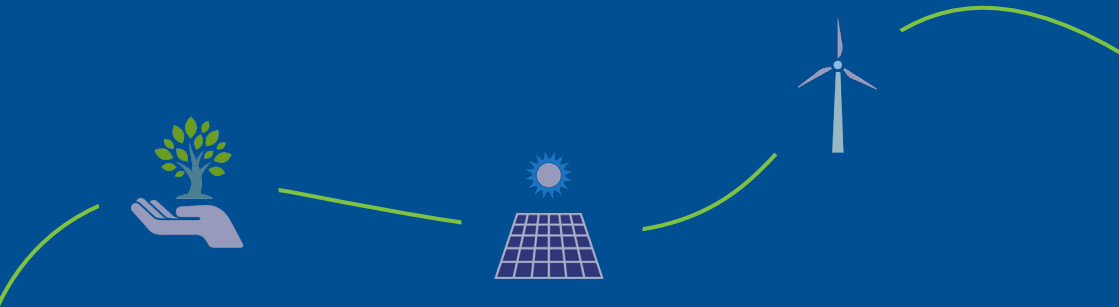


Bird & Bird & Energy Transition & Singapore



From Fossils to Zero Carbon

The path to decarbonisation?

CO2 emissions must be cut to limit climate change. Decarbonisation of the energy sector requires imminent energy transition. Renewable energy and energy efficiency measures are key to achieving the required carbon reductions.

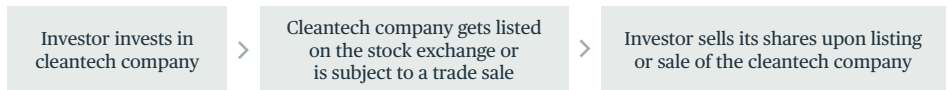
What are the types of investments?

- Joint Ventures & Collaborations
- Mergers & Acquisitions
- Strategic Loans & Green Bonds
- R&D & Testbedding

Who are the investors?

Venture capital funds, private equity firms, angel investors, family offices and the public sector.

Life cycle of a cleantech investment, start-up to exit



Why Singapore? - A Hub for Smart Sustainable Solutions

Singapore is positioning itself as a hub for renewable energy deployment, innovation and investments and has distinct competitive advantages which set itself apart from other countries in the region.

These competitive advantages include:

- Stable and supportive government encouraging foreign investment;
- Robust R&D climate through the provision of grants and incentive schemes;
- World-class intellectual property regime protecting the jurisdiction's strong R&D capabilities;
- Established renewable energy eco-system which offers technical experience, financial markets and top class investment climate; and
- Excellent connectivity to other regional markets and its access and attractiveness to skilled international talent.

Start-Ups

As part of its plan to strategically position itself as a leading sustainable energy hub in the region and in tandem with the emerging interest in deep tech sectors, the Singapore government has initiated several strategic funding and incentive schemes to promote urban solutions and sustainability.

There are excellent prospects to develop virtual power plants, demand response initiatives, smart buildings and intelligent energy solutions for resilient urban systems.

StartupSG

StartupSG, a division of Enterprise Singapore, brings together an array of schemes and a network targeted at nurturing green startups at any size or stage of growth. StartupSG aims to support startups in identifying options for the transformation of the energy landscape in Singapore and the region.

Global Innovation Alliance

The Global Innovation Alliance (GIA) is a network of Singapore and overseas partners in major innovation hubs and key demand markets, with a focus on technology and innovation. It is a joint initiative between Enterprise Singapore and the Economic Development Board.

Start-Ups (Cont.)

GIA partners in-market players across GIA cities to run inbound and outbound GIA Acceleration Programmes to connect companies to overseas business and tech communities. The GIA Acceleration Programmes will support:

- Singapore startups and small-medium enterprises (SMEs) in venturing abroad; and
- International startups in scaling up in Asia through Singapore as a springboard



Intellectual Property & Innovation

For companies engaged in renewable energy R&D, where brand identification and state of the art technology is often the key to commercial success, Intellectual Property plays a huge role in safeguarding a Company's interest.



- Points to Note:
- IP protection is often territorial (i.e. Protection in 1 country/jurisdiction does not protect in another)
 - IP protection is sometimes limited only to the class registered in (i.e. Trademarks must be registered in specific category)

Harnessing Technology for Energy Transition

Repurpose

Look for new uses and applications
for existing technologies;
e.g. thermal films improve existing solar
panels, solar panels as shelters

Scale

Tap into the smart-nation
and big data initiatives;
e.g. nation-wide sensors and
publicly-accessible datasets

Always-on, always-
there sensors;
e.g. smart watches
and devices

Disrupt

Challenge norms;
e.g. energy-recovery
roadways and tracks

Crowd-fund, crowd-
source as a resource

Hydrogen

To encourage diversification of our energy sources, Singapore is looking towards adoption of Hydrogen and Fuel Cell technology as a low-carbon alternative. Feasibility studies, pilot projects and sandboxed trials are undertaken by a mix of public and private players to study the mass deployment of Hydrogen as a practical, reliable and cost-effective energy source.

Memorandums
of Understanding
between industry
experts to
study Hydrogen
deployment

Formation
of industry
associations

Consultancy
studies, grant
calls and pilot
projects initiated
by Government
and Government-
related bodies

Regulatory
sandbox
framework by
EMA

Helping you achieve sustainable solutions

Bird & Bird's dedicated involvement in the sustainable energy and cleantech sectors forms part of our longstanding work in the energy and utilities sector.

Our international energy & utilities team advises commercial enterprises and public sector entities on a wide range of legal issues including power purchase agreements, demand response programs, microgrids, energy storage, carbon mitigation, IP assets, hydrogen fuel cells, green loans and electricity futures.

Our clients include many organisations that are developing or investing in projects that offer technological solutions to the challenges presented by the combined forces of climate change and energy security.

We provide legal support to our clients on M&A, fund-raising, energy regulation, project management, sustainability reporting, intellectual property, commercial contracts and dispute resolution.

Our clients:

- Onsite & offsite solar
- Sustainability & Decarbonisation
- Waste to energy
- Hydrogen
- Biomass
- Batteries and Fuel Cells
- Microgrids & distributed generation
- Hydro power
- Grid & Transmission
- E-mobility
- Digitalisation

Understanding your sector & a
switched-on international legal team
& real passion & creative energy &
leading to bright ideas & sustainable
solutions & making deals happen &
that's Energy Transition
with Bird & Bird

Get in touch



Sandra Seah

Joint Managing Partner, Singapore

Tel: +65 6428 9429

sandra.seah@twobirds.com



Ken Cheung

Partner, Singapore

Tel: +65 6428 9893

ken.cheung@twobirds.com

Find out more about our services at www.twobirds.com/en/sectors/energy-and-utilities

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