



CLEANTECH START-UPS CAN SOLVE CLIMATE CHANGE

ASIA NEEDS CLEANTECH SOLUTIONS



Asia and the Pacific is home to

4.4 billion people

(UNESCAP)



About **44 million people** are being added to Asia's urban population every year. That is equivalent to **120,000 people** a day.



700 million people in Asia have no access to electricity.

By 2025



750 million people in Asia will be at risk from inland and coastal flooding.

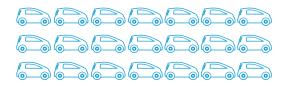
(ADB)

By 2030



Agriculture will need to produce 60% more food globally and 100% more in developing countries using diminishing water resources.

By 2035



Asia will have more than

1 billion vehicles

(Clean Air Asia)

As much as **80% of air pollution** in Asia's cities are already attributable to transport.

Asia will emit **20 billion tons of CO**₂ representing **46%** of the planet's emissions





Consume **54%** more energy.

(BP Outlook)

By 2050

88% of Asia's population will experience water scarcity.

(ADB/IIASA)



CLEANTECH IS A BIG NEW MARKET OPPORTUNITY

Cleantech refers to innovative technologies, products, and services that enable the more efficient use and management of energy and natural resources, reducing waste while providing superior performance at lower or comparable costs. It covers:



Clean energy and energy storage



Green materials



Energy and resource efficiency



Sustainable agriculture



Smart cities



Smart grids



Smart industry



Sustainable transport



Water, land, and air quality



Recycling & waste

New disruptive innovations are unlocking new big cleantech markets



Global market for clean technologies by 2020

(Frost & Sullivan)



Annual market for clean technologies in developing countries in the next 10 years.

(World Bank)

Large-scale and widespread deployment of cleantech solutions

Scalable and bankable cleantech solutions and business models

Strong and investable cleantech entrepreneurs

Cleantech start-up support

START-UPS DRIVE THE CLEANTECH INDUSTRY

Entrepreneurs and start-ups are driving disruptive innovation and the growth of clean technology.

They develop the technologies, business models, products, and services required to deploy and finance cost-effective cleantech solutions at scale.

They create jobs and new opportunities for inclusive growth.



70%

of renewable energy companies in the People's Republic of China were founded after 2010



4 of top 10

global electric car manufacturers are less than 15 years old



75% of India's solar PV capacity installed by young entrepreneurs



8 of top 10

global solar PV manufacturers are less than 20 years old

CLEANTECH START-UPS STILL FACE SIGNIFICANT CHALLENGES

In Asia, major barriers include:

Lack of cleantech entrepreneurs



of total start-ups in Asia are categorized as cleantech start-ups.

Lack of access to risk capital



of global cleantech venture capital investment goes to cleantech entrepreneurs and start-ups in Asia.

> Lack of cleantech communities and support systems



cleantech-focused incubators and accelerators in developing Asia.

HOW ADB SUPPORTS THE CLEANTECH START-UP JOURNEY

DEVELOP THE IDEA

Agriculture Recycling



Energy Efficiency

Water

Smart Cities

What are the **OPPORTUNITIES?**



START-UP CAFÉ PHILIPPINES

organized the first major cleantech event in the Philippines, bringing together 200 participants including start-ups, investors, policy-makers and researchers.



NEXUS ACTION CONTROLL

Together with California Clean ADB supports the New Energy practices of cleantech start-up accelerators and incubators around the world.

INCREASED CLEANTECH ADB supports:

- Cleantech innovation trends
- New business and investment models
- Cleantech policy analysis
- Industry survey & mapping



ADB \$6 billion annual



MORE INVESTABLE CLEANTECH BUSINESSES

ADB works with:



 Leading cleantech accelerators, incubators, and start-ups across Asia

MORE RISK CAPITAL FOR CLEANTECH

ADB provides expertise, advice, and support:



- First-time cleantech VC/PE funds and investors
- Non-institutional investors
- Public-private & non-equity financing



RAISE CAPITAL

Banks -----

Angels/family/friends •-----

Venture Capital/Private Equity ●-----

Corporate investors •-----

ASIA CLIMATE **PARTNERS**

ADB supports the new \$400M Asia Climate Partners fund, Asia-Pacific's first

\$1.3 TRILLION GLOBAL

CLEANTECH MARKET

HCP



POWERSTART INDIA

ADB partnered with Powerstart, India's leading cleantech accelerator programme. Out of 400 business plans evaluated, 40 start-ups received training from among 100 mentors and experts with 12 successfully receiving financing.

Kazakhstan

₩ HOST

India



Viet Nam



powerstart

People's Republic of China



Ideaspace

Philippines

SCALE THE BUSINESS

















About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to the majority of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

About ADB's Asia-Pacific Climate Technology Finance Center

ADB's Climate Technology Finance Center seeks to accelerate clean technology entrepreneurship and investment in Asia by supporting activities, programs, and partnerships that aim to produce:



ASIAN DEVELOPMENT BANK

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