



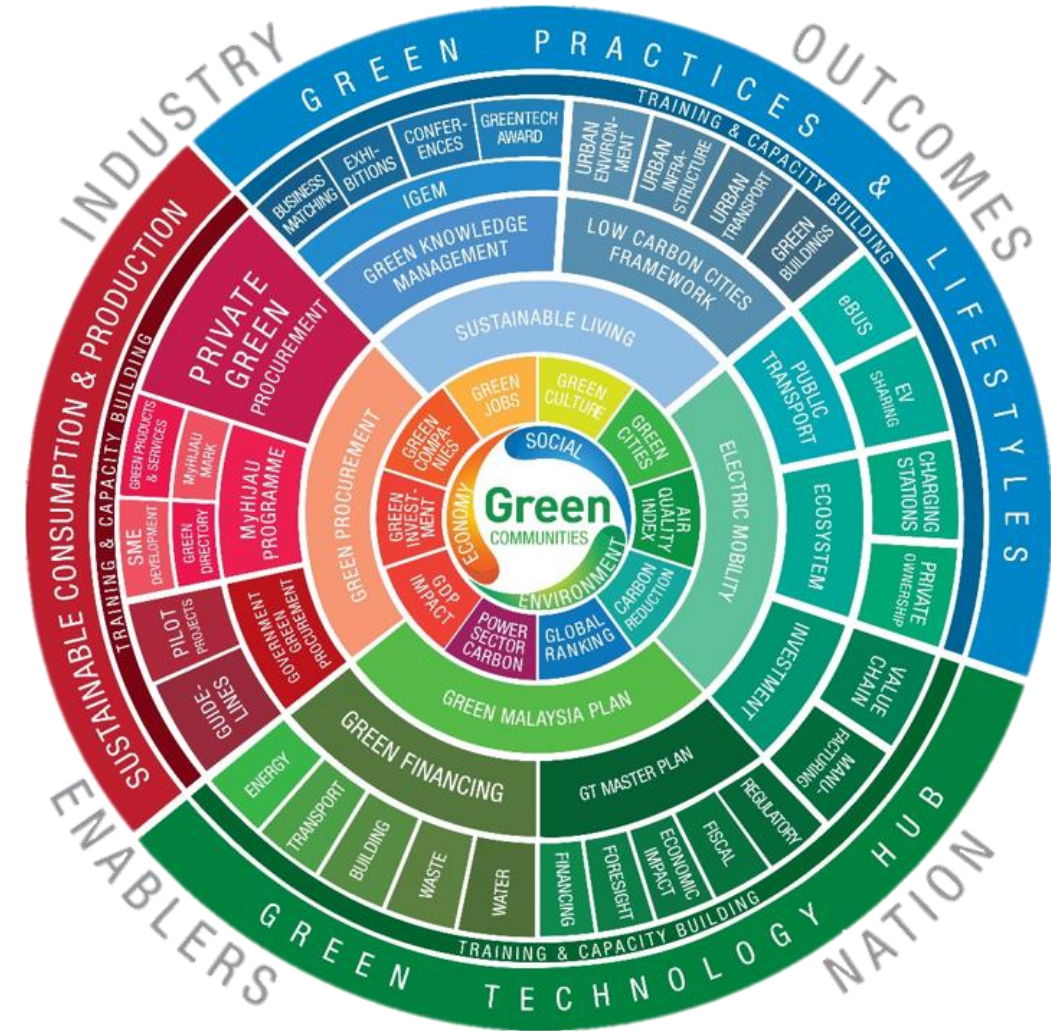
**CATALYSING GREEN
GROWTH**

GREEN CLIMATE
FUND
STRUCTURED
DIALOGUE WITH
ASIA

26-29 APRIL 2017
Bali, Indonesia

OUTLINE

- About GreenTech Malaysia
- Green Technology Financing Scheme
- Issues and Challenges to Accelerate Green Investments
- Unlocking Private Investment For Green Growth
- Financial Mechanism For Green Investments



ABOUT MALAYSIAN GREEN TECHNOLOGY CORPORATION (GREENTECH MALAYSIA)



An organization under the purview of the **Ministry of Energy, Green Technology & Water**, Malaysia

PURPOSE: To catalyse green technology deployment as a strategic engine for Malaysia's socio-economic growth

GOAL: Establish Malaysia as a world hub for Green Technologies

NATIONAL GREEN TECHNOLOGY POLICY

LAUNCHED ON 24 JULY 2009

POLICY STATEMENT

**GREEN TECHNOLOGY SHALL
BE A DRIVER TO
ACCELERATE THE
NATIONAL ECONOMY AND
PROMOTE SUSTAINABLE
DEVELOPMENT.**

FOUR PILLARS OF GREEN TECHNOLOGY POLICY

ENERGY

Seek to attain
energy
independence
and promote
efficient
utilisation.

ENVIRONMENT

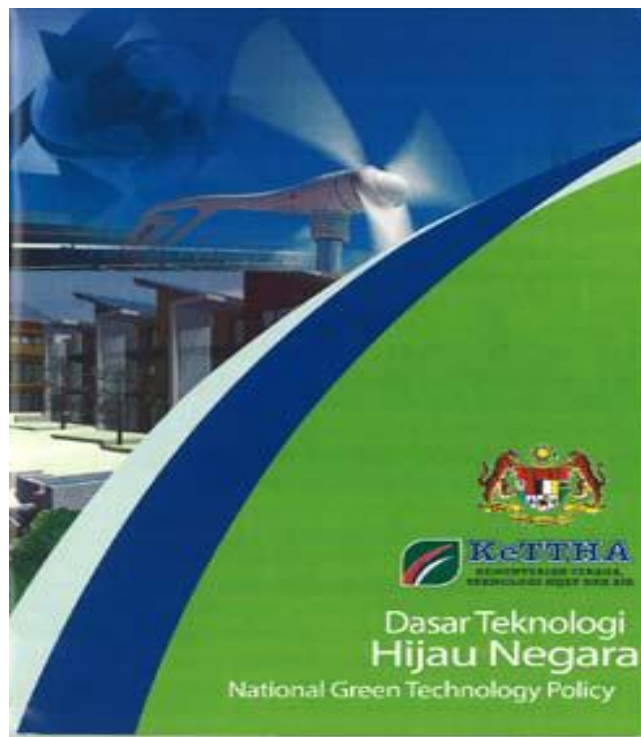
Conserve and
minimize impact
to the
environment.

ECONOMY

Enhance the
national
economic
development
through the use
of technology.

SOCIAL

Improve the
quality of life for
all.



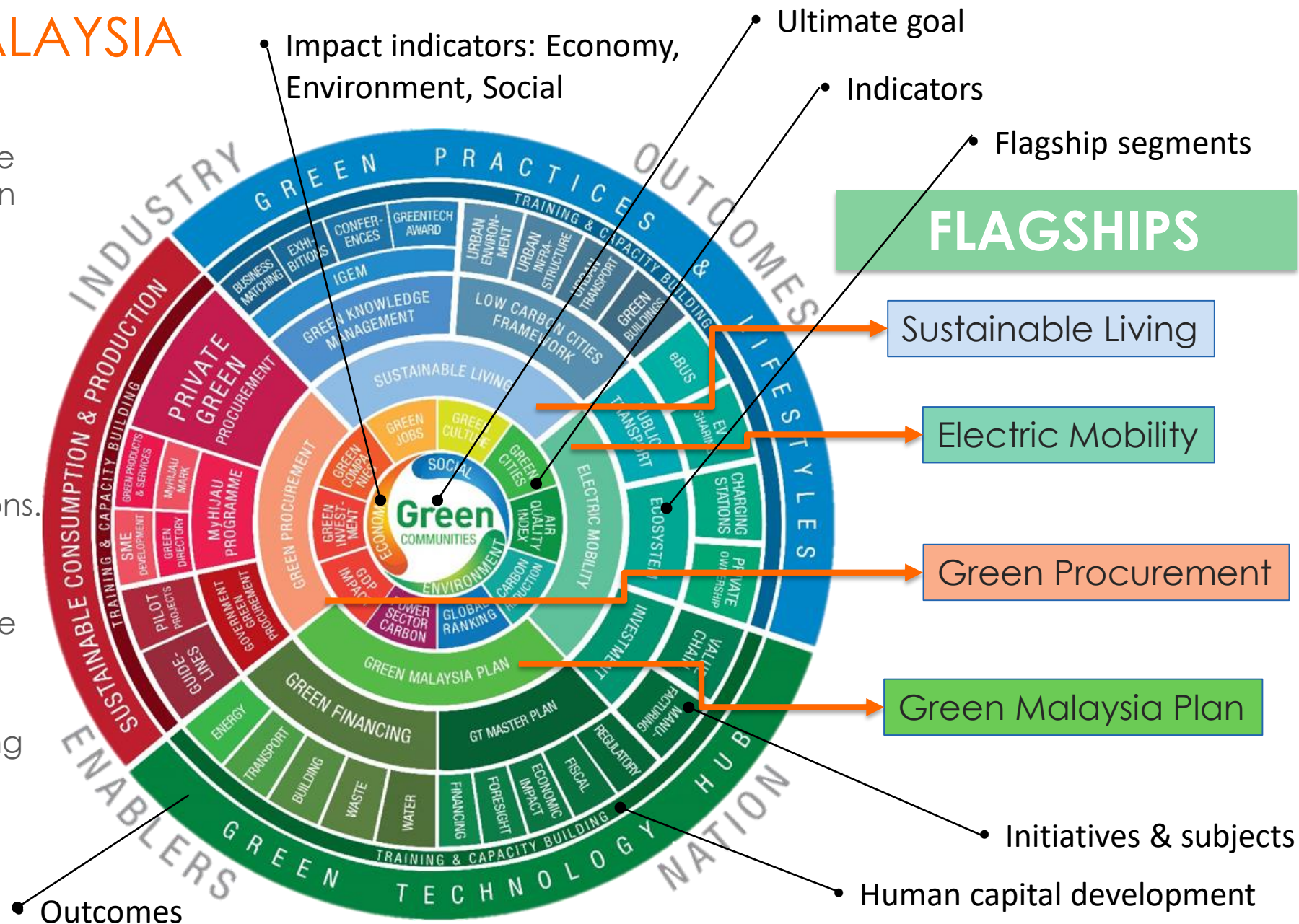
**MINISTRY OF ENERGY,
GREEN TECHNOLOGY AND WATER
(KeTTHA)
MALAYSIA**

Responsible for the
planning and formulation
of policies for energy,
green technology and
water sectors, as well as
to facilitate and regulate
the growth of these
sectors.

GREENTECH MALAYSIA

Strategic Focus Areas:

- ❑ Developing sustainable and widespread Green Technology **markets**.
- ❑ Strengthening local Green Technology **industry**.
- ❑ Enhancing **human competency and capacity** in Green Technology applications.
- ❑ Formulating **support policies and financing frameworks** to promote Green Technology growth.
- ❑ Promoting and creating **awareness** on Green Technologies.



ENSURING BUSINESS SUSTAINABILITY



Incorporated on 1st June 2015.

Accelerate the growth of Malaysia's green market through strategic partnerships offering innovative sustainability solutions.



Incorporated on 15th October 2015.

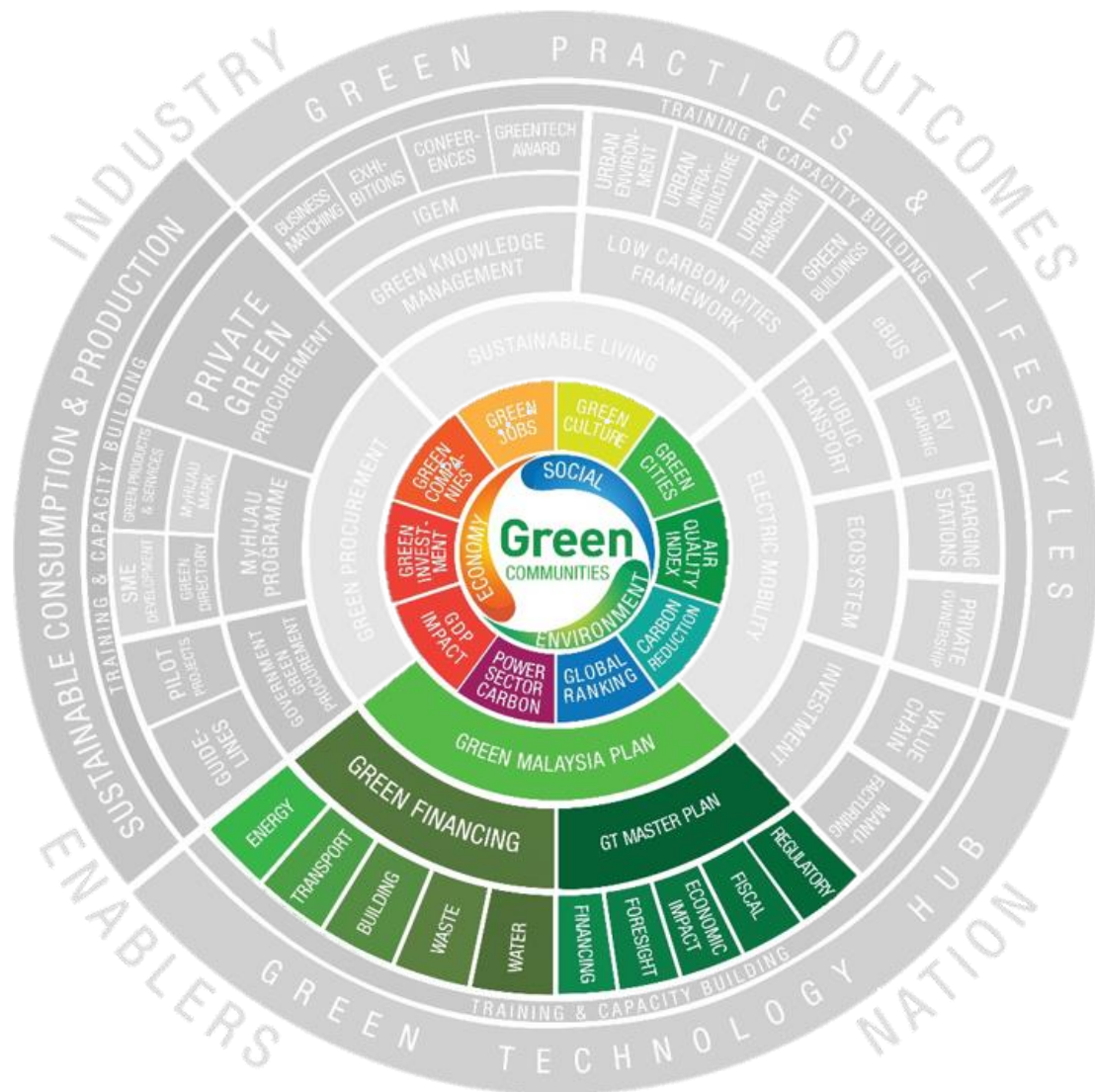
Expedite the adoption of green technology through the provision of advisory and business services in finance, entrepreneurship, standardisation and incentives.



Incorporated on 16th March 2016

Promote sustainable lifestyle through on-ground public engagements; develop green skills through customised training programmes; as well as spur the green economy through industry-level international exhibitions and professional consultancy.

FLAGSHIP: GREEN MALAYSIA PLAN



GREEN MALAYSIA PLAN
Formulate supportive instruments, blueprints and green financing mechanisms

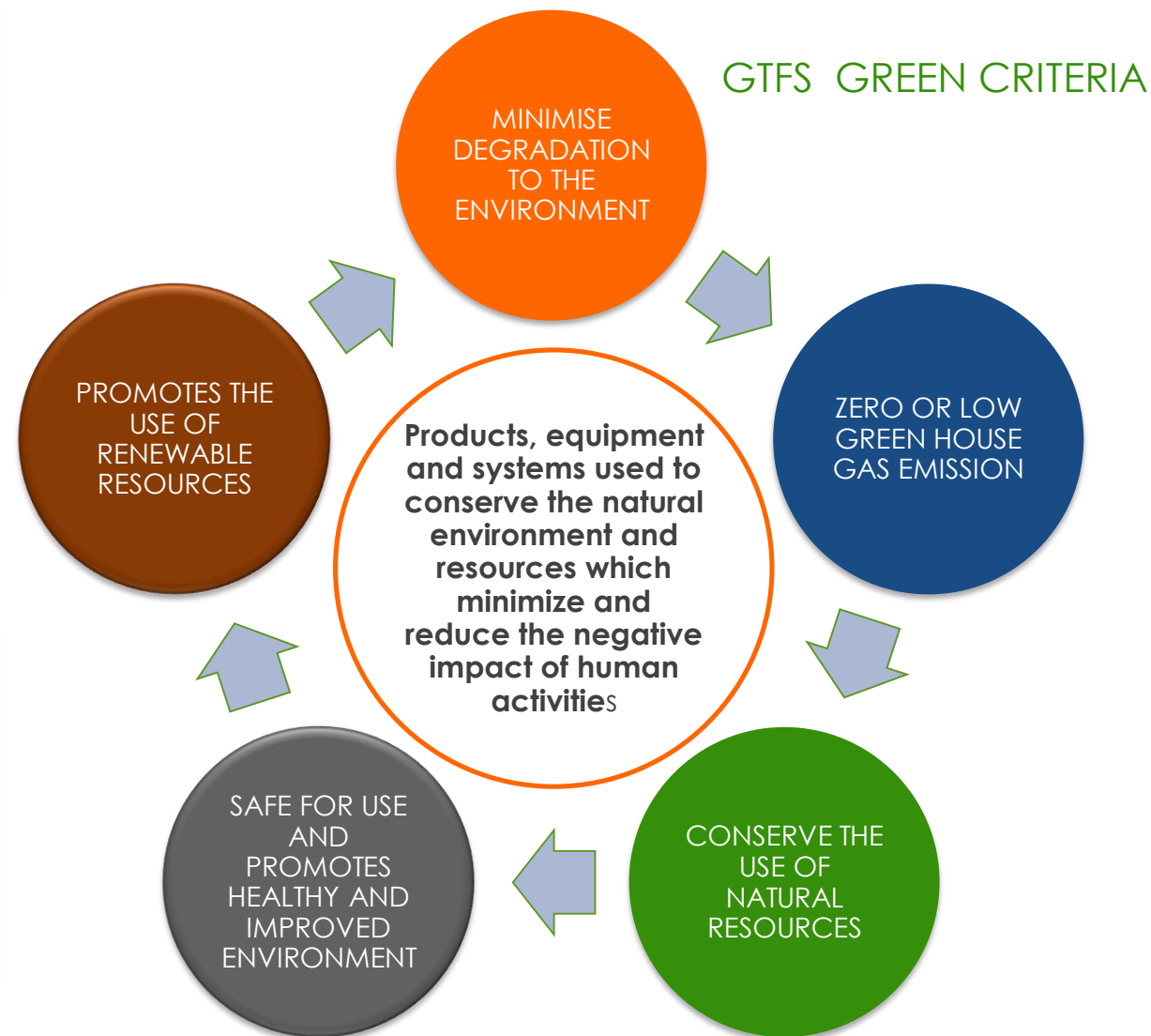
GREEN TECHNOLOGY FINANCING SCHEME (GTFS)

Financial Incentive introduced in 2010 till 2017 with a total target financing approval of RM3.5 billion.

Objective is to promote green investments by providing easier access to financing and at a lower financing costs.

Incentives:

- 60% Government Guarantee on financing provided by financial institutions.
- 2% rebate on interest/profit rate charged by financial institutions.



RM164.3m
(USD37m)

272 PROJECTS



GREEN TECHNOLOGY FINANCING SCHEME

Empowering Green Businesses

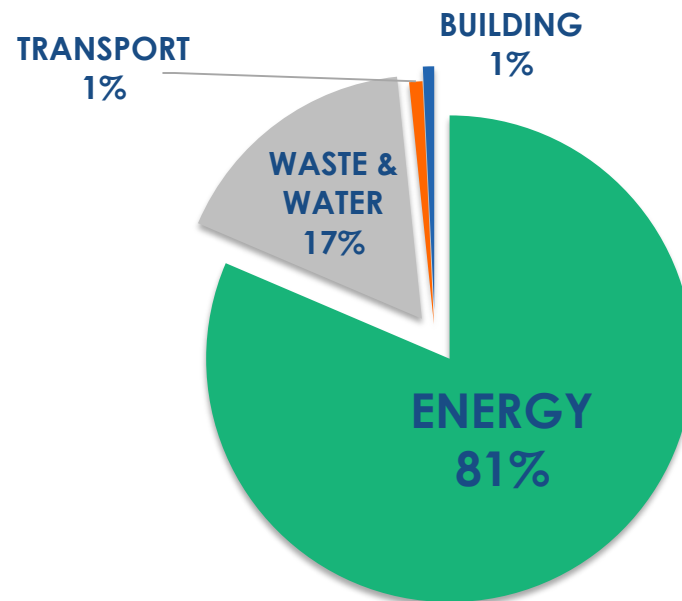


OUTCOME

2010

2016

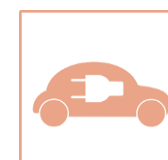
FINANCING APPROVALS BY SECTOR (RM)



ENERGY
RM2.33b
(USD524m)



**WATER &
WASTE
RM485m
(USD109m)**



TRANSPORT
RM25.2m
(USD5.7m)



BUILDING
RM21.4m
(USD4.8m)

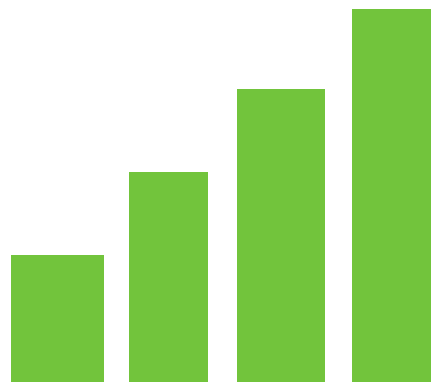
GTFS IMPACT



**PARTICIPATING
FINANCIAL
INSTITUTIONS: 28**



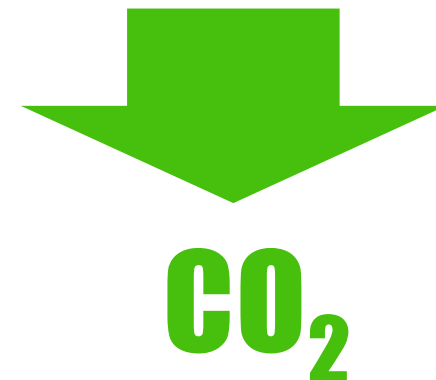
**GREEN
PROJECTS:
272**



**GREEN
INVESTMENTS:
RM5.8 billion
(USD1.05b)**

**GREEN
JOBS**

**GREEN
EMPLOYMENT:
4,645**



**GHG EMISSIONS
REDUCTION:
3.161tCO2eq/yr**

RENEWABLE ENERGY –SOLAR FARM

Project Name	Renewable Energy Project – 8MW Solar Farm Project
Sector	Energy – Solar Farm
Category	Producer
Total Investment	RM110m (USD26.6m)
Finance amount	RM50m (USD12.1m)
Estimated Annual CO₂ Reduction	8,869.35 tCO ₂ eq



RENEWABLE ENERGY – SOLAR ROOFTOP

Project Name Renewable Energy Project – 4 MWp Solar Rooftop

Sector Energy – Rooftop

Category Producer

Total Investment RM43.8m (USD10.6m)

Finance amount RM36.8m (USD8.9m)

Estimated Annual CO₂ Reduction 3,549 tCO₂eq



CASE: WASTE SECTOR - BIOMASS

Project	Biomass Pellets Manufacturing Facility
Sector	Waste
Category	Producer
Raw Materials	Palm kernel shell and wood chips
Total Investment	RM15.8m (USD3.8m)
Finance Amount	RM5.0 (USD1.2m) for raw materials
Estimated Annual CO₂ Reduction	11,325.000 tCO _{2eq}
Project Operation Date	Mid 2015



CASE: WASTE - RECYCLING

Project Description Recycle Paper Mill production line – expansion and construction of waste water treatment plant

Sector	Waste & Water
Category	Producer
Raw Materials	Waste paper
Total Project Cost	RM60m (USD14.5m)
Finance Amount	RM42.5 (USD10.3m)
Estimated Annual CO₂ Reduction	43,146 tCO _{2eq}
Project Operation Date	Year 2012



ISSUES & CHALLENGES TO ACCELERATE GREEN INVESTMENTS



- Public funding resources are limited to cater for the immense green infrastructure investment
- Green technologies often have higher initial capital costs.



- Novel technologies and business models lack pertinent information and face information asymmetries
- Certain green technologies have real or perceived higher risks.



- Knowledge gap in evaluating green technologies and involved high cost of due diligence checks.
- Limited track record of consistent returns.

UNLOCKING PRIVATE INVESTMENT FOR GREEN GROWTH

PUBLIC SUPPORT MECHANISM

Policy and Overarching Policy Support

Feed-in –
Tariff

Tax
Incentives

Standards

Project Level Assistance

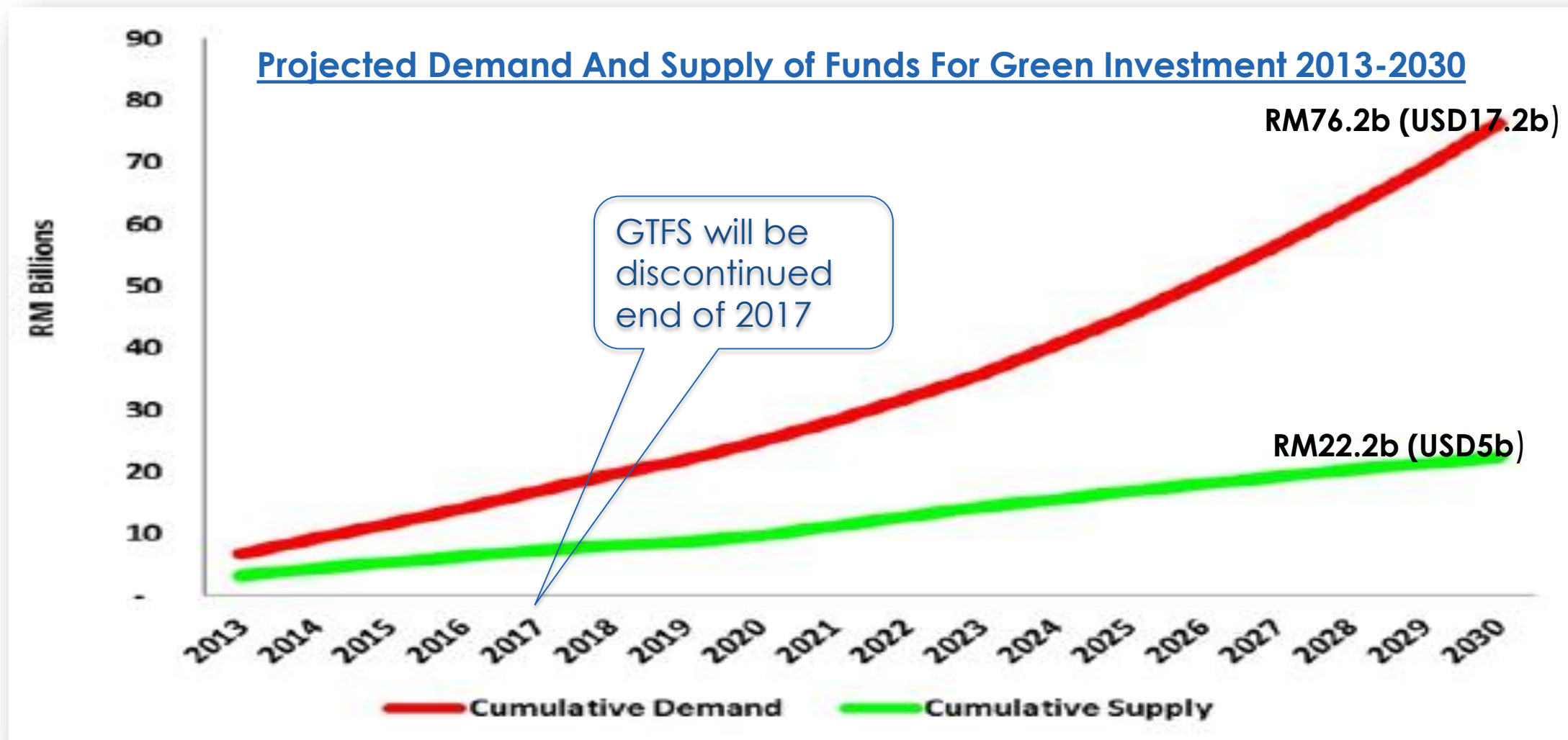
Technical
Support

Grants

GTFS

- The government has addressed the issues in green investments providing an enabling framework.
- However, constraints in the financial sector remain a barrier in the mobilisation and channelling of finances to prospective green businesses.
- **As such, the deployment of public funds to mobilise private finance is essential in addressing these barriers to unlock the needed funding.**

BUSINESS AS USUAL



Source: Protégé Associates

BRIDGING THE GAP



Establishing a more specialised innovative green financial institution (or “**Green Investment Bank**”) will scale up and accelerate the growth of green investments leveraging and mobilising on private financing through a “crowd-in” approach narrowing the financing gap.

CHALLENGES TO PRIVATE FINANCE IN GREEN INVESTMENTS

FACTORS FAVOURABLE TO BAU

Matured technology-
economies of scale

Risks well understood and
managed.

Regulatory environment
support

Supporting Policy
framework-subsidies and
incentives

Available data and track
record

BARRIERS TO PRIVATE FINANCE FOR GREEN INVESTMENTS

Nascent technology- yet to
achieve economies of scale

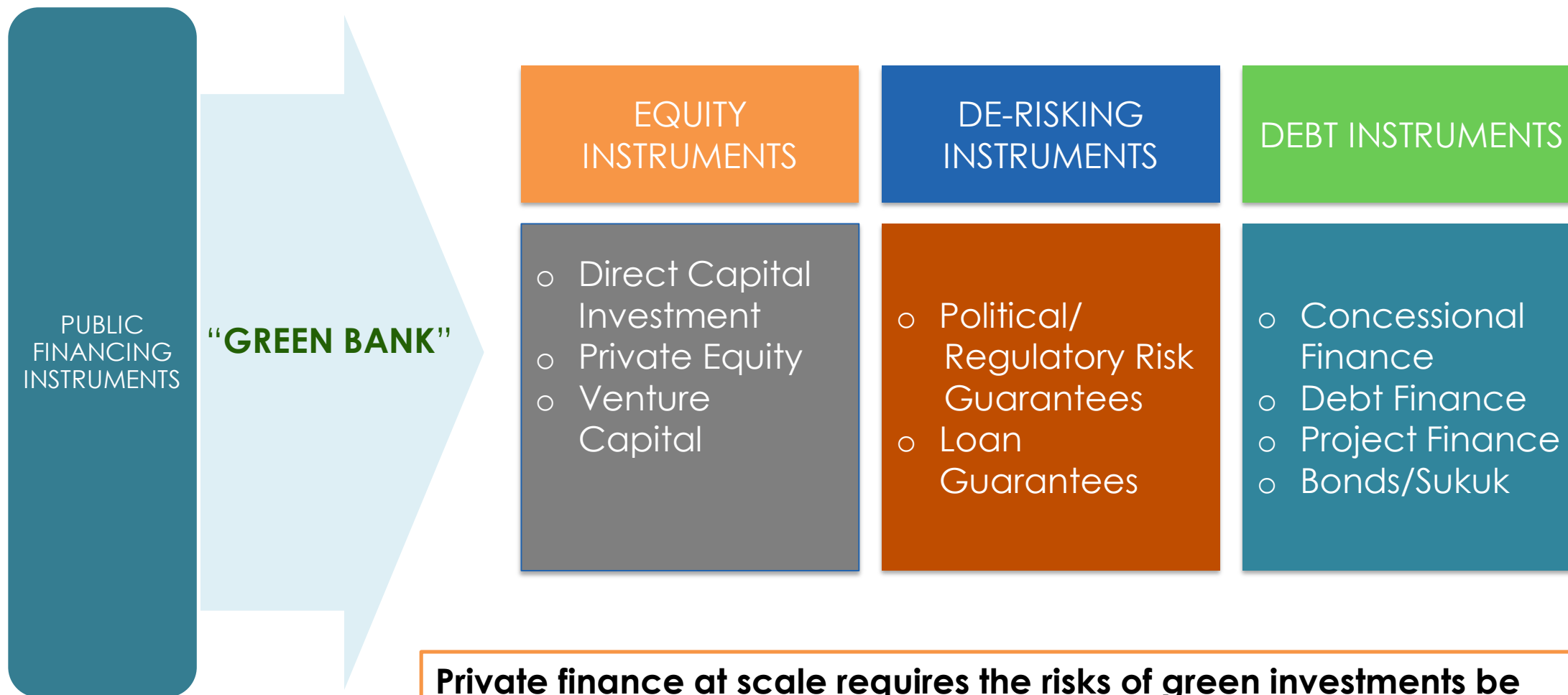
Limited past experience-lack
track record

Risks not well understood

Supportive regulatory
framework not in place

Limited incentives and
subsidies

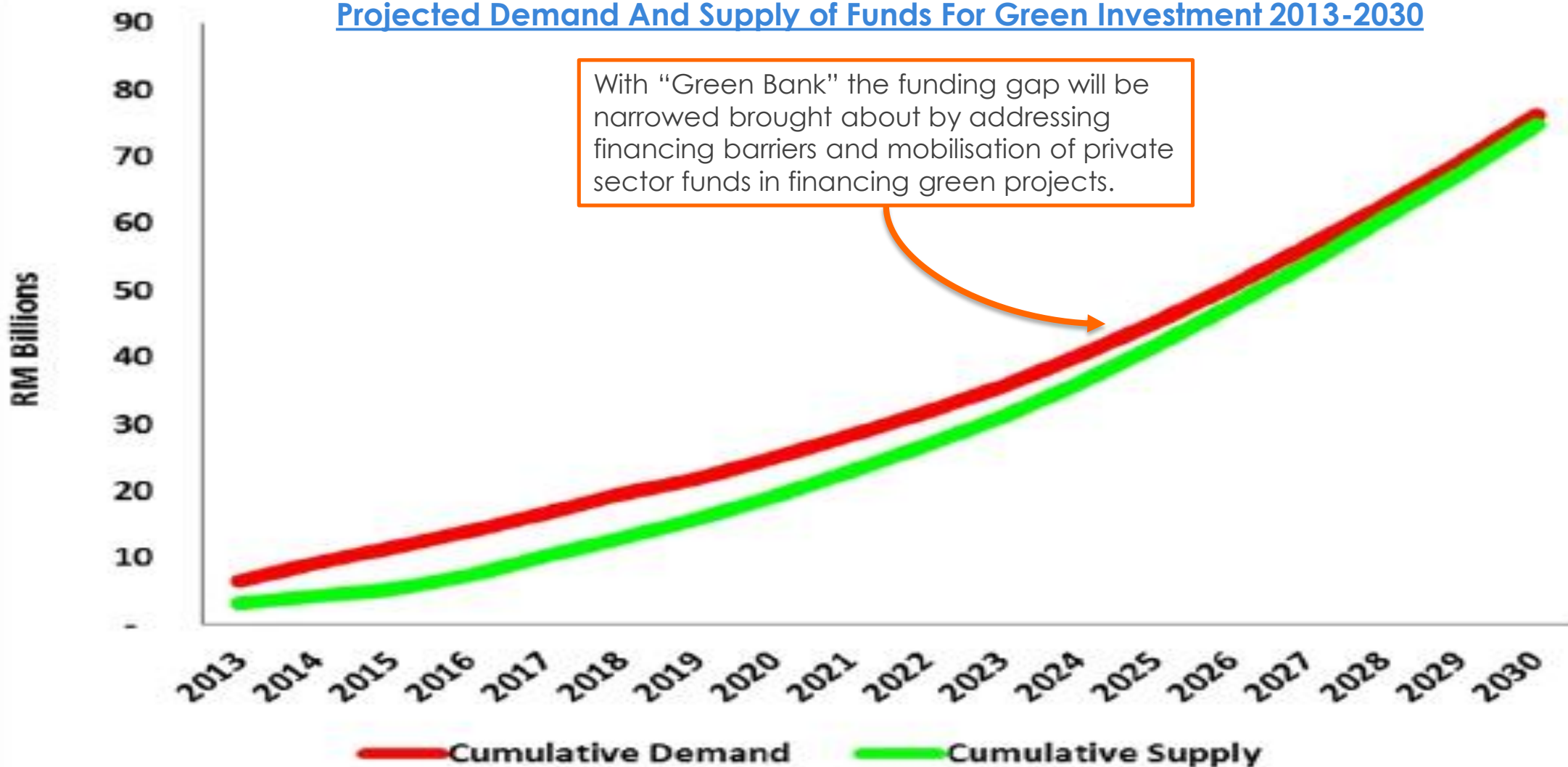
FINANCIAL MECHANISM FOR GREEN INVESTMENT



Private finance at scale requires the risks of green investments be reduced to about the same levels as those faced by conventional investments

NARROWING THE GAP

Projected Demand And Supply of Funds For Green Investment 2013-2030



Source: Protégé Associates



**CATALYSING
GREEN
GROWTH**

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