



SDG Investor Maps in APAC

November 2021

What are the SDG Investor Maps?



- **Identifies investment themes** that have significant potential to advance the SDGs that are aligned to government policies and national development needs
- Evidence based solutions for tackling the impact of COVID-19
- Insights on private sector partnership opportunities and new funding streams that governments seek



• A unique service to government development efforts with UNDP driving the dialogue on **innovative finance-facilitation**



A platform for building private and finance sector networks



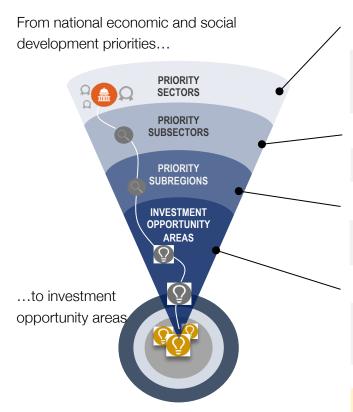
Opportunity to **leverage UNDP's network** to bring together International Financial Institutions (IFIs), UN and policy makers to boost collaboration



Provides Insights on new **funding streams** and opportunities for blended finance initiatives

SDG Investor Maps' methodology helps identify investment potential in SDG aligned opportunities.

Methodology



Define the national priority starting point

Distil and compare national development needs and national policy priorities to identify sectors where there is demonstrable political/financial commitment to stimulate development & investment

Identify priority subsectors to focus on

Prioritize subsectors where there is development need & policy/investment momentum

Identify priority subregions to focus on

Identify the subregions where there is both high development need within each subsector, and strong political/financial momentum to spur potential subsector growth

Derive specific Investment Opportunity Areas

Highlight impactful business models within priority subsectors and subregions where new capital can facilitate scale, and identify potential 'white spaces' where new business models are most needed

Note: a more detailed 8-step methodology within this 4-level funnel has been developed, including secondary research as well as interviews and consultations with investors, companies, governments and a range of other relevant stakeholders

The entire process is heavily consultative bringing together a wide range of public and private sector stakeholders

SDG Investor Maps in the APAC- A panoramic view.



2
COMPLETED

7
IN PROGRESS

3
PLANNED

Emerging trends from the region: SDG-aligned Sectors

Sector	Sub-sectors Relevant SDGs [direct]		Relevance to APAC	
Food & Beverage [Agriculture]	 Processed Food Food retailers and distributors Agricultural products Meat, Poultry and Dairy products 	SDG 2 [High degree of influence on other SDGs]		
Healthcare	 Bio-technology & pharmaceuticals Healthcare delivery Medical equipment & supplies 	SDG 3 [High degree of influence on other SDGs]*	8 of 9 countries	
Education	Formal EducationEducation TechnologyEducation Financing	SDG 4 [High degree of influence on other SDGs]	in the APAC have these as priority sectors	
Infrastructure	 Real Estate [Climate resilient and Affordable Housing] Waste management Water Utilities and Services 	11 SUSTAINABLE CITIES AND COMMONTIES 12 CRESPONSIBLE AND RODOCITION AND RODOCITION COOL TO BE SEPONSIBLE ACTION ACTION ACTION		
Renewable Energy & Alternative Resources	 Solar technology and project developers Water technology and project developers 	T GUIRDING AND THE STATE OF THE		
Financials	Consumer FinanceInsurance	Underpinning various SDGs	7 of 9 countries in the APAC prioritizes this sector	

Technology/ digitalization

&

Gender and marginalization are underpinning themes.

These sectors will continue to be important even in the context of the ongoing pandemic. However, new sub-areas are emerging within each sector to meet the changing needs

COVID-19 impact mentioned in expert consultations		Key Needs								
		Technology adoption / digitization	Industrialization / employment generation	Inclusion	Environmental Sustainability	Infrastructure development				
	W Healthcare	Telemedicine / remote treatment. Prevention and diagnostics. Vaccines.		Rural healthcare delivery Low-cost healthcare						
	Food and Beverage / Agriculture	Agri-tech to enhance productivity	Food processing units Marketplaces for agricultural products; Agri-waste processing	Digital platforms connecting farmers to marketplaces	Sustainable Agri practices; waste to energy products					
Sectors	Education / Skills Development	Remote skilling / EdTech Reskilling for digital economy	Industrial training	Rural re-skilling Skills development for women, teacher training		Skills development centers				
	Infrastructure (Water and Sanitation)	Use of data for resource optimisation			Waste treatment Waste to energy	Water and solid treatment Toilet infrastructure				
	Renewable Energy	Technologies to harness, store and distribute renewable energy			Energy efficiency	Solar / Wind / Hydro/ blended				
	Finance	Fintech / digital channels for financial services	Micro lending Payments	Low-collateral credit Social protection products						
	Technology and Communications		Modernising industries, especially MSMEs	Use of technology for last- mile connectivity	Deployment of green technology solutions					

How do we shortlist Investment Opportunities Areas (IOAs)?

1 Test emerging themes to determine if they meet the following criteria:

Alignment to development needs and policy priorities



Potential for private sector participations

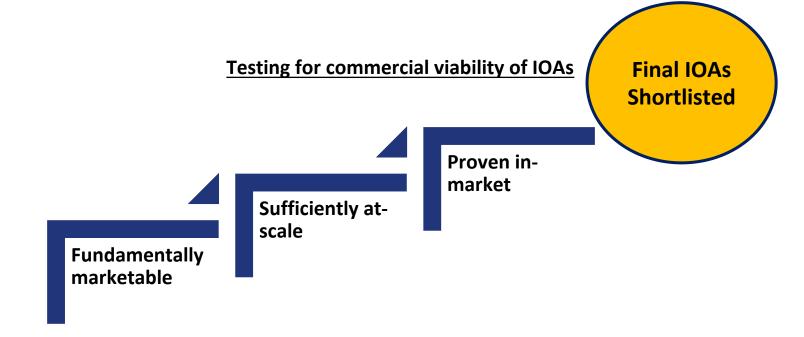


Examples of scalable models



Identified roadblocks to scale

- 2 Seek expert advice to rank emerging themes based on their ability to meet development needs and private sector interest
- Shortlist IOAs based on their <u>commercial</u> <u>viability</u> in addition to their ability to help countries meet their SDG commitments for 2030.



IOAs are underpinned by 20 actionable data points spanning business and impact considerations









INDIA: SAMPLE INVESTMENT OPPORTUNITY AREA

Low-cost hospital satellite centres/care units beyond urban areas.

Business Model: Technology-enabled, asset-light, scalable satellite centres or small care units to serve under-penetrated lower-tier cities and villages by providing quality healthcare services that are accessible and affordable.





Development need

- India has 1 hospital bed per 879 people -only a third of the global average.
- A large section of the population travels more than 100 km to access basic healthcare.



Expected development outcomes

- Contribute to access to quality and affordable healthcare
- Job creation in healthcare sector
- · Reduction in inequalities



Stakeholders impacted

- **Direct:** Patients in areas where public healthcare system does not provide adequate coverage.
- Indirect: Providing treatment options to Indians to reduce the strain on an underfunded public health network



IMP Classification

C: Contribute to Solutions given that this business model yields an important and intended outcome that can improve the access and quality of healthcare across cohorts



Economic considerations

- The hospital industry is expected to reach USD 132 bn by 2023
- Returns for hospital chains are expected to be between 5-15%
- It is likely to take at least **3-5 years** for a greenfield project to break-even



Enabling factors

- GOI announced USD 30.5 billion outlay for the healthcare sector in budget 2021-22, an increase by 137% over previous FY.
- 100% FDI is allowed under the automatic route for greenfield and brownfield project investments



Investment Timeframe

- It takes at least 3-5 years for a greenfield project to break even, even in urban areas
- Therefore, the break-even period is expected to be longer (5 years or more) in regions where the business model is needed the most.

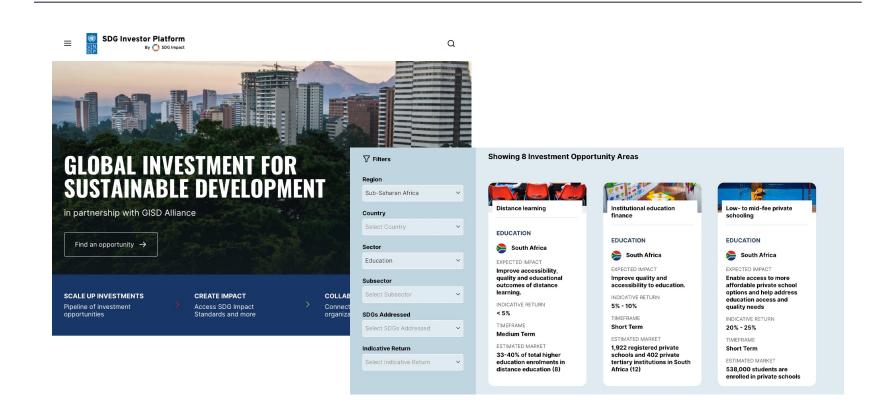


Risk Factors

- Execution Risk: The unit economics are not proven for new businesses and this may affect breadth of impact
- Stakeholder participation / external risk: The model will be most impactful with efforts to ensure universal health coverage by the Government otherwise the impact may be limited to those who can already afford private healthcare services



SDG Investor Maps result in IOA data sets for presentation in the SDG Investment Platform



The global <u>SDG Investor Platform</u> brings market intelligence and impact measurement tools to the desktop for foreign and domestic investors.





Actioning SDG Investor Maps in APAC:

- We will continue to build a critical mass of SDG Investor Maps for the region over next year;
- The process will allow us to highlight areas for policy intervention and where innovative financing mechanisms are best suited to push the SDG goals;
- 3. Organize events designed to attract investor interest inviting them to apply the market intelligence to develop SDG enabling investment thesis;
- 4. Host the maps on the global SDG Investor Platform that currently hosts maps for 17 other countries;
- 5. Contribute to the building of an ecosystem that recognizes the business value in SDGs and a sustainable world for the people and the planet.







































Annexes

Emerging trends from the region: SDG aligned Sectors

Sector	Relevant SDGs [direct]	Indonesia	Thailand	Vietnam	Cambodia	Sri Lanka	Bangladesh	Pakistan	India	China
Food & Beverage [Agriculture]	SDG 2 [High degree of influence on other SDGs]	~	~	~	~	~	~	~	~	
Healthcare	3 GOODHEATH	~	✓	~	~	~	~	~	~	
Education	SDG 4 [High degree of influence on other SDGs]	~	~	~	~	~	~	~	~	
Infrastructure [Affordable Housing, Waste, Water Utilities]	11 SUSTAINABLE CITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION AND PRODUCTION	~	✓	✓	~	~	~	~	✓	
Renewable Energy & Alternative Resources	[High degree other	~	~	~	~	~	~	~	~	~
Financials	Underpinning various SDGs	~	~		~	~	~	~	~	

SASB's Sustainable Industry Classification System (SICS)

CONSUMER GOODS

- Apparel, Accessories & Footwear
- **Appliance Manufacturing**
- **Building Products & Furnishings**
- E-Commerce
- **Household & Personal Products**
- Multiline and Specialty
- **Retailers & Distributors**
- **Toys & Sporting Goods**

HEALTH CARE

- Biotechnology & Pharmaceuticals
- **Drug Retailers**
- **Health Care Delivery**
- **Health Care Distributors**
- Managed Care
- Medical Equipment & Supplies

- **Electronic Manufacturing Services &**
- Original Design Manufacturing
- **Internet Media & Services**

- **Telecommunication Services**

FOOD & BEVERAGES

- **Agricultural Products**
- **Alcoholic Beverages**
- Food Retailers & Distributors
- Meat, Poultry & Dairy
- Non-Alcoholic Beverages
- **Processed Foods**
- Restaurants
- Tobacco

RESOURCE TRANSFORMATION

- Aerospace & Defense
- Chemicals
- **Containers & Packaging**
- **Electrical & Electronic Equipment**
- **Industrial Machinery & Goods**

EXTRACTIVES & MINERALS PROCESSING

- **Coal Operations**
- **Construction Materials**
- Iron & Steel Producers
- Metals & Mining
- Oil & Gas Exploration & Production
- Oil & Gas Midstream
- Oil & Gas Refining & Marketing
- Oil & Gas Services

SERVICES

- Advertising & Marketing
- **Casinos & Gaming**
- **Hotels & Lodging**
- Leisure Facilities
- Media & Entertainment
- **Professional & Commercial Services**

FINANCIALS

- **Asset Management & Custody Activities**
- Commercial Banks
- Consumer Finance
- Insurance
- Investment Banking & Brokerage
- Mortgage Finance
- Security & Commodity Exchanges

INFRASTRUCTURE

- **Electric Utilities & Power Generators**
- **Engineering & Construction Services**
- Gas Utilities & Distributors
- **Home Builders**
- Real Estate
- **Real Estate Services**
- Waste Management
- Water Utilities & Services

TECHNOLOGY & COMMUNICATIONS

- Hardware
- Semiconductors
- Software & IT Services

RENEWABLE RESOURCES & ALTERNATIVE ENERGY

- **Biofuels**
- **Forestry Management**
- Fuel Cells & Industrial Batteries
- **Pulp & Paper Products**
- Solar Technology & Project Developers
- Wind Technology & Project Developers
- Electric Vehicle¹

TRANSPORTATION

- Air Freight & Logistics
- Airlines
- Auto Parts
- Automobiles
- Car Rental & Leasing
- Cruise Lines
- Marine Transportation
- **Rail Transportation**
- **Road Transportation**

EDUCATION / SKILLS DEVELOPMENT¹

- Education Financing¹
- Education Technology¹
- Formal Education¹

Note: 1. We have added sectors and sub-sectors which were not covered under SASB classification.

Source: https://www.sasb.org/wp-content/uploads/2018/11/SICS-Industry-List.pdf

Renewable Energy: Sector alignment with development needs and policy priorities:



Scope for private

sector participation

<u>Market size</u>: Indonesia aims to make renewable energy contribute at least 23% of the total energy mix by 2025. The country also commits to decrease GHG emissions by 29% by 2030.

<u>Development Need</u>: According to Institute for Energy Economics and Financial Analysis (IEEFA) estimates, only **24 MW** of solar, including solar rooftop units, are currently installed and dispatchable to the grid in 2019.

<u>Direct stakeholders</u>: According to International Renewable Energy Agency (2017) **1.1 million households** in remote areas of Indonesia lack adequate access to electricity.

<u>Skilled workforce supporting the sector</u>: RE related industries generate a total of **4.6 million jobs** in Indonesia.

Requires more

research

Limited scope of

investment

Obstacles to scale

Sub-Sector	Emerging Themes	Identified IOAs	Obstacles to scale, if any	Examples of commercially viable businesses models
Solar Technology and project	Solar energy-based energy solutions	Solar PV system / Rooftop Solar for specific use: industrial, housing, office, school, road		XURYA VENA ENERGY
developers	Solar energy-based equipment	Manufacturing and selling of Solar Street Lights, Solar Water Pumping System, etc.		JSKÝ By Sky Energy
Wind technology and project developers	Wind energy-based energy solutions	Wind farm electric power plant	Not scalable since the capacity to generate electricity is only viable in eastern (low population levels; not well explored) or certain coastal Indonesian areas	UPC Renewables VENA ENERGY
Others	Hybrid power projects	Smart-Grid Pilot Project using Hybrid Generation System – Solar-Wind Hybrid, Solar-Diesel Hybrid, Wind-Diesel Hybrid		

Requires more

research

Renewable Energy: Sector alignment with development needs and policy priorities:

Sub-Sector	Emerging Themes	Identified IOAs	Obstacles to scale, if any	Examples of commercially viable businesses models
Others	Hydro energy-based energy solutions	Mini hydro, micro hydro (1-10 MW), hydro plants of more than 10 MW	High costs related to land; Social and environmental issues pertaining to operating in conservation areas	
	Biomass	Energy generation using waste from palm-oil plantation, pineapple farms, etc.	Model is not as scalable and concentrated in areas close to farmlands.	
	Energy-efficiency	Energy Storage systems	More public policy initiative required to promote private investment	
		Manufacturing and trading of efficient energy management solutions / equipment	More public policy initiative required to promote private investment	
	Green Transport	Manufacturing and Trading of Electric Vehicles	Existing investment in fossil fuel- based vehicle businesses discourages private investment towards electric vehicle manufacturing / trading	

Scope for private sector participation

Obstacles to scale

Limited scope of investment

Requires more research

Requires more research