

Africa's Infrastructure

A Time for Transformation

Africa Infrastructure Country Diagnostic: A multi-stakeholder effort



African Union



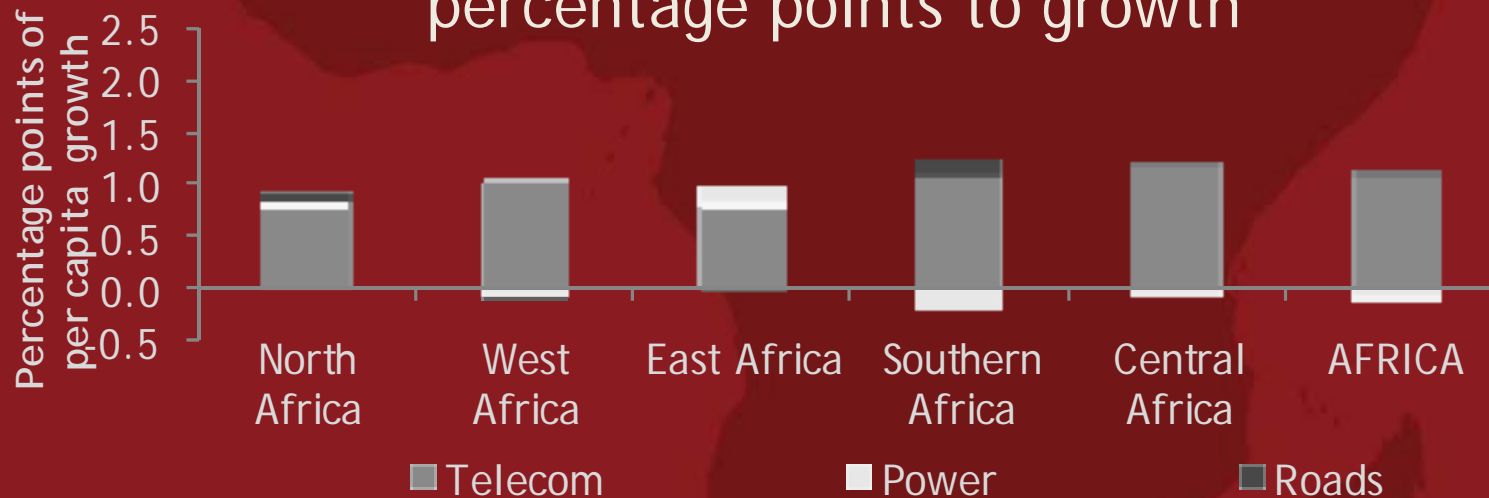
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Key Message

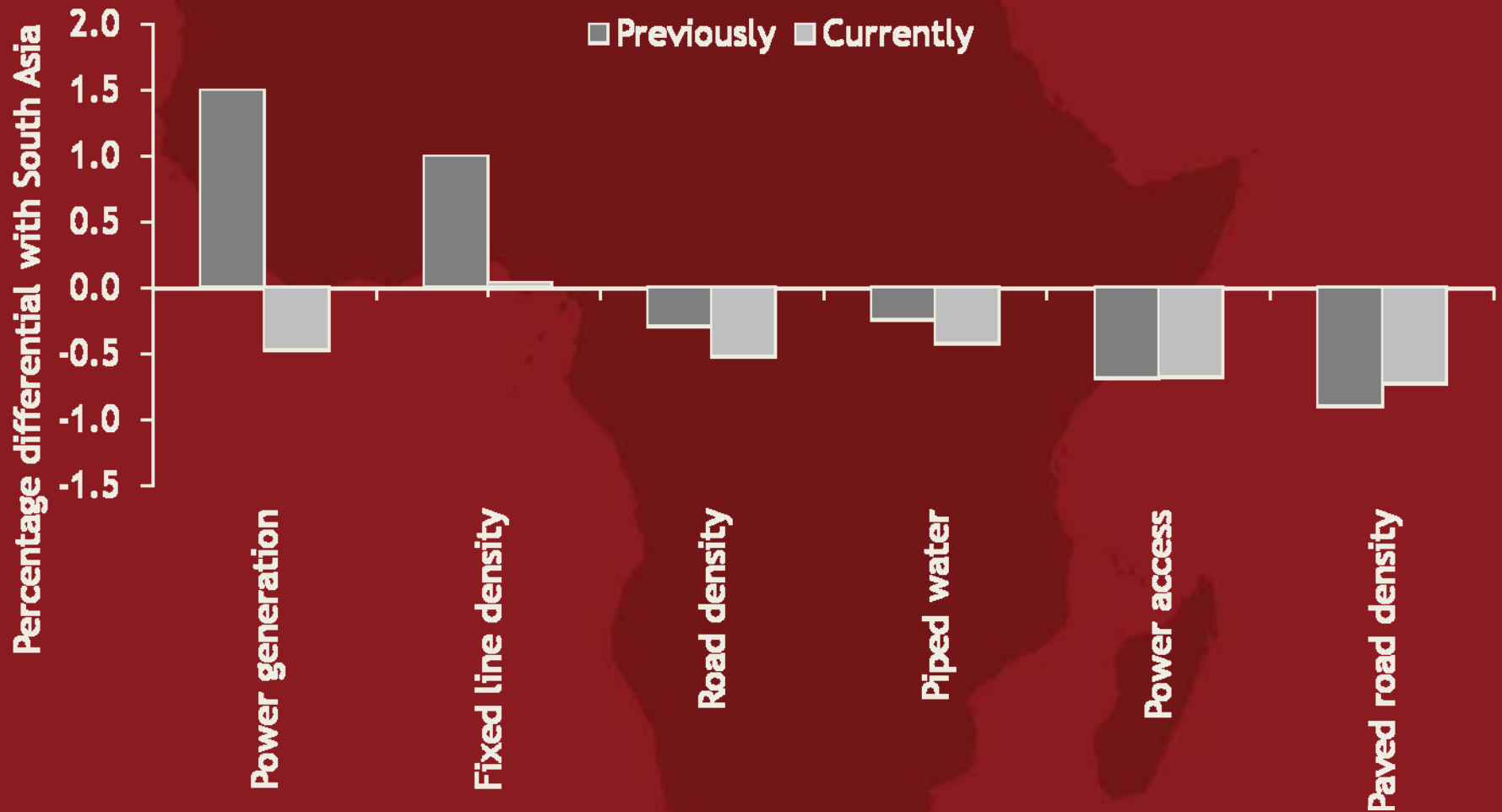
Infrastructure critical to growth, but continent hampered by limited stocks and high costs

Infrastructure contributed about one percentage point of Africa's recent growth spurt

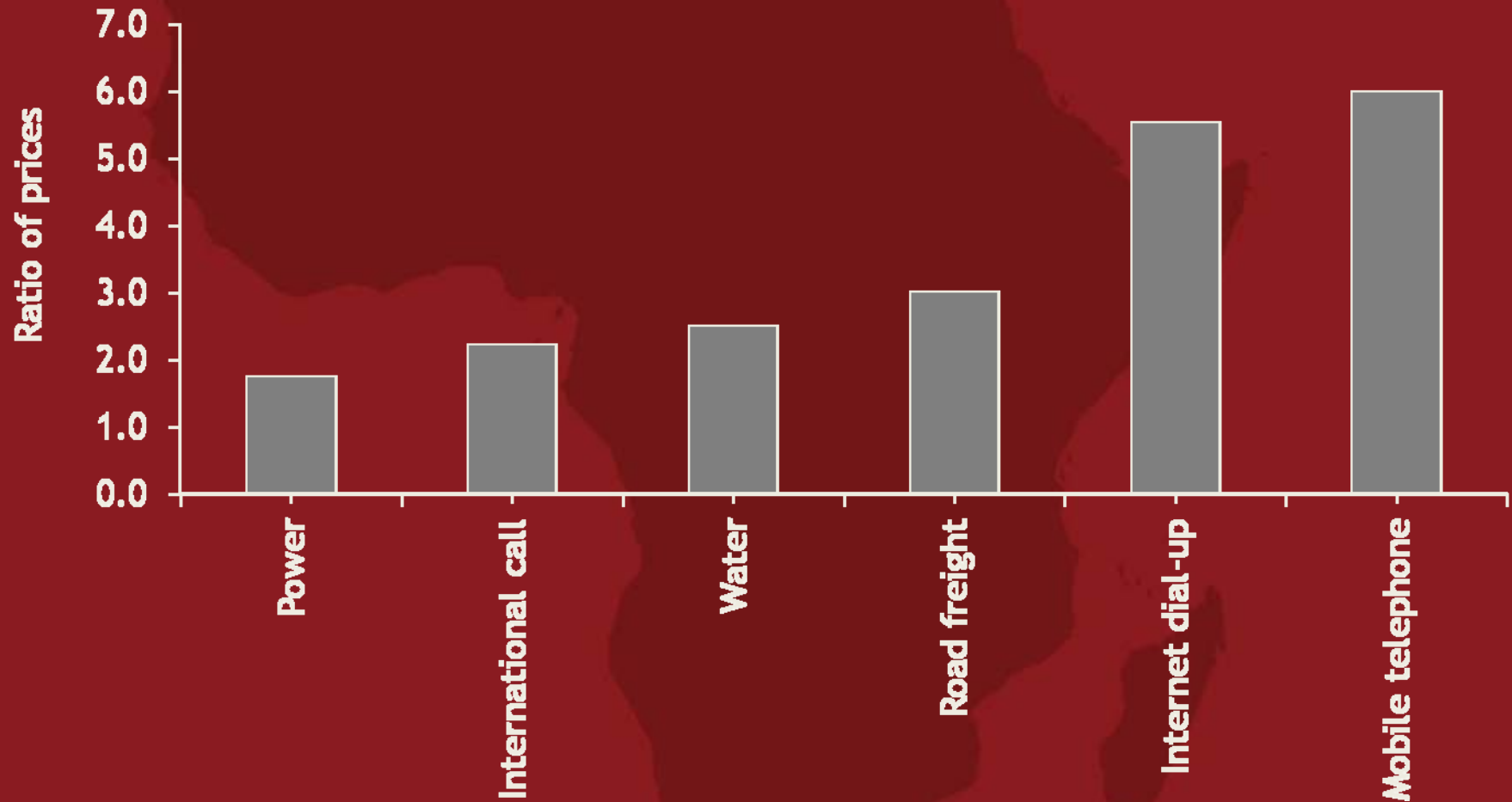
Improving all countries infrastructure to level of Mauritius could add 2.2 percentage points to growth



Infrastructure gap with respect to South Asia has been widening over time



Africa's infrastructure services several times more expensive than elsewhere



Africa's economic
geography complicates
infrastructure development

Need to think regional about infrastructure

- ◆ Africa's economic geography is a serious challenge
 - ◆ 20+ countries with populations of <5 million
 - ◆ 20+ countries with economies of <US\$5 billion
 - ◆ 60 international river basins
 - ◆ 15 landlocked countries
- ◆ That means infrastructure inherently regional
 - ◆ Most countries too small to generate power efficiently
 - ◆ Handful of countries with major hydro resources
 - ◆ Upstream decisions compromise downstream availability
 - ◆ International corridors provide access to sea
 - ◆ Regional fiber optic backbone provides access to internet
 - ◆ Stronger regional hubs needed for air and sea transport

Each of the infrastructure sectors
has a very different story to tell

The ICT story: the glass is still only half full

- ◆ Dramatic progress on coverage
 - ◆ GSM population coverage rises from 5% to over 60%
 - ◆ 180 million new (prepaid) subscribers added
 - ◆ US\$28 billion of private investment
- ◆ Further regulatory reform to pave the way for more investment and lower prices
 - ◆ Intensify mobile competition to reduce prices (3+ operators) and extend signal coverage to 95%
 - ◆ Facilitate private investment in fiber optic backbone
 - ◆ Provide competitive access to submarine cables

The power story: so much energy so little power

- ◆ Today's situation is dismal
 - ◆ 30 countries face chronic blackouts
 - ◆ Entire generation capacity equivalent to Spain's
 - ◆ Outside RSA, consumption only 1% of OECD levels
 - ◆ Universal access more than 50 years away
- ◆ A major turnaround is needed
 - ◆ Accelerate pace of investment (7,000 MW pa)
 - ◆ Harness cheaper energy through regional trade
 - ◆ Tackle major subsidies, institutional inefficiencies

The transport story: not just about asphalt

- ◆ Linkages across modes do not function effectively
 - ◆ **Air** – the sky's the limit
 - ◆ **Ports** – landlords needed
 - ◆ **Rail** – looking for traffic
 - ◆ **Roads** – broadening the agenda
- ◆ A number of common challenges
 - ◆ More about improving quality than increasing quantity
 - ◆ Software as important as hardware – good quality roads
 - without smooth trade facilitation keep transit slow
 - without competitive trucking keep tariffs high
 - ◆ Safety remains prominent concern across the board

The water story: getting more out of nature

- ◆ Africa fails to harness water for development
 - ◆ Only 200m³ of water storage to buffer high variability
 - ◆ Less than 5% agricultural land irrigated
 - ◆ Less than 10% hydropower captured
 - ◆ Failing to meet MDGs for water and sanitation
- ◆ A way forward
 - ◆ Develop regional multi-purpose approach to water
 - ◆ Go after quick wins on irrigation (7 million hectares)
 - ◆ Give greater emphasis to appropriate technologies

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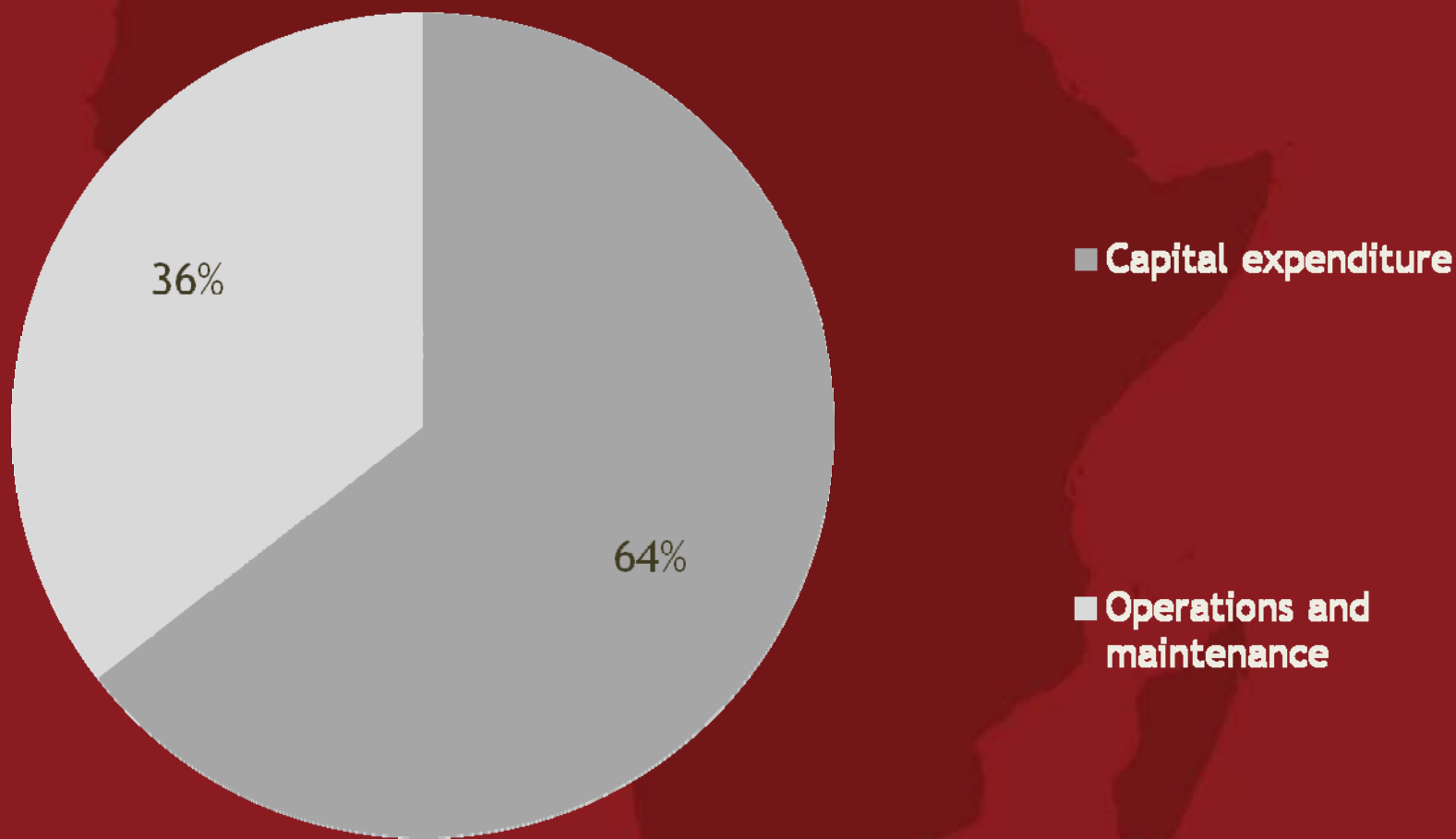
Key Message

Transforming Africa's infrastructure will require an additional US\$31 billion a year and huge efficiency gains

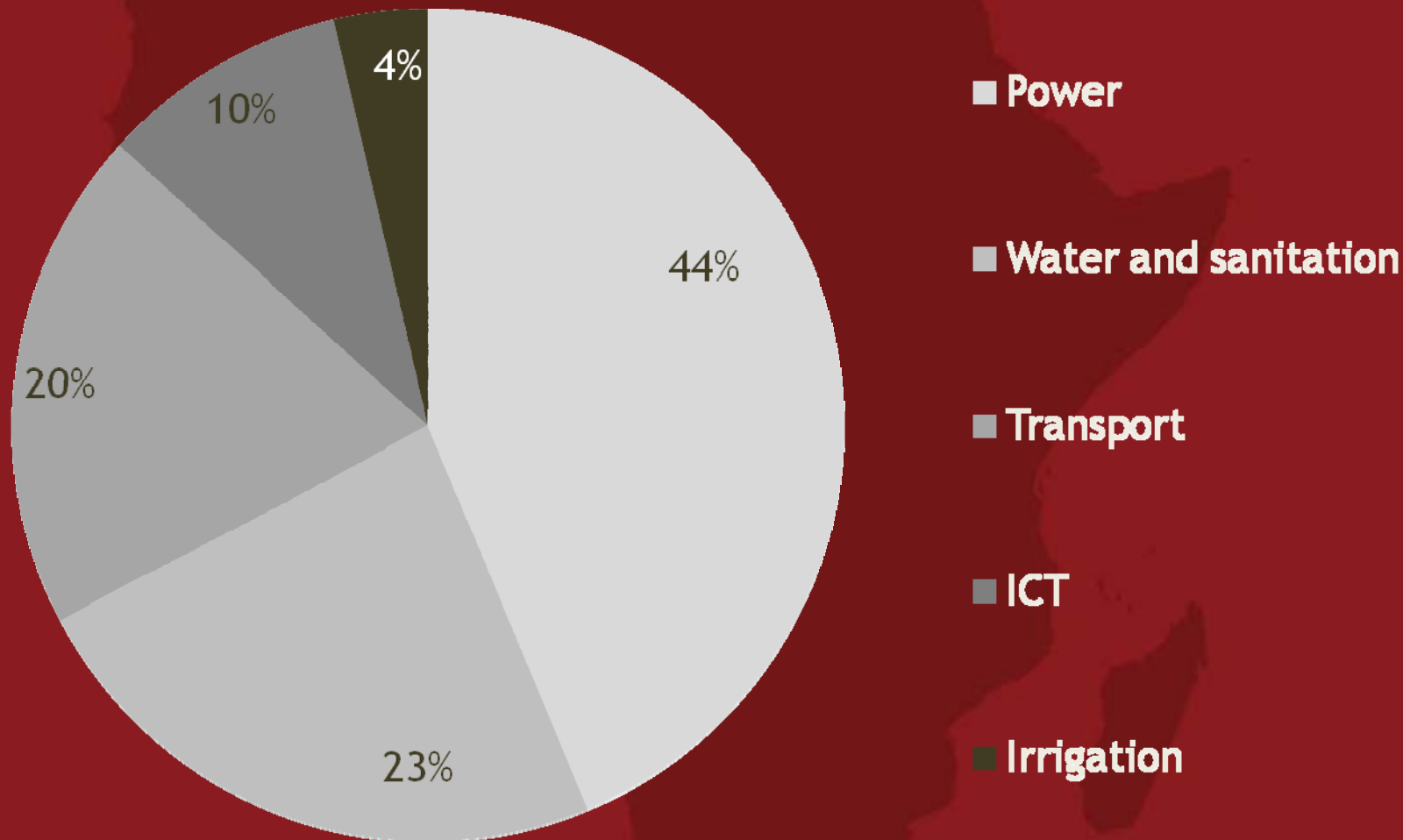


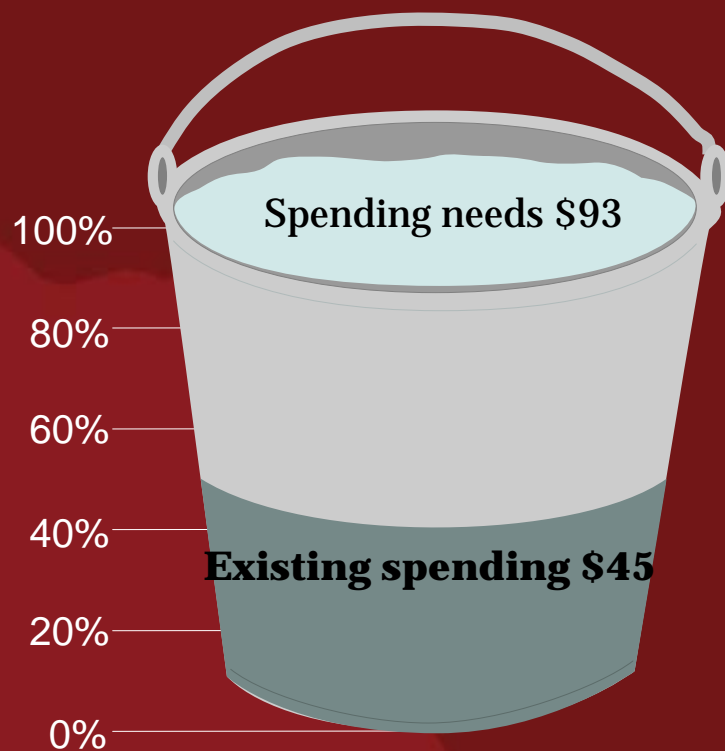
All figures in US\$ billion a year

One third of infrastructure spending needs should go to operations and maintenance



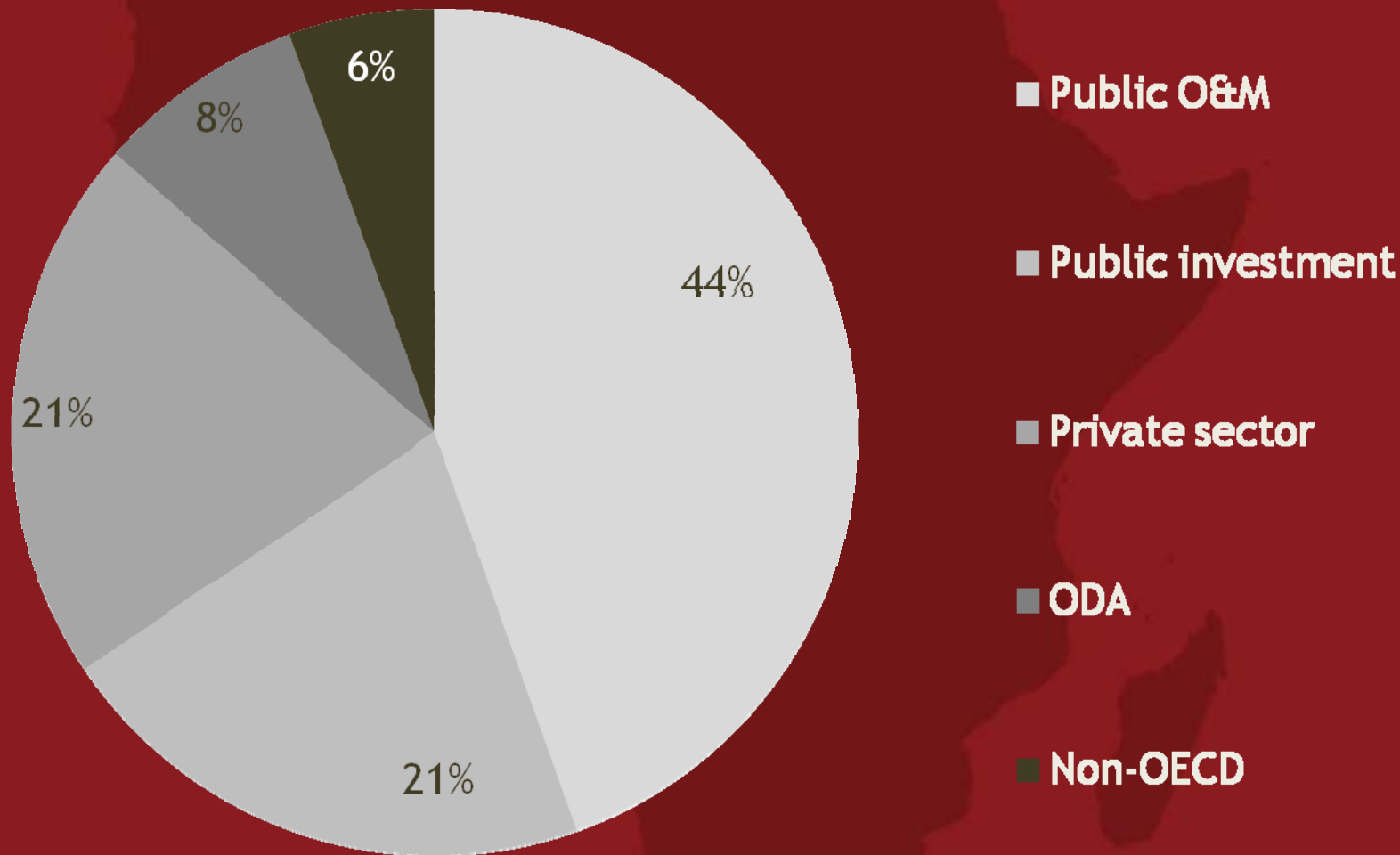
Almost half of the spending needs are associated with power





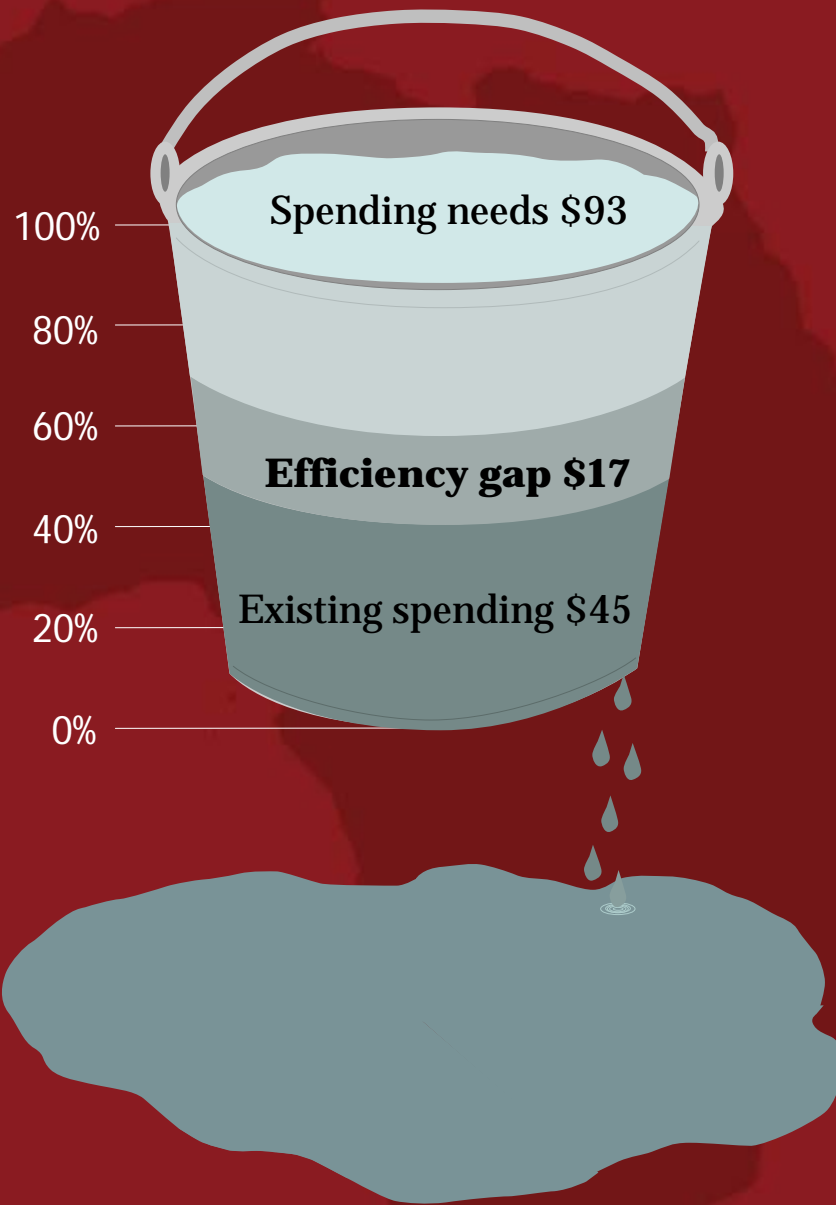
All figures in US\$ billion a year

Three quarters of infrastructure spending is financed by African tax-payers and consumers

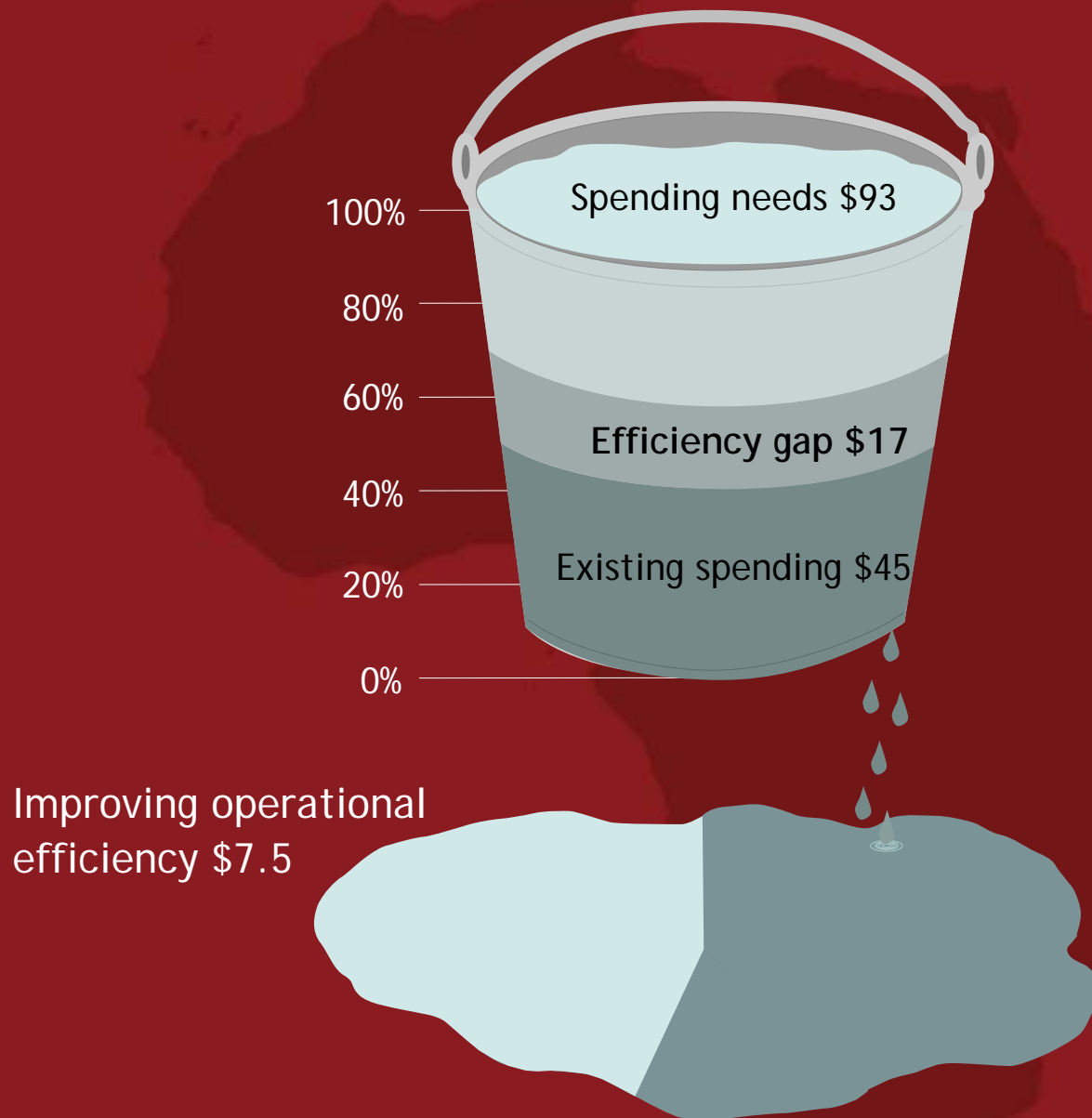




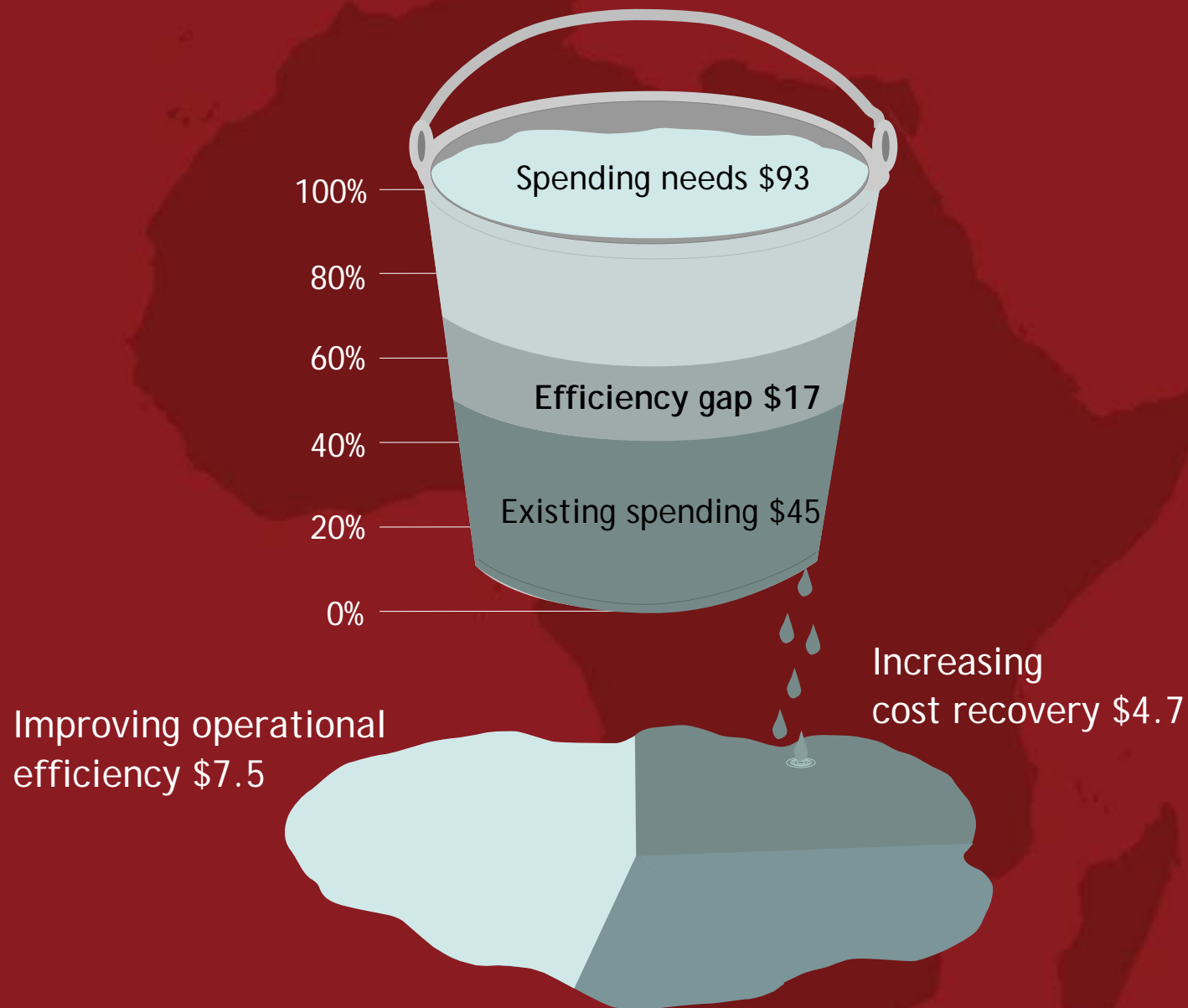
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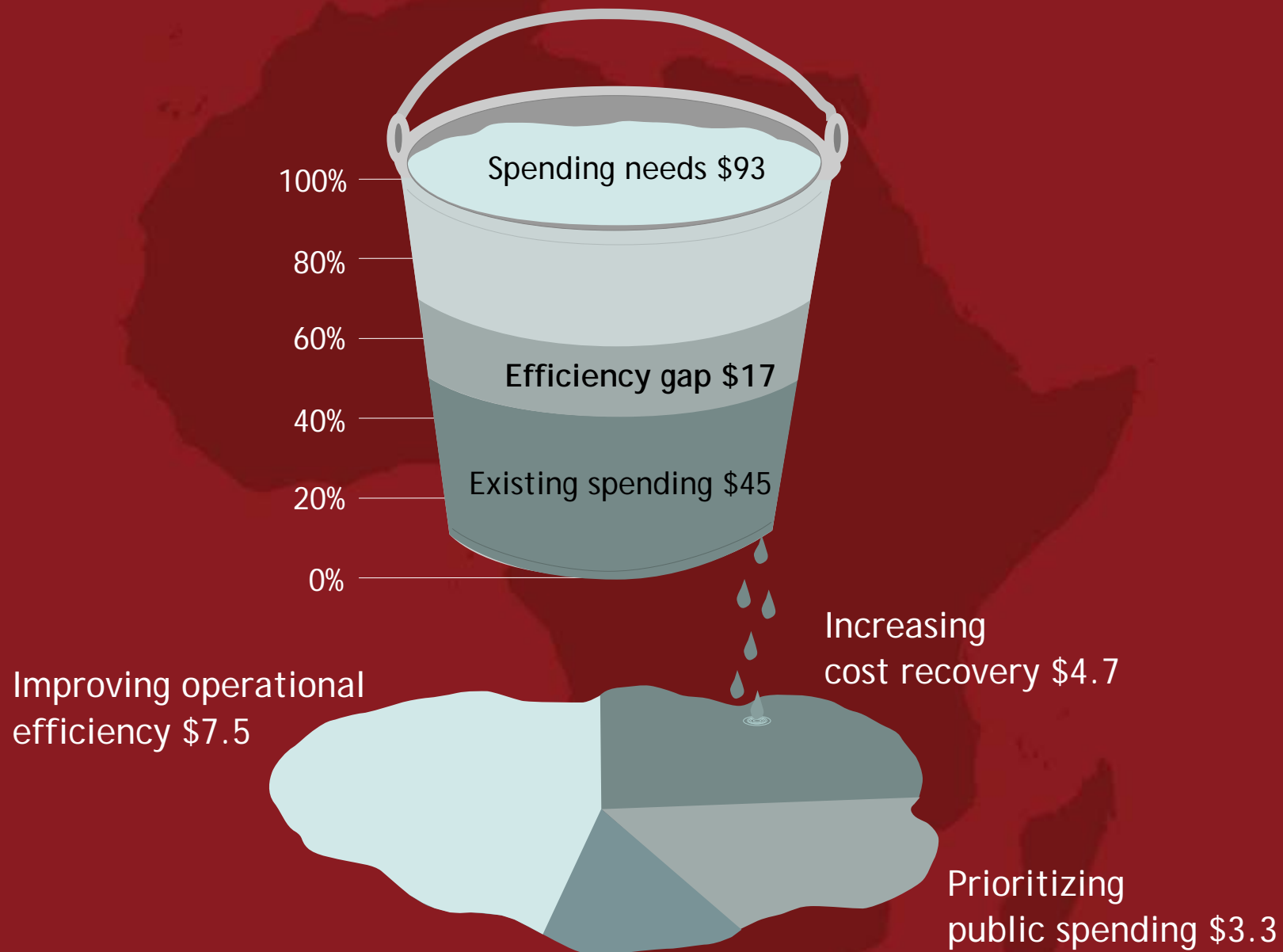
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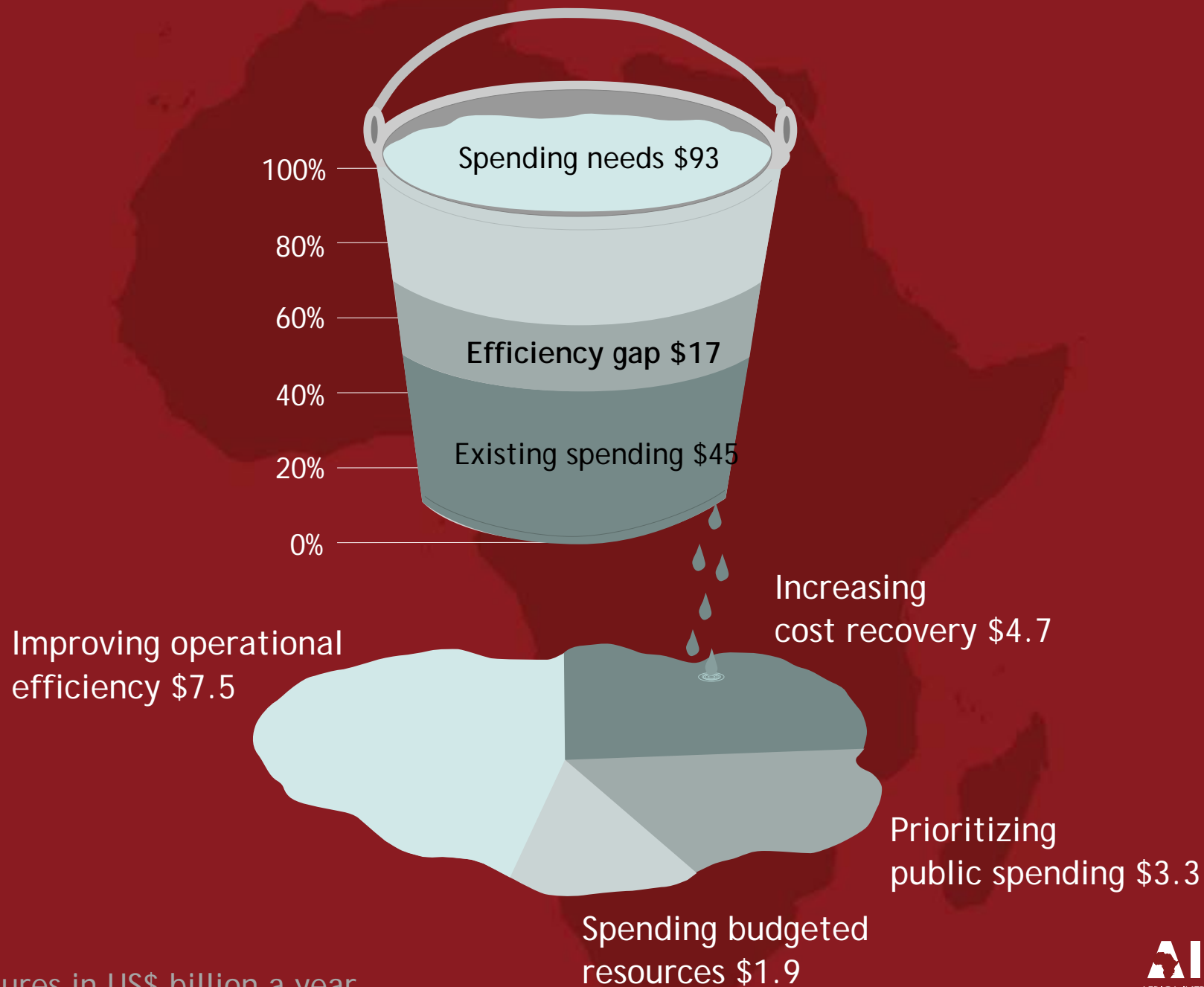
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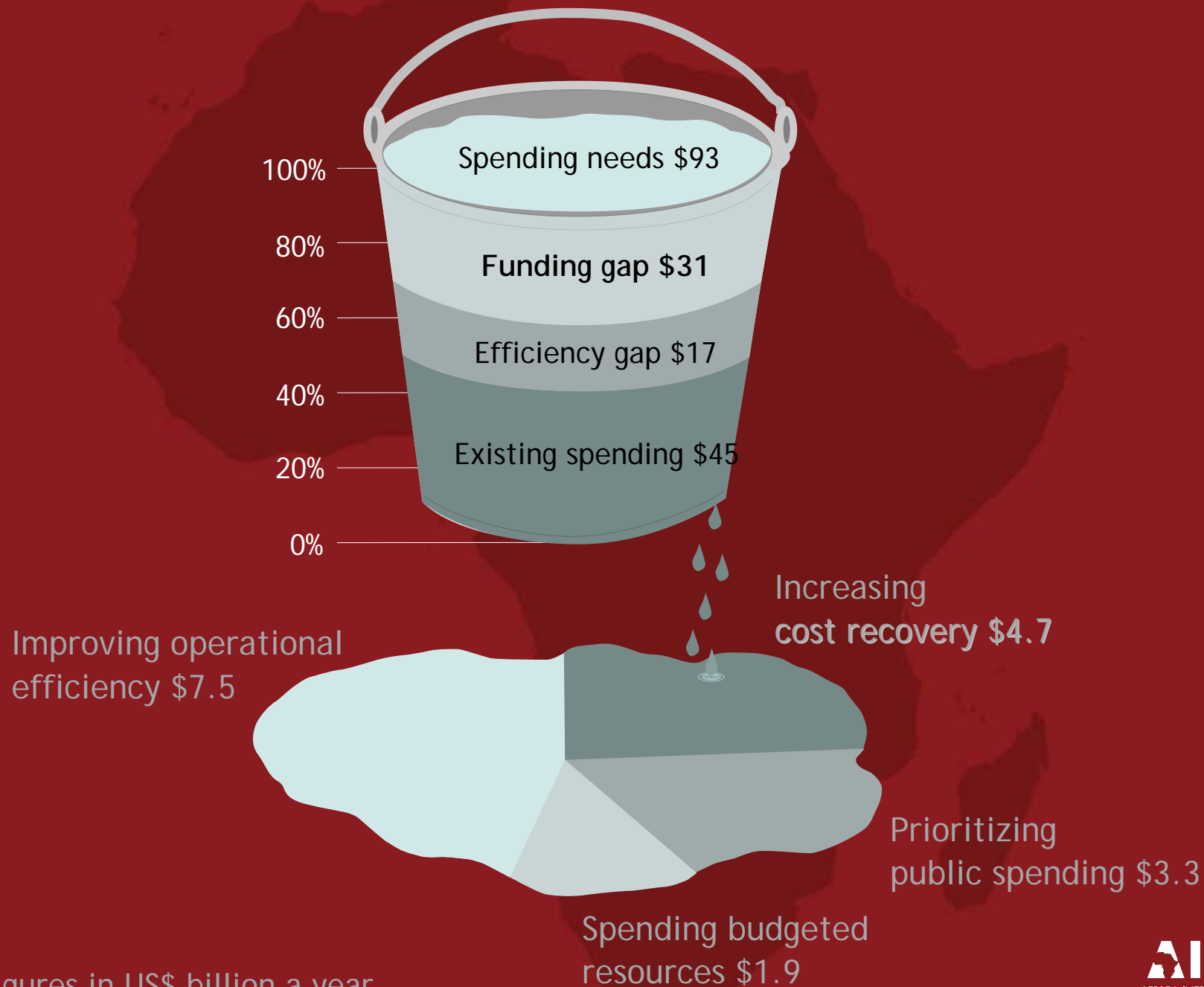


All figures in US\$ billion a year



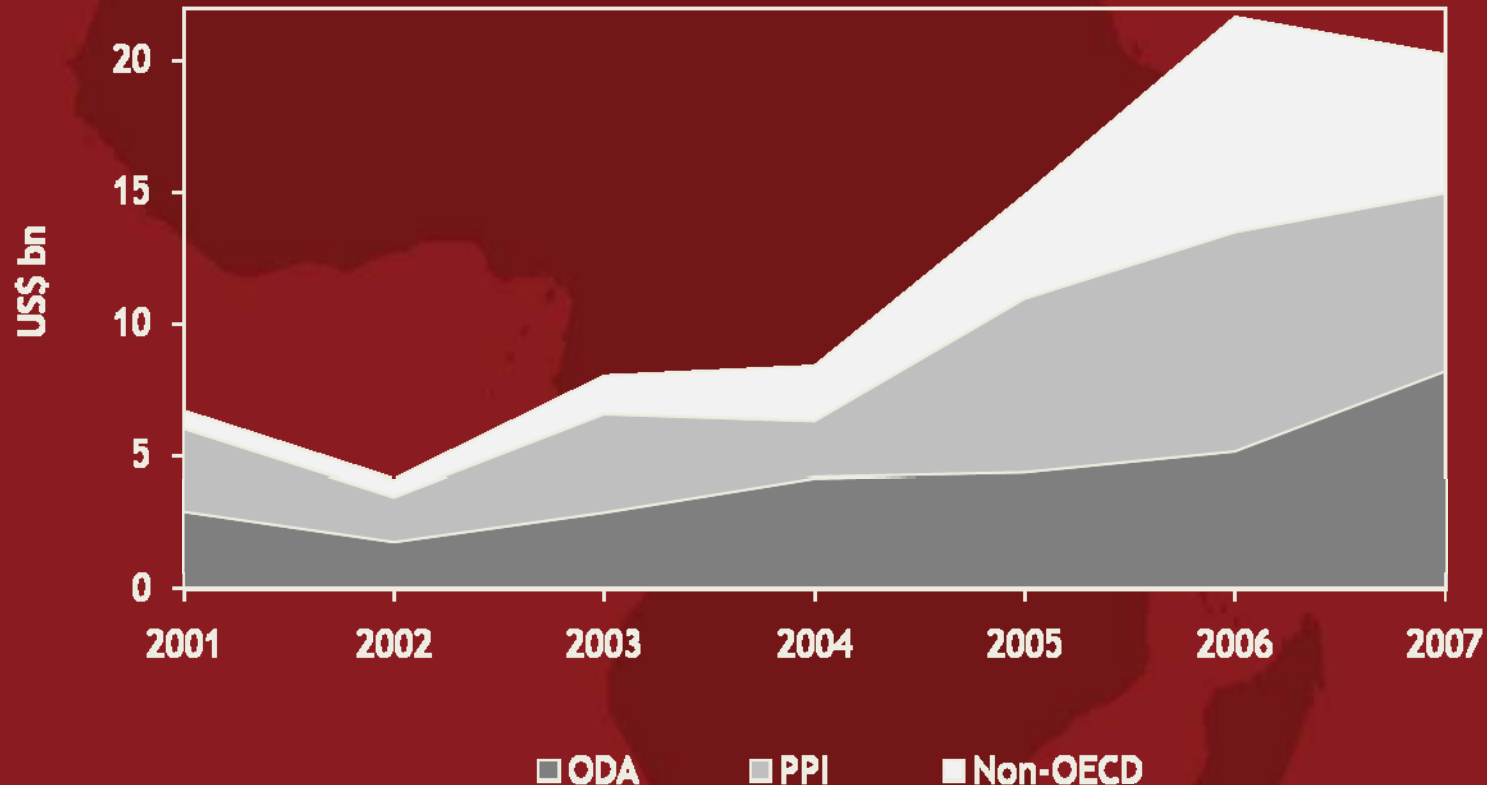
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All figures in US\$ billion a year

Recent years have witnessed a quadrupling of external finance from a variety of sources



How much to expect from private sector?

- ◆ Private finance limited to certain niches
 - ◆ Significant investment in ICT (\$28bn), thermal power generation (\$3bn) and ports (\$3bn)
 - ◆ Minimal appetite for power and water utilities, rails and roads
 - ◆ Makes significant contribution across country types
- ◆ Private management helps narrow efficiency gap
 - ◆ Positive impact on railroads, power and water utilities

Extent of infrastructure
challenge varies hugely
across countries

Extent of infrastructure challenge varies hugely across countries

	Percentage GDP			
	Needs	Spending	Efficiency gap	Funding gap
Middle income	(10)	6	2	(2)
Resource rich	(12)	5	3	(4)
Low income	(22)	10	3	(9)
Fragile states	(36)	6	5	(25)
Africa	(15)	7	3	(5)

For some countries, the only way to close the circle is by rethinking the targets

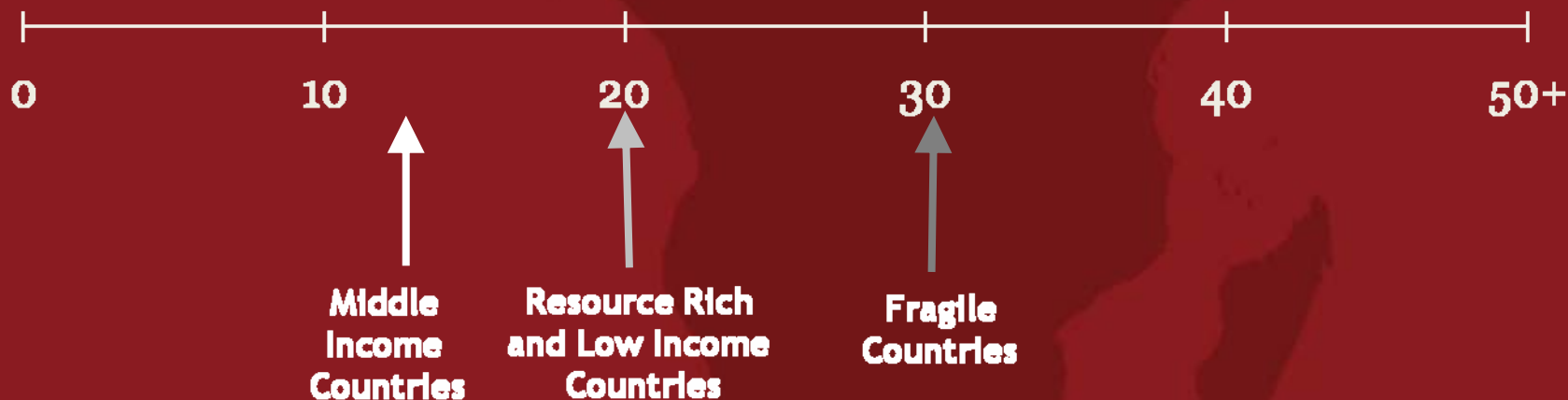
Time savings from efficiency gains

Existing spending

Middle
Income
Countries

Resource Rich
and Low Income
Countries

Fragile
Countries



Existing spending plus efficiency gains

Adopting lower cost technologies

- ◆ Tough trade-off between level of service and extent of service coverage
- ◆ In some sectors, cost savings are achievable
 - ◆ **Water and sanitation** – cost of MDGs can be reduced by 30% using stand posts and improved latrines
 - ◆ **Roads** – costs of regional and national connectivity can be reduced by 30% with appropriate standards

Final Message

Both increased funding and improved efficiency are needed to redress Africa's infrastructure deficit