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RENEWABLE ENERGY STRATEGY

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Realising climate ambitions

19 – 23 August 2019 | Songdo, Republic of Korea

POWER GENERATION

THE GLOBAL OUTLOOK



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Power
Generation

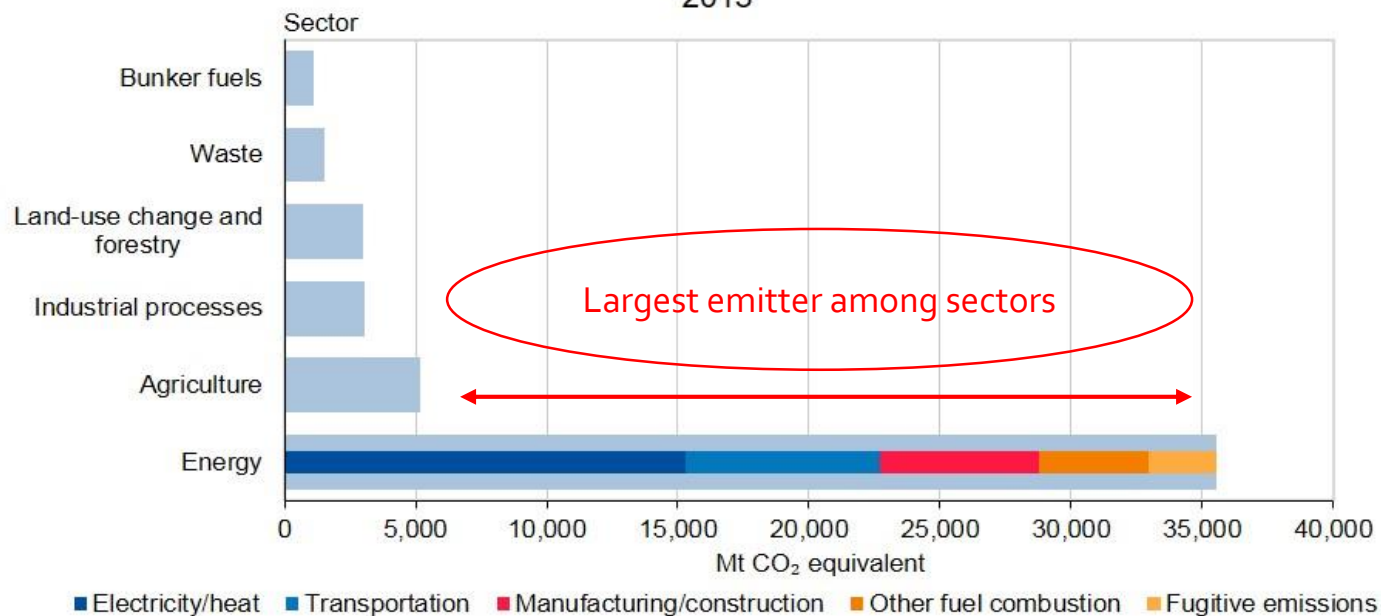
Energy
Emissions

Gaps / Opportunities

Priority Areas

Around **two-thirds of global GHG emissions stem from energy production and use⁽¹⁾**, which puts the energy sector at the core of efforts to combat climate change.

Gross global greenhouse gas emissions by sector
2013



Source: Climate Analysis Indicators Tool; World Resources Institute

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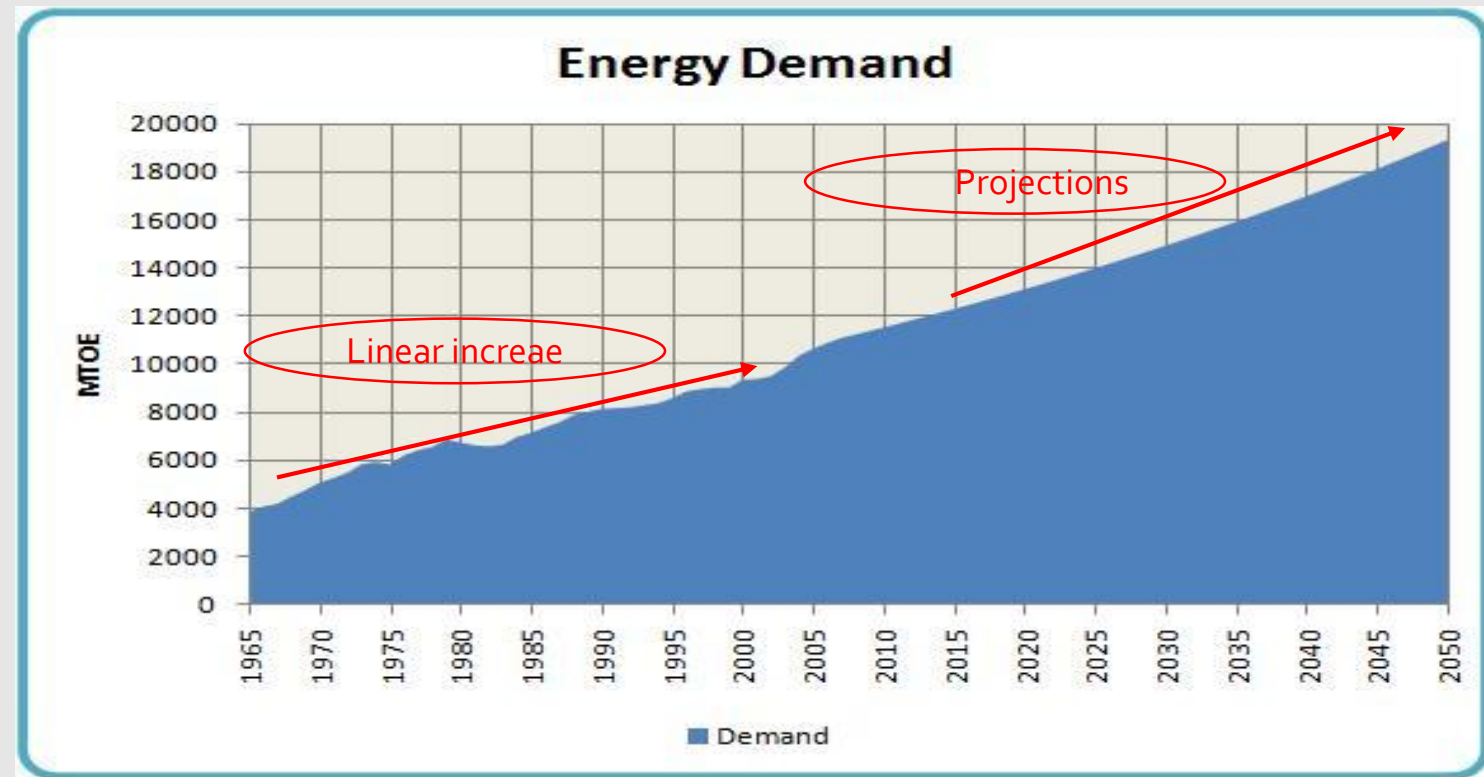
Power
Generation

Energy

Gaps / Opportunities

Priority Areas

Forecasts now showing that global energy demands are to rise by **at least one quarter over 2015-2050**.⁽²⁾



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2. McKinsey Energy Insights "Global Energy Perspective: Reference case 2018"

ENERGY ACCESS

THE GLOBAL OUTLOOK



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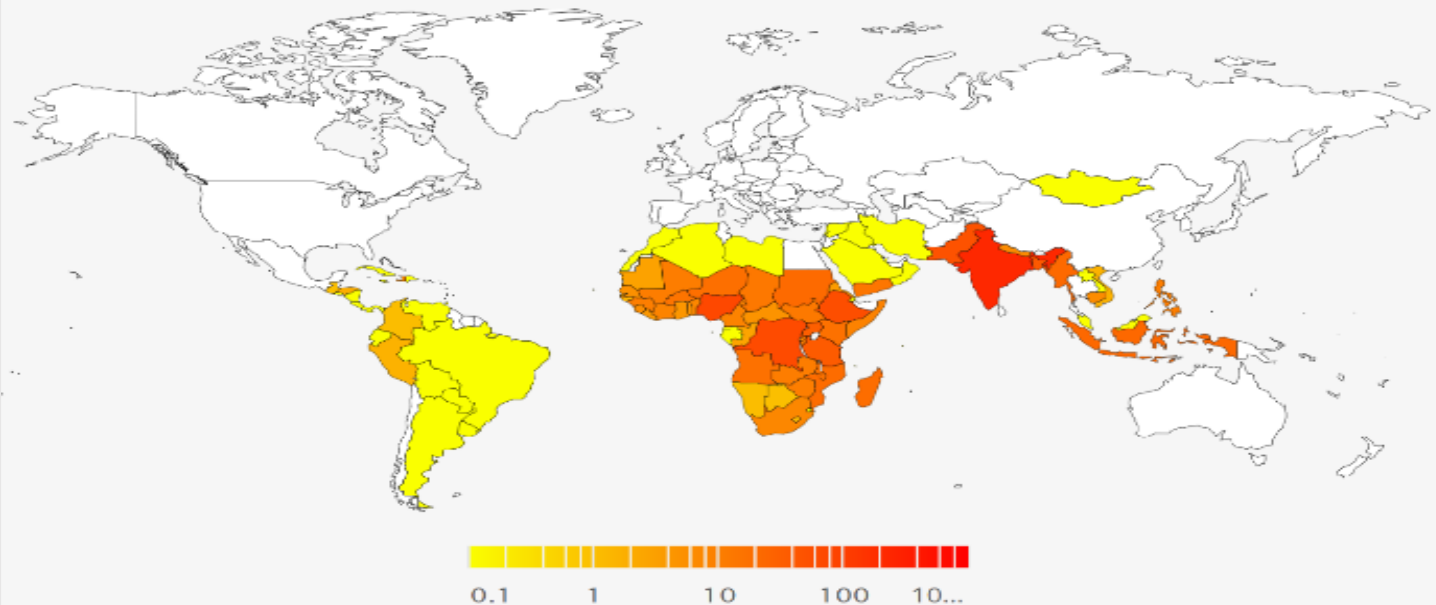
Energy
Access

Gaps / Opportunities

Priority Areas

- Currently, there are **840 million people without access to electricity** (89% of global access rate) **of which 570 million live in sub-Saharan Africa** showing uneven progress across different regions ⁽³⁾.
- SDG 7 aims at **universal access by 2030**.

Population without access to electricity, 2016 (millions)



GAPS



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Power
Generation

Energy
Access

Gaps / GCF opportunities

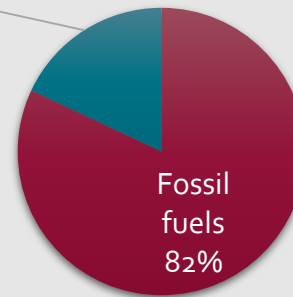
Priority Areas

Progress however in renewable energy investments worldwide has been rather slow; currently, **renewables count for only about 18%** in the global generation mix.⁽³⁾

For the world to meet the 1.5degree Celsius pathways, renewables must **supply 70-85% of electricity by 2050**.⁽⁴⁾

Global share of renewables (as of today)

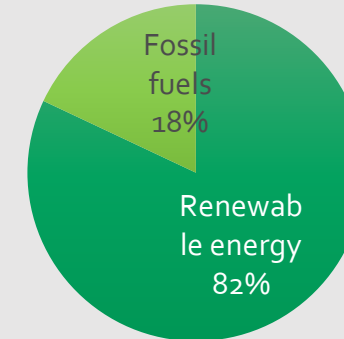
Renewable energy
18%



■ Fossil fuels ■ Renewable energy

Global share of renewables ("to-be" based on IPCC)

Fossil
fuels
18%



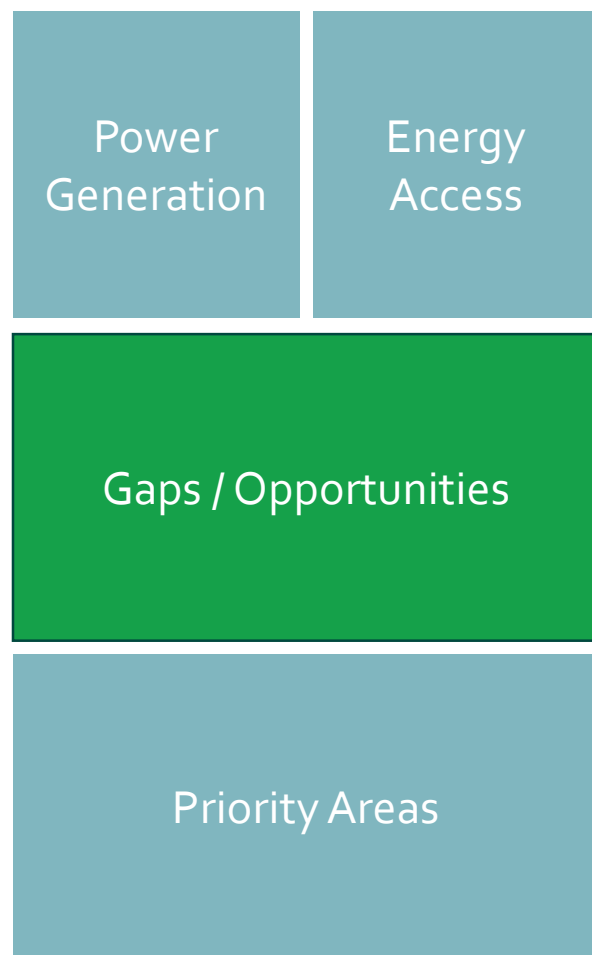
■ Renewable energy ■ Fossil fuels

GCF OPPORTUNITIES



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| General | |
|--|--|
| <ul style="list-style-type: none">• Collaborate with partners, incl. NDAs, AEs, implementing partners• Scaling-up investments• Catalyzing climate Innovation• Promote knowledge sharing | |
| Power generation specific | Energy access specific |
| <ul style="list-style-type: none">• De-risking instruments• Enabling environments (policies and regulations)• Scaling-up what works well | <ul style="list-style-type: none">• Concessionality (subsidies)• Enabling Environments• Policies and regulations• Innovative technologies |

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Theory of change

IF developing countries raise their ambition for clean energy in the context of their NDCs and deploy reforms that can create conducive environments for clean energy investments and actively seek to de-risk renewable energy transactions

THEN investments on renewable energy will accelerate and the transition to a low-carbon economy will be achieved

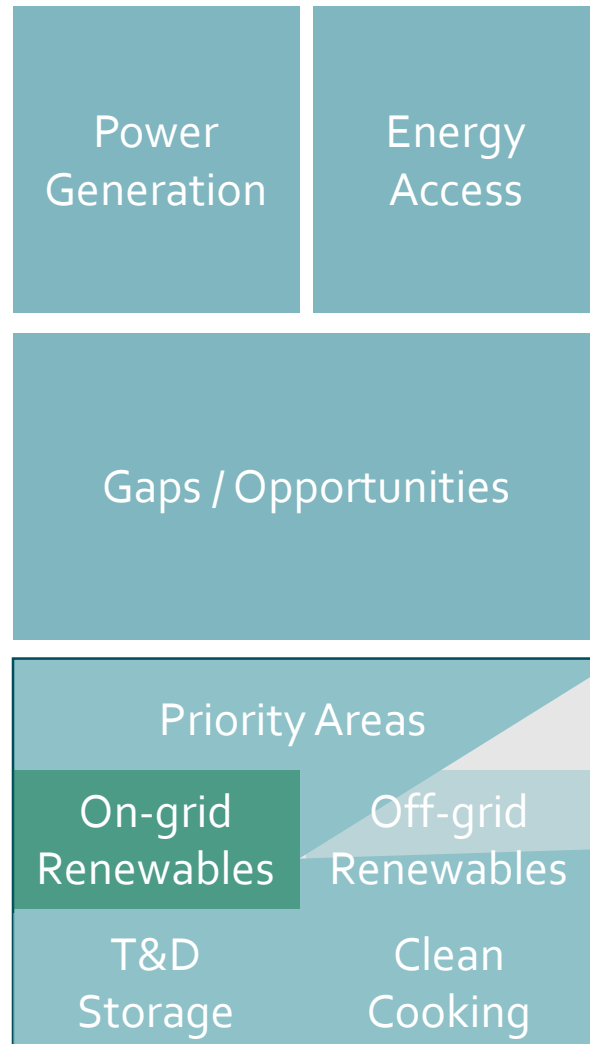
BECAUSE an attractive and viable renewable energy market would have been created in developing countries

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On-grid Renewables

Focus on

- addressing regulatory and market organization barriers
- Leveraging and de-risking commercial finance

Sub-area

- Large-scale solar wind and geothermal projects
- Geothermal
- Marine power

GCF Intervention

Funding proposals: Equity and loan finance and limited grants focused on addressing systemic market barriers

Clean energy RfPs

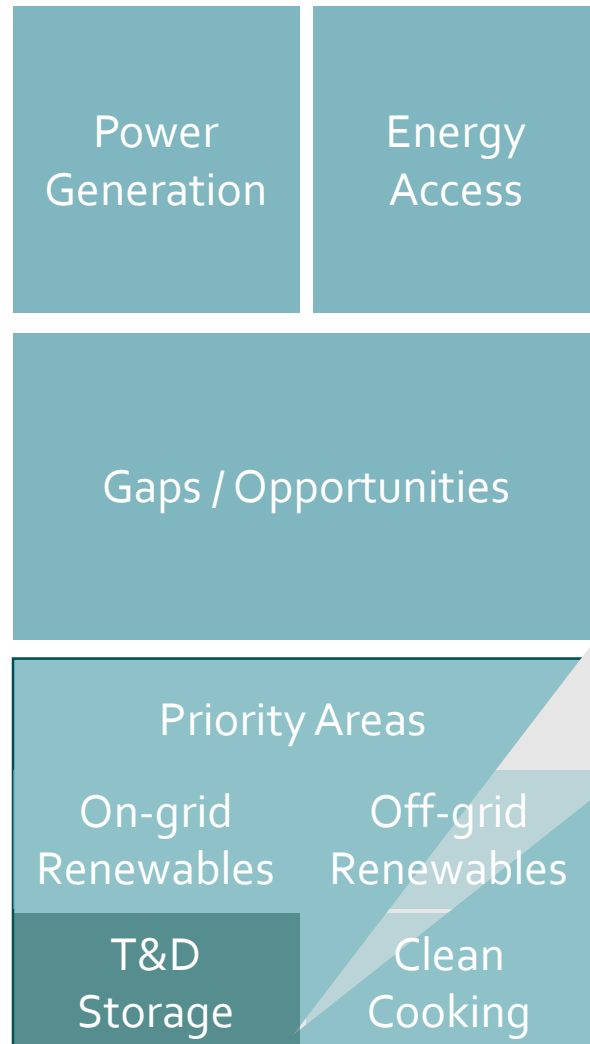
Strategic partnerships with others in the area of supporting demonstration and learning

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Energy T&D and Storage

Focus on

- Address barriers of high capital needs and utilities' weak financial status
- Filling the existing market gaps with GCF additionality

Sub-areas

- T&D
- Utility scale storage
- Behind the meter storage

GCF Intervention

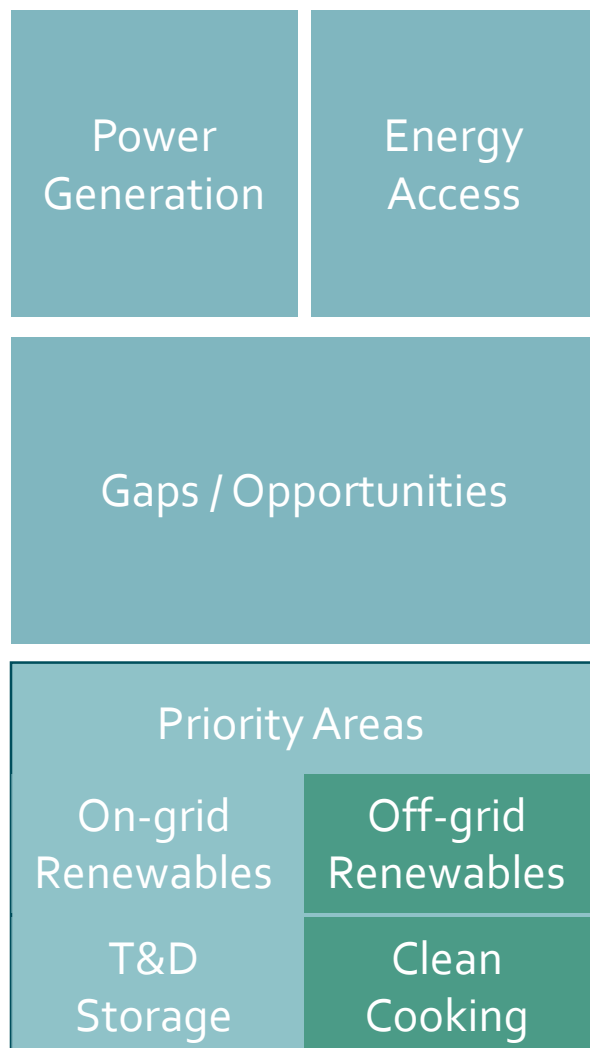
Support **regulatory reforms, and corporate strengthening** of utilities through **grants, equity/loans**
De-risking instruments
Strategic partnerships to support demonstration and learning

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Theory of change

***IF** developing countries would create investment friendly environments to solve the problem of energy access and design and implement transformational clean energy access interventions*

***THEN** the rates of energy access will significantly increase while access to energy becomes access to clean energy*

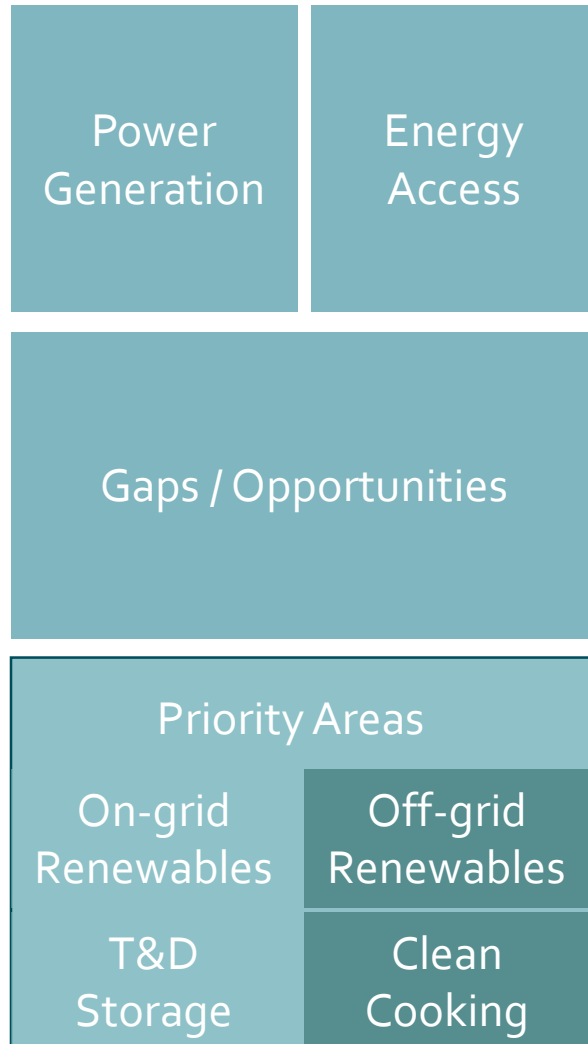
***BECAUSE** an increasing number of investors will find rural electrification as a commercially viable activity.*

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Off-grid Renewables/Clean Cooking

Focus on

- Scale-up of proven business models
- Address **regulatory barriers, and build market capacity**
- Through **loan finance and grants** for on-lending / on-granting to market actors.



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