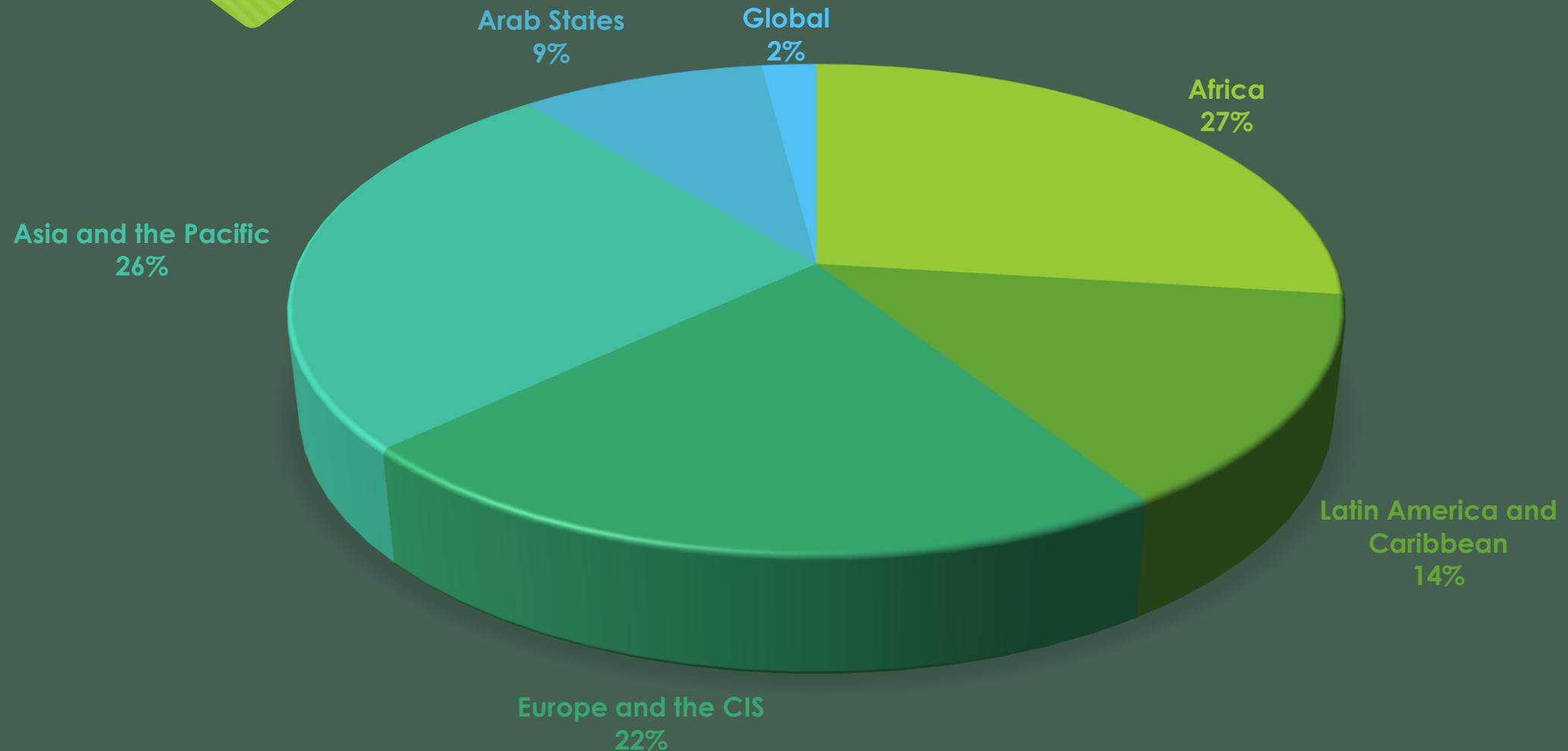


and **US\$ 5.9 billion** in co-financing

Portfolio breakdown of projects by region – Total 259 projects (2016)



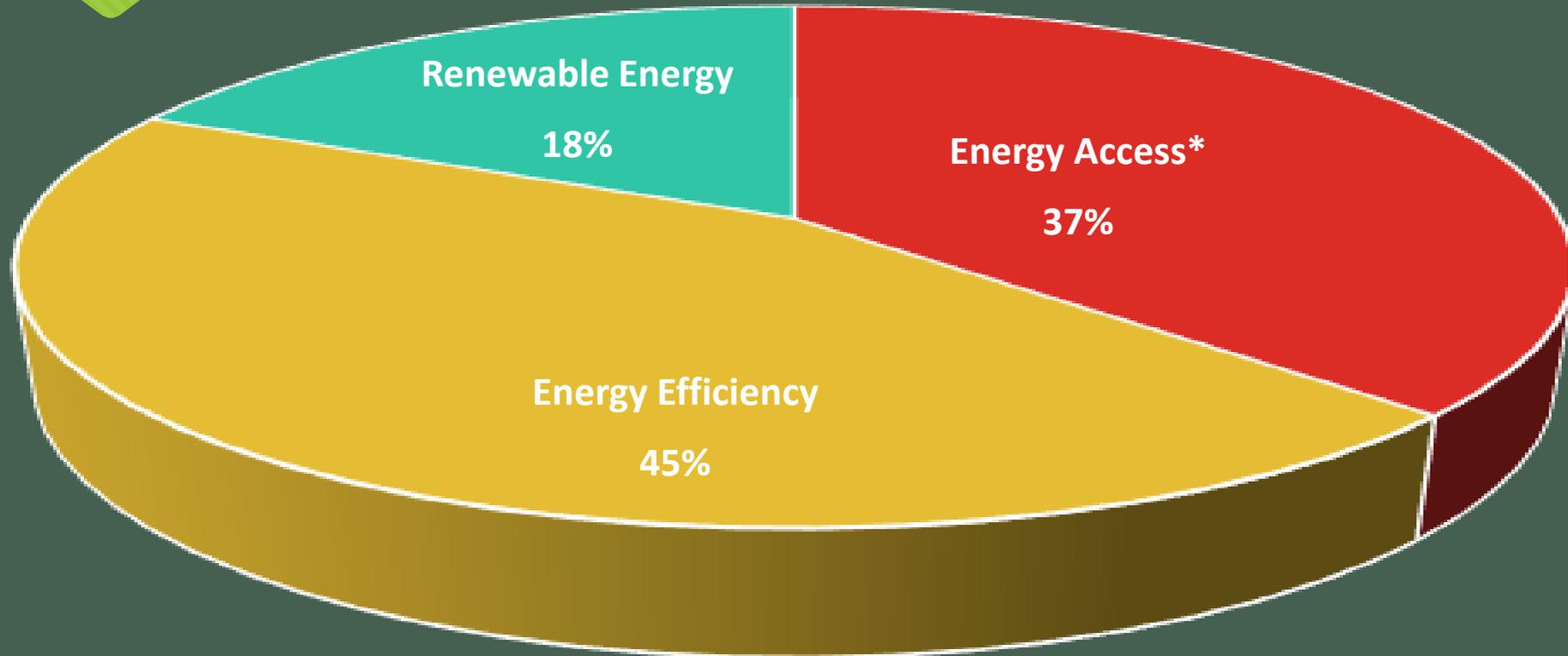
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Portfolio breakdown of projects by Thematic Area



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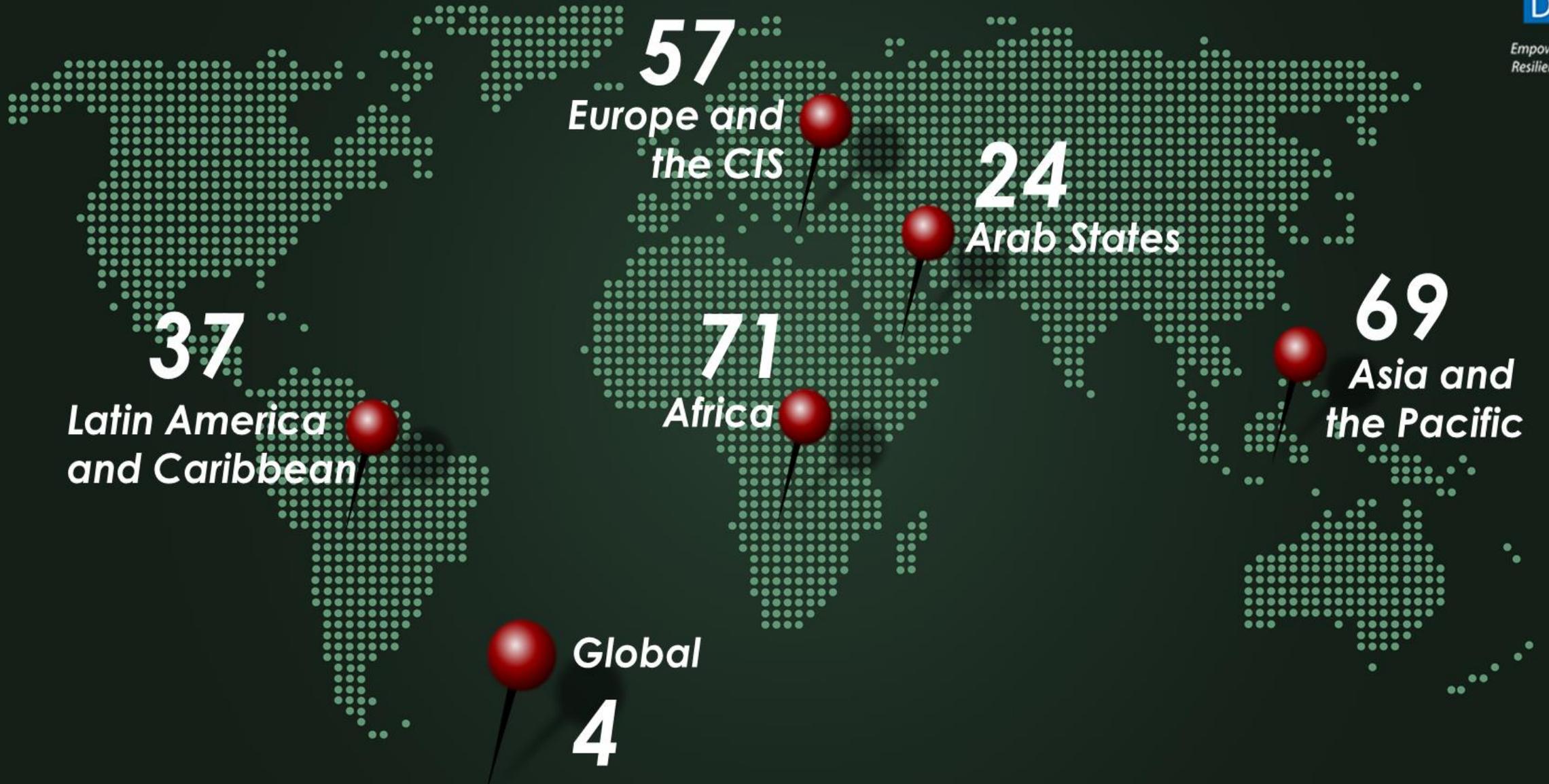


**Out of the 97 energy access projects, 88 projects (90.7%) are renewable energy based energy access projects.*

UNDP's Current Energy Projects per Region 2016



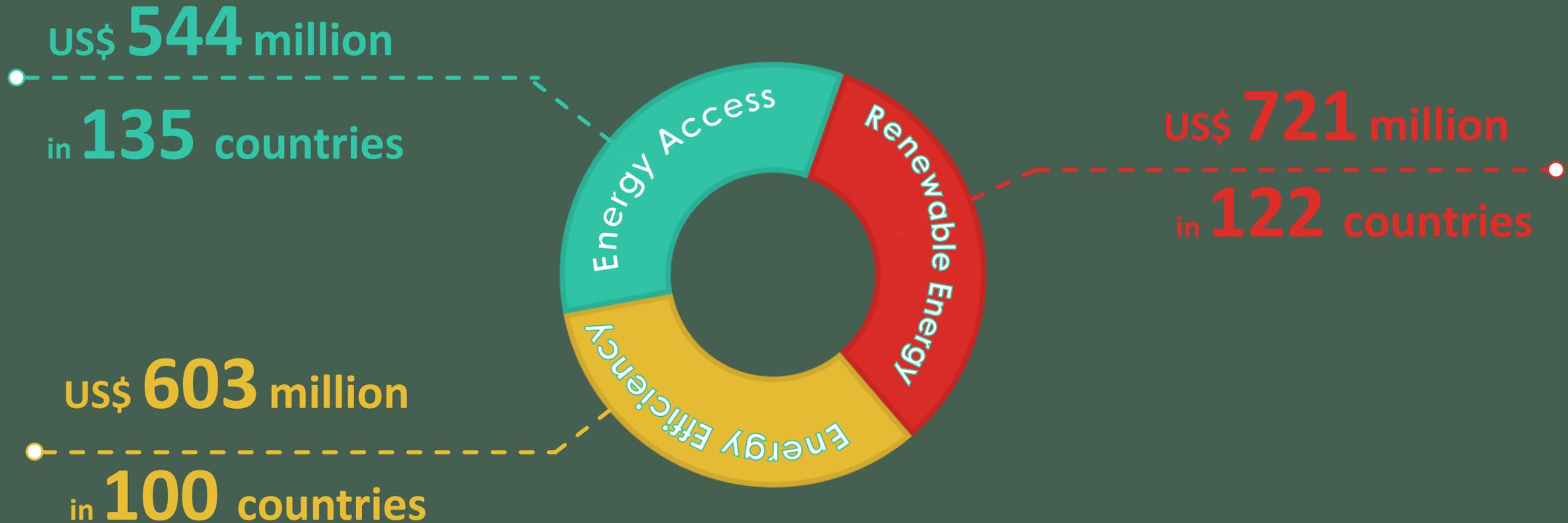
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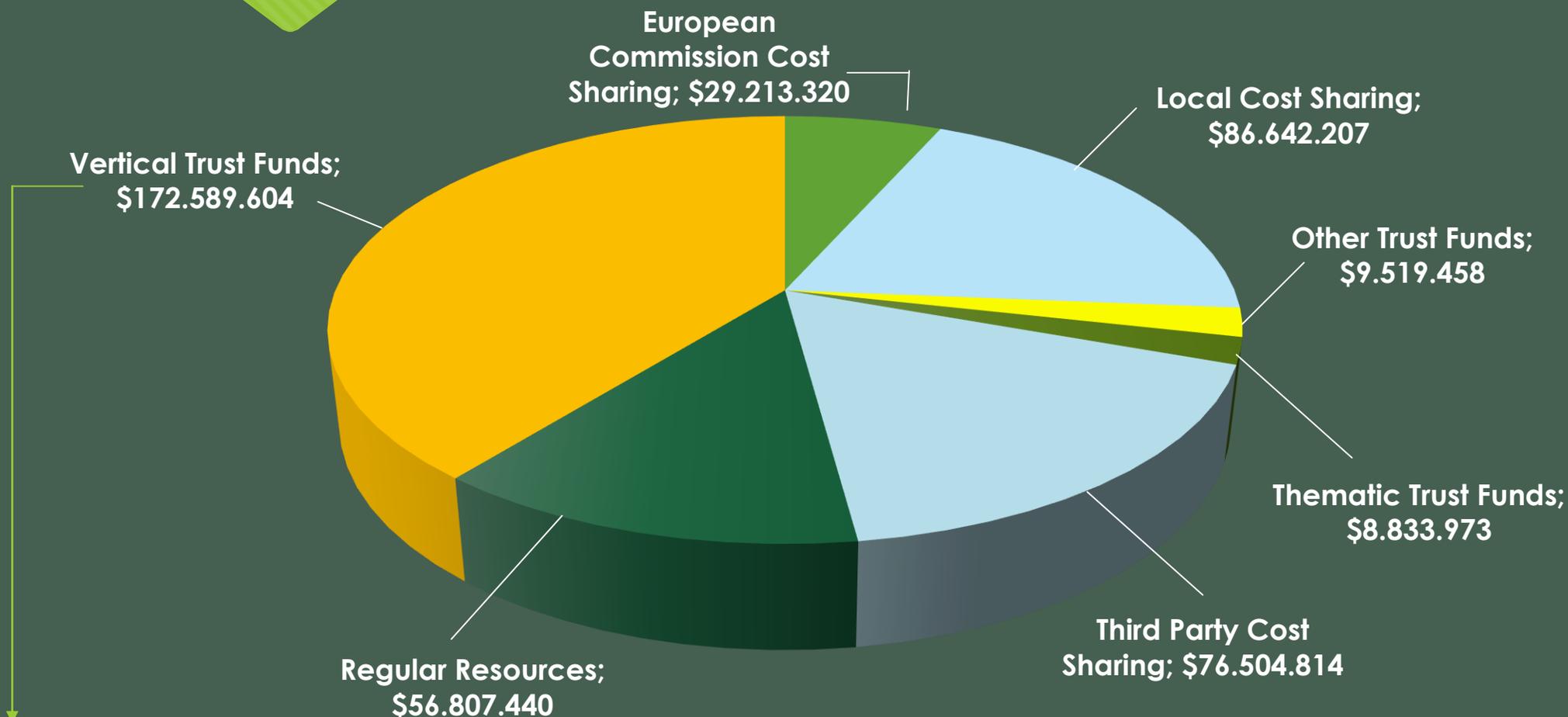
UNDP's Total Investment in Sustainable Energy between 2000 - 2015, by Thematic Area



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Funding Sources for Energy Programming over the past 4 years



Funds from the Global Environment Facility (GEF) make up 99% (US\$ 171,616,959.79) of Vertical Trust Fund energy investment over the past four years.

SDG 11. Sustainable cities

- Today, more than **half the world's population lives in cities**. By 2030, it is projected that 6 in 10 people will be urban dwellers. Despite numerous planning challenges, cities offer more efficient economies of scale on many levels, including the **provision of goods, services** and transportation. With sound, **risk-informed planning and management**, cities can become incubators for innovation and growth and drivers of sustainable development.

PROGRESS OF GOAL 11 IN 2018

- Many cities around the world are facing acute challenges in managing rapid urbanization—from ensuring adequate housing and infrastructure to support growing populations, to confronting the environmental impact of urban sprawl, to reducing vulnerability to disasters.
- Between 2000 and 2014, the proportion of the global urban population living in slums dropped from 28.4 per cent to 22.8 per cent. However, the actual number of people living in slums increased from 807 million to 883 million.
- Based on data collected for 214 cities/municipalities, about three quarters of municipal solid waste generated is collected.
- In 2016, 91 per cent of the urban population worldwide were breathing air that did not meet the World Health Organization air quality guidelines value for particulate matter (PM 2.5); more than half were exposed to air pollution levels at least 2.5 times higher than that safety standard. In 2016, an estimated 4.2 million people died as a result of high levels of ambient air pollution.
- From 1990 to 2013, almost 90 per cent of deaths attributed to internationally reported disasters occurred in low- and middle-income countries. Reported damage to housing attributed to disasters shows a statistically significant rise from 1990 onwards.

SDG 11. Sustainable cities



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TARGETS	INDICATORS
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing
11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate 11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters , including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people 11.5.2 Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services

SDG 11. Sustainable cities

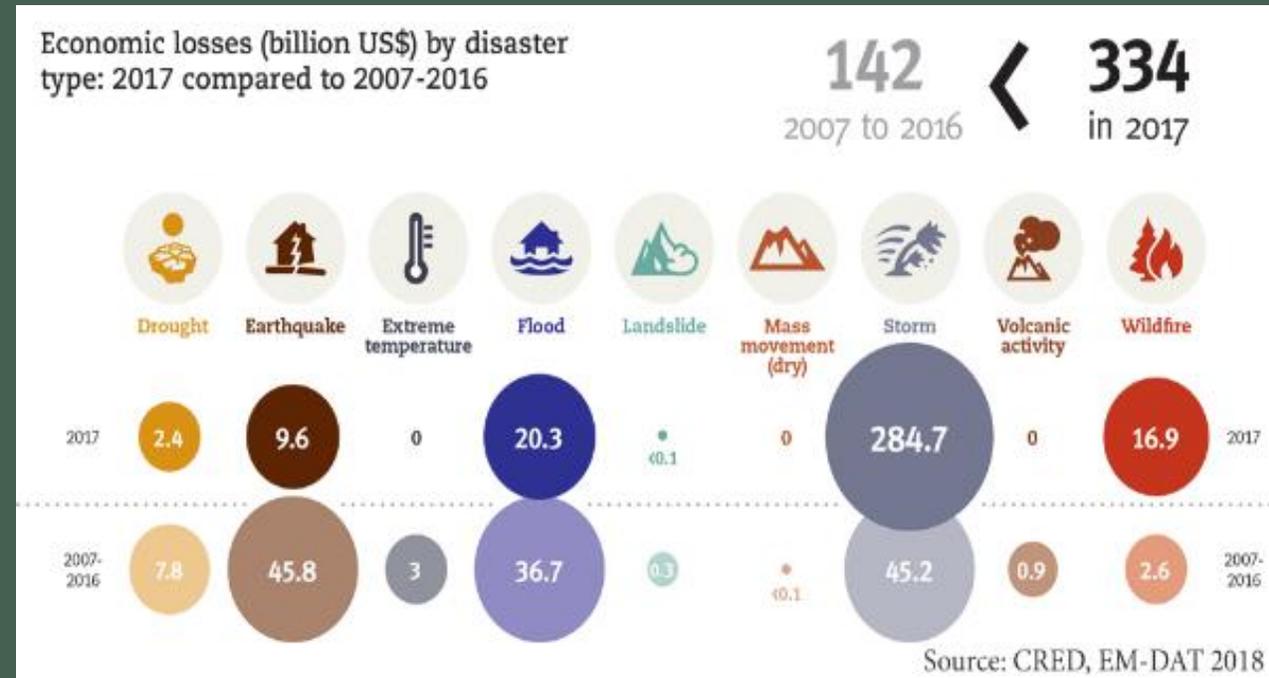
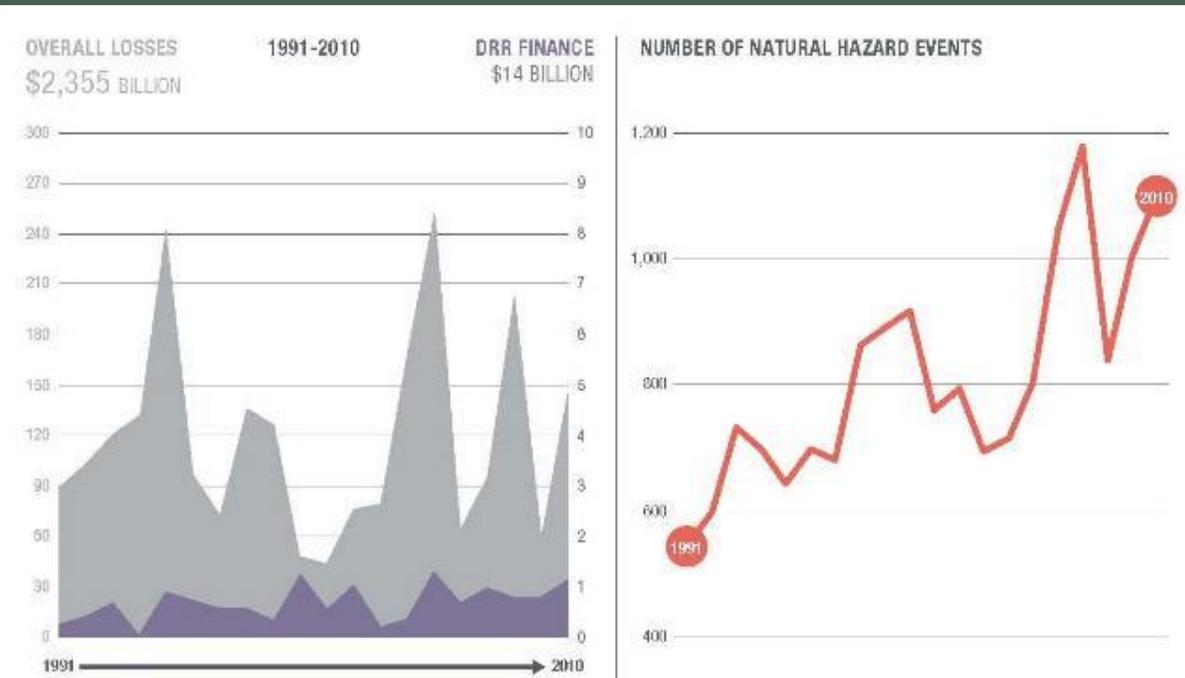


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TARGETS	INDICATORS
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces , in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities 11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months
11.A Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning	11.A.1 Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city
11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters , and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	11.B.1 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030 11.B.2 Number of countries with national and local disaster risk reduction strategies
11.C Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	11.C.1 Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials

Disasters are increasing and their costs are growing

- Globally, the **number of disasters has doubled** since the 1980s.
- The **costs of the damage and losses caused by disasters** have been estimated at an **average \$100 billion a year since the millennium.**



Climate Change and Disasters

- Climate disasters = 91% of 7,255 events in 1998-2017 (UNISDR)
- Climate-related hazards are increasing across the world
- Extreme events are becoming more frequent and more severe
- In the last 10 years, there have been 314 disasters **in ECIS**, resulting in:

60k deaths 11m displaced \$25bn damage

Major disasters in ECIS

Drought in Albania affected **3.2 MILLION** people in 1989 and 1 million people in Russia in 2003.

Storms in Moldova affected **2.6 MILLION** people in 2000.

Floods in Ukraine affected **1.7 MILLION** people in 1995, and **2.6 MILLION** people combined in Bosnia-Herzegovina and Serbia in 2014.

Turkey suffered **38 EARTHQUAKES OVER 20 YEARS** affecting 6 million people; a 1998 earthquake in the Soviet Union affected 1.6 million people.

Wildfires in Macedonia affected **1 MILLION** people in 2007.



Overview of ECIS region

South East Europe | Central Asia | South Caucasus | Eastern Europe



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Trans-boundary characteristics of hazards
(wide/long river systems, extended seismic zones)

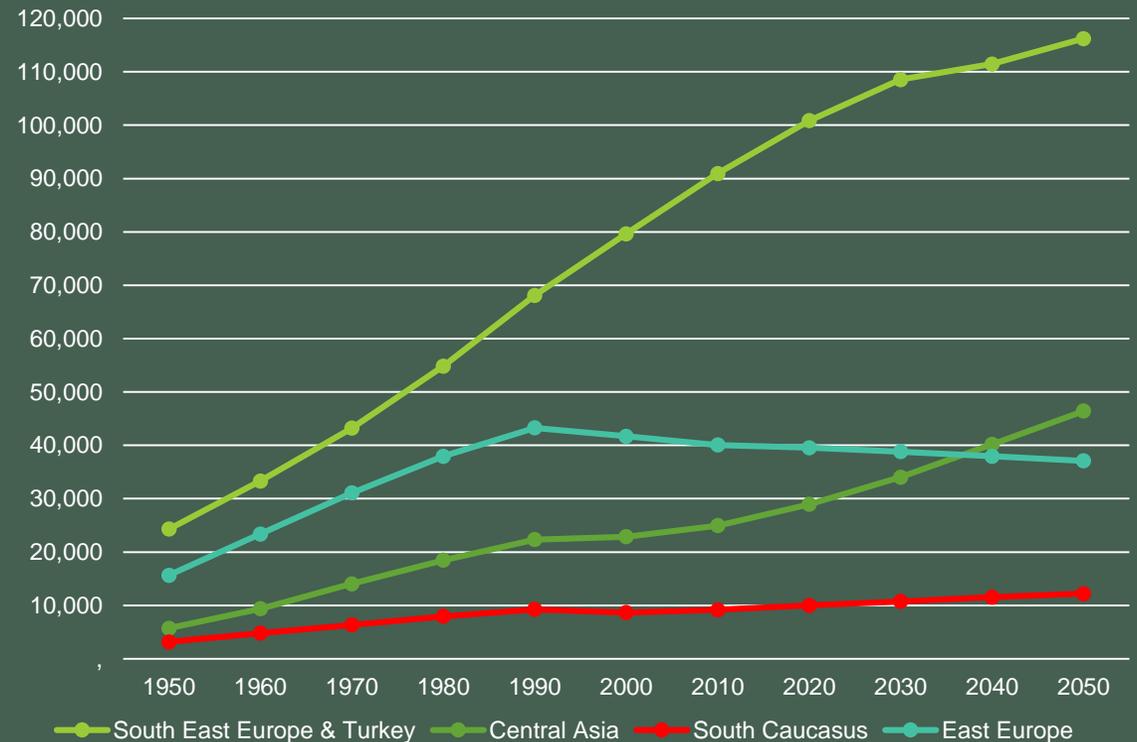
Urban risks factors:

- improving/neutral trends: South East Europe
- worsening/neutral trends: Central Asia
- in-between and similar to each other trends: South Caucasus and Eastern Europe

Main factors contributing to urban disaster risks:
(in 3 out of 4 sub-regions)

- income disparities;
- land use planning needs improvements;
- environmental degradation.

Urban Population in the ECIS region 1950-2050 (Thousands)



Priority hazards: earthquakes, landslides, floods, mudflows, flash-floods, droughts, GLOFs, fires, climate change*

* Climate change is presented as one of the factors affecting hazards' impact and frequency

South East Europe & Turkey

Albania | Bosnia and Herzegovina | Croatia | Montenegro | FYR of Macedonia | Serbia | Kosovo (as per UNSCR 1244) | Turkey



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“Urban” population:

- highest dynamic in the ECIS region
- 55% in the Balkan countries and 77% in Turkey

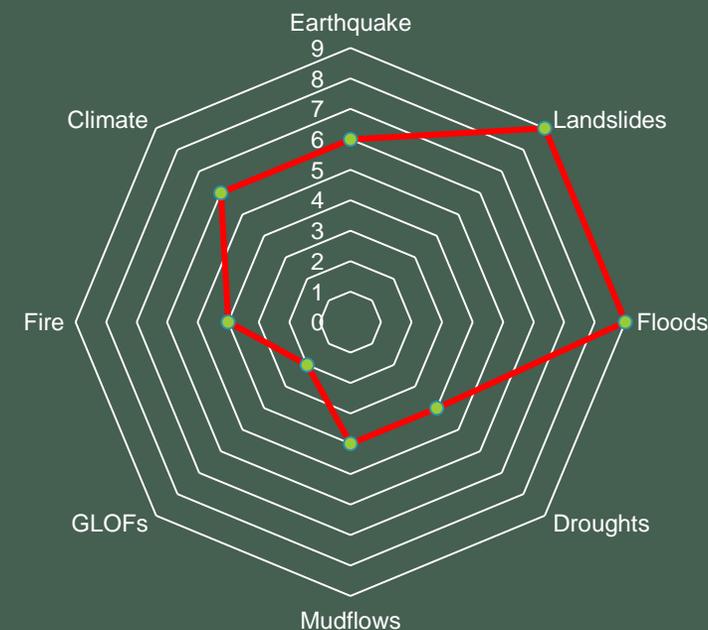
Main factors contributing to urban disaster risks:

#	Factors	State	Trend
1	Displacement of population/ urbanisation	⊕	↓
2	Application of land use regulations, updating required	☹	↓
3	Insufficient enforcement of building codes	⊕	↓
4	Ineffective management and outdated public and private infrastructure	☹	↓
5	Land use planning needs improvements	☹	↓
6	Income disparities	😊	↓
7	Environmental degradation	☹	↓
8	Illegal houses and homelessness	☹	↓
9	Lack of self-governance on local level	☹	↓
10	Disaster Risk Reduction efforts	☹	↓

State: 😊 - low risk, ☹ - medium risk, ⊕ - high risk.

Trend: ↓ - negative (improving), ⇔ - no significant trend, ↑ - positive (worsening)

Vulnerability to priority hazards



Exposure to risks in urban area:

- almost all capital cities → moderate to high seismic hazard zones



South East Europe Urban Resilience Building Action Network



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- **Project Area:** Albania, Bosnia and Herzegovina, Croatia, Kosovo*, FYR of Macedonia, Montenegro and Serbia
- **Duration:** 24 months (2017-2018)
- **Total Costs:** 576.990 EUR

SEE URBAN Project objectives:

- **formalize local level cooperation in urban DRR**
(both at city/municipality/county and cross-border/regional level)
- **form a network of urban local level DRR stakeholders (SEE URBAN)**
- **develop SEE URBAN electronic DRR library**
- **strengthen local level DRR practitioners' knowledge on urban risks**



SEE URBAN
South East Europe Urban Resilience Building Action Network



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THANK YOU!