

GAME-CHANGING FINANCIAL MODELS TO UNLOCK INVESTMENTS IN CLEAN COOLING





About BASE



*Driving investment in
sustainable energy*

Basel Agency for Sustainable Energy

BASE is a Swiss not for profit foundation and a Specialised Partner of UN Environment.

BASE develops innovative, actionable financial strategies and market-driven solutions to unlock investment in sustainable energy and to tackle climate change.

GCPF AT A GLANCE

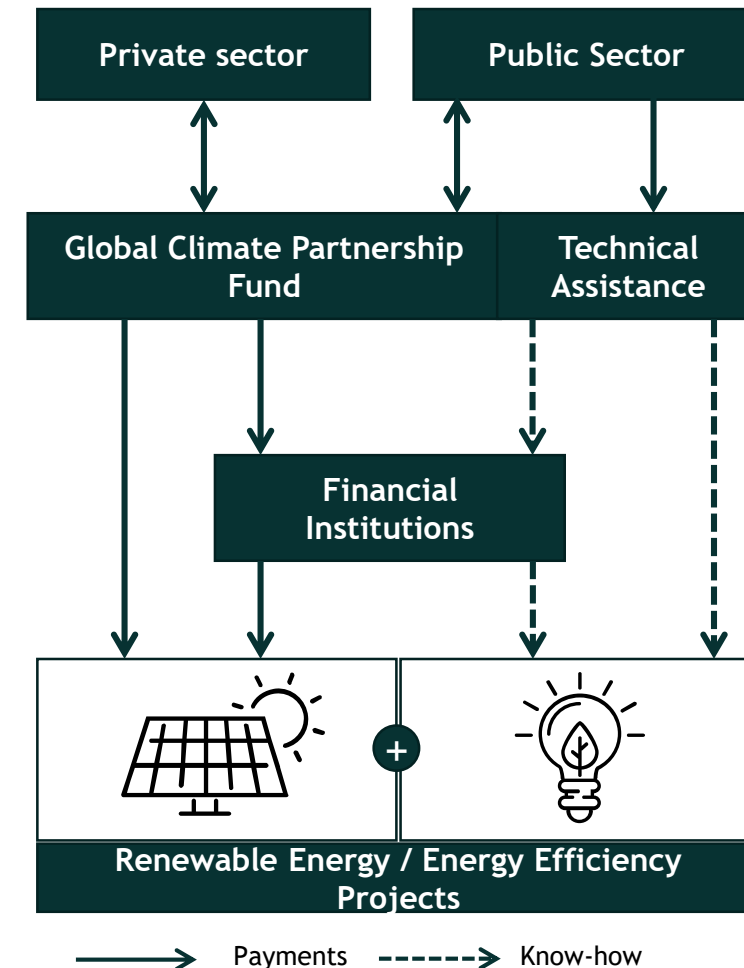


FINANCIAL INSTITUTIONS:

- Creating local market leaders in green lending (loans to renewable energy and energy efficiency projects)

DIRECT INVESTMENTS:

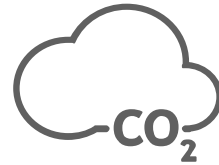
- In selected renewable energy projects.



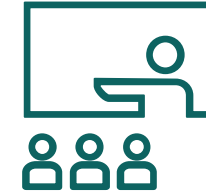
GCPF AT A GLANCE



35 partner
institutions
financed



+17 m t CO₂
of emissions
reductions
expected



178 projects
supported by
Technical
Assistance Facility



~25
investment
countries



~USD 700m of
invested capital



45%
average CO₂
emissions savings
of projects

WHY COOLING?



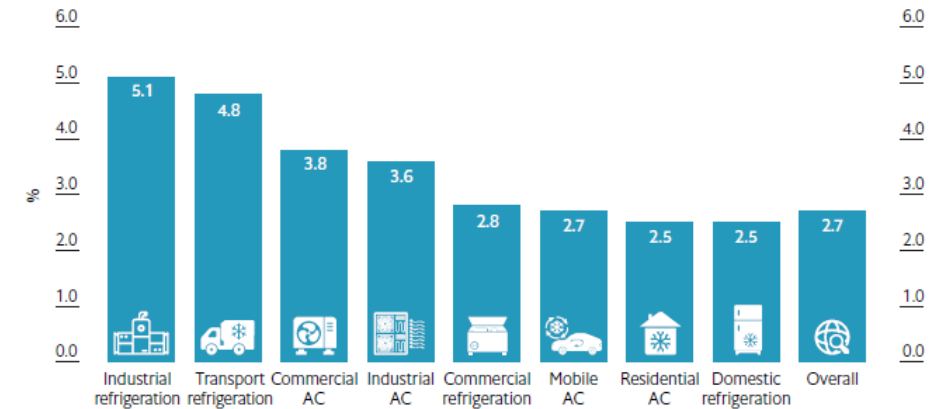
MARKET POTENTIAL:

- 6.9 trillion USD over next 30 years (230 billion USD/year) that could be invested in clean efficient cooling

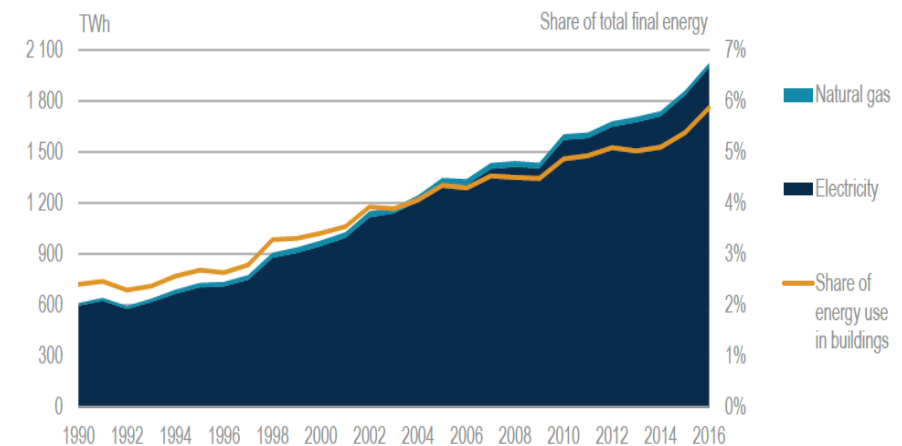
IMPACT:

- 10% of global electricity consumption
- Energy demand for space cooling will more than triple by 2050 - consuming as much electricity as all of China and India today.
- HCFCs and HFCs used as refrigerant gases have less impact on the ozone layer but are tens to thousands of times more potent than CO₂ in their contribution to global warming.

Cooling sales: Average annual growth rate by sub-sector (2018-2030) (a)



2019 - The economist: The cooling imperative



2018 - IEA The Future of Cooling



Cooling as a Service

Refresh the planet

The Opportunity



The Challenge

Investment decision is sensitive to purchase price



Key barriers:

- Higher upfront cost of efficient technology (competing against cheap and inefficient tech)
- Lack of trust in performance
- Prioritisation of investment in core business



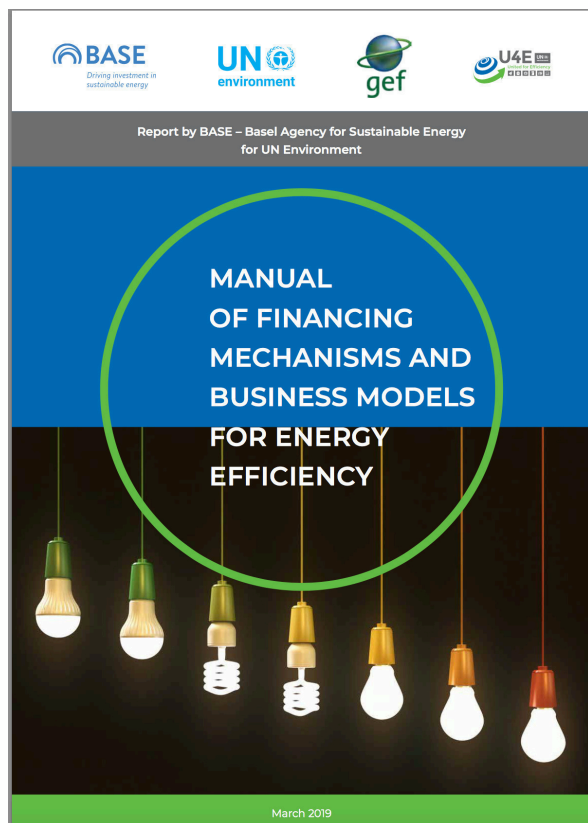
Solutions

Some innovative financing mechanisms as solutions

Residential sector: On-bill financing mechanisms, on-wage financing mechanisms, remittance based payment models, ...

Commercial/public sector: shared and guaranteed savings ESCO models, Energy Savings Insurance, servitisation models, ...

BASE implements these and other models across the globe.





Cooling as a Service
Refresh the planet

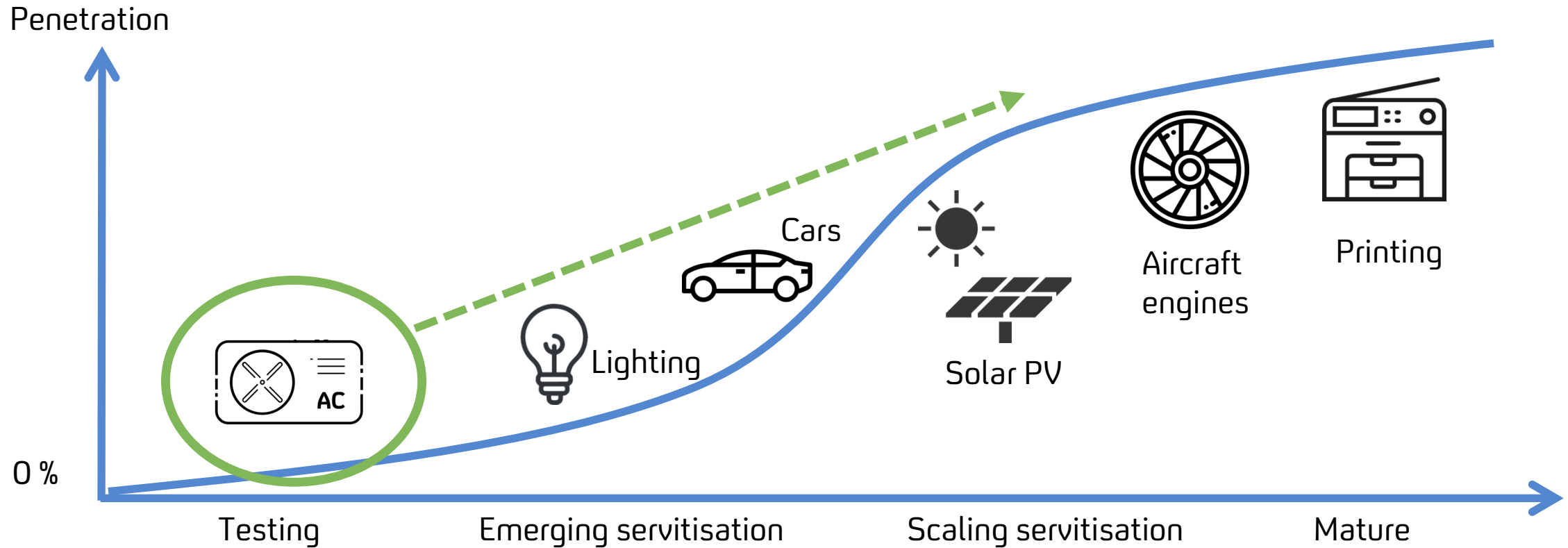
The Solution

Cooling as a Service (CaaS)



CaaS Solution

Servitisation: mega-trend growing rapidly across industries





CaaS Solution



Endorsed by the Global Innovation Lab for Climate Finance as one of 2019's most innovative financial instruments

- **Pay-per-use** model
- **Providers own** equipment
- CAPEX to **OPEX**
- Aligns incentives for **efficient production** and **efficient consumption**
- Makes **lower life-cycle cost** of efficient cooling tangible
- **Capitalisation** of CaaS providers (SPV, sale-leaseback)



CaaS Solution

Key actors involved



Clients



Technology Providers



Banks / Investors



CaaS Solution

Advantages for customers



- No capital expenditure
- Service is off-balance (operating expense)
- No more performance risks
- Full out-sourcing of cooling service
- Customer can focus and invest in core business



CaaS Solution



Advantages for technology providers

- Opportunity to deploy full potential of technology
- Increase demand for energy efficient solutions
- Predictable and continuous revenue streams
- Higher profits by selling outcome (cooling) to customers instead of selling equipment and parts
- Differentiation from competition: become front-runner to implement servitisation models (new trend)



CaaS Solution



Advantages for banks and investors

- Opportunity to place green funding
- Increase demand for green funding (Technology providers expand their pool of clients)
- Become front-runner to finance servitisation models (new trend)
- Investing in assets generating cashflows



Challenges

Shifting to as-a-service requires internal changes and a mind-shift

- **Changes:**
 - Business strategy & organisational culture
 - Internal procedures, structure and success measurement (e.g sales incentives)
 - Adapt risk management (performance and payment risk)
- **Mind-shift:**
 - Challenge BaU
 - Customer-centric approach
 - Need to be patient for ROI



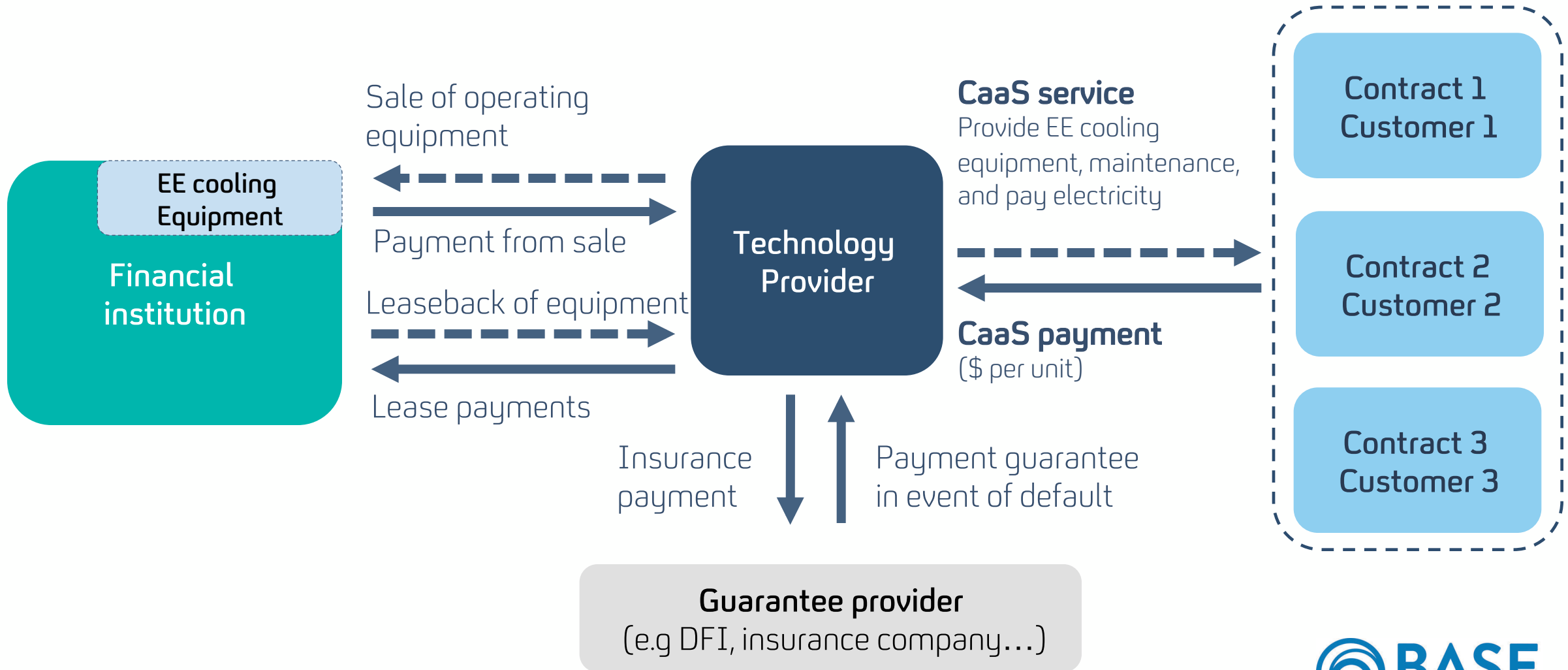
Cooling as a Service

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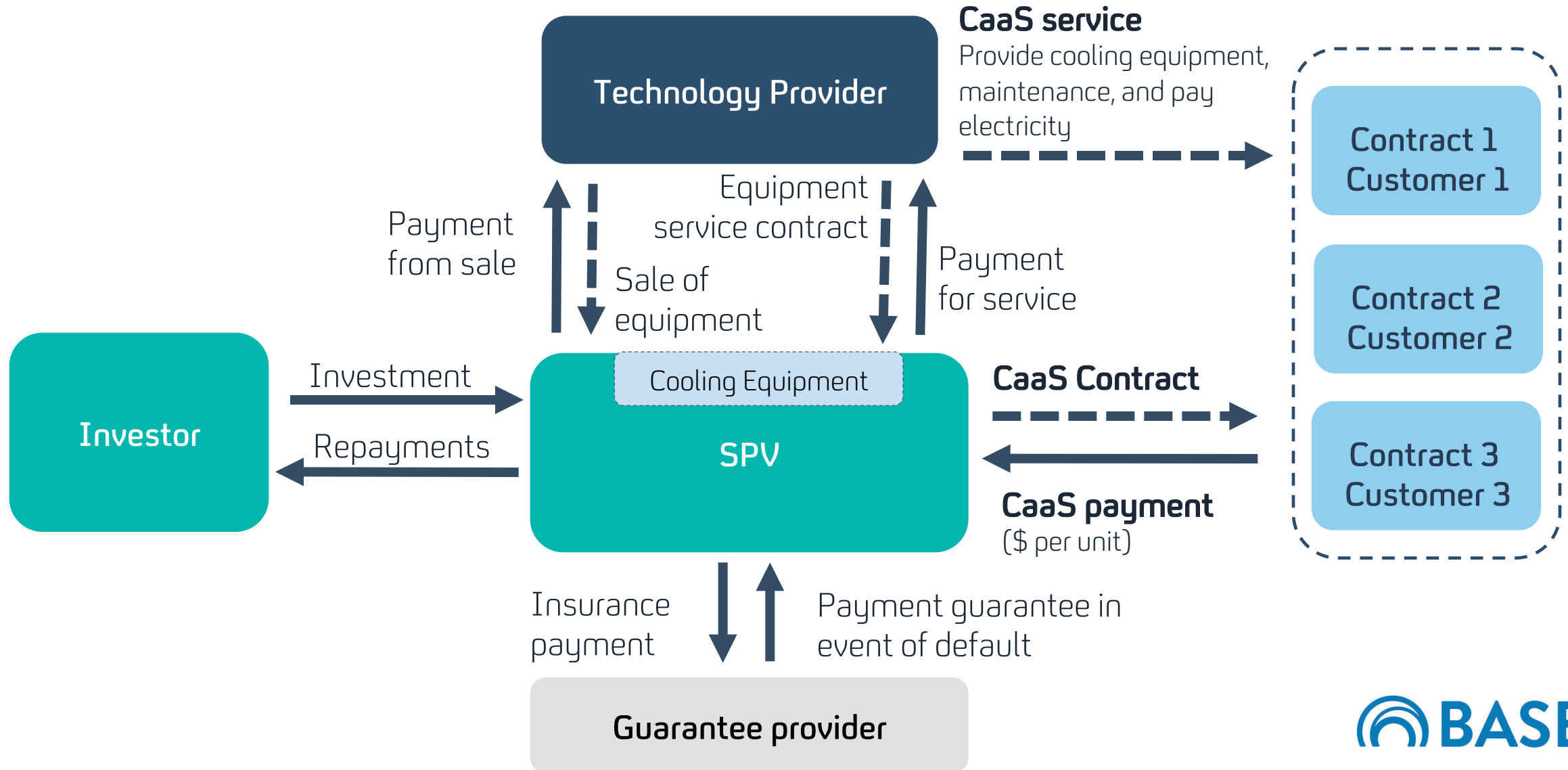
How it works

Possible financial structure 1

Sale and leaseback



Possible financial structure 2 Special Purpose Vehicle (SPV)



CASE STUDY

How cooling solutions are being delivered in Sri Lanka
– our experience

WHY COOLING IS IMPORTANT FOR SRI LANKA

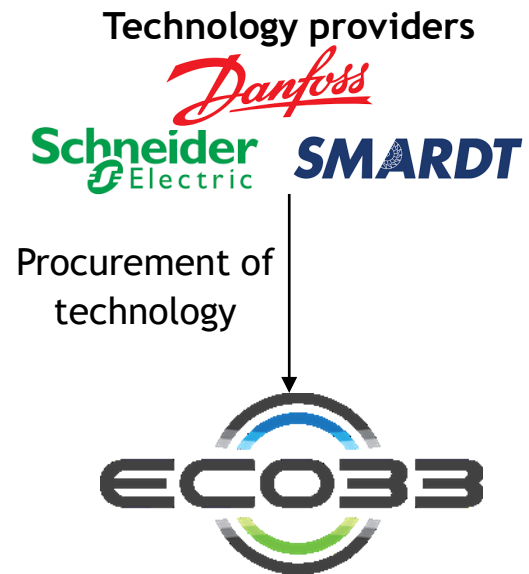


- Hot and humid climate zone
- Tourism and hospitality industry is growing
- Cooling contributes to more than 60% of the energy cost for these businesses and it is important to maintain cost competitiveness in the local as well as international market to attract global tourist
- Recent events pushed this segment to look at energy efficient cooling solutions
- There is a huge demand for energy efficient cooling solutions but not many players are active in the market

ENERGY PERFORMANCE GUARANTEE STRUCTURE



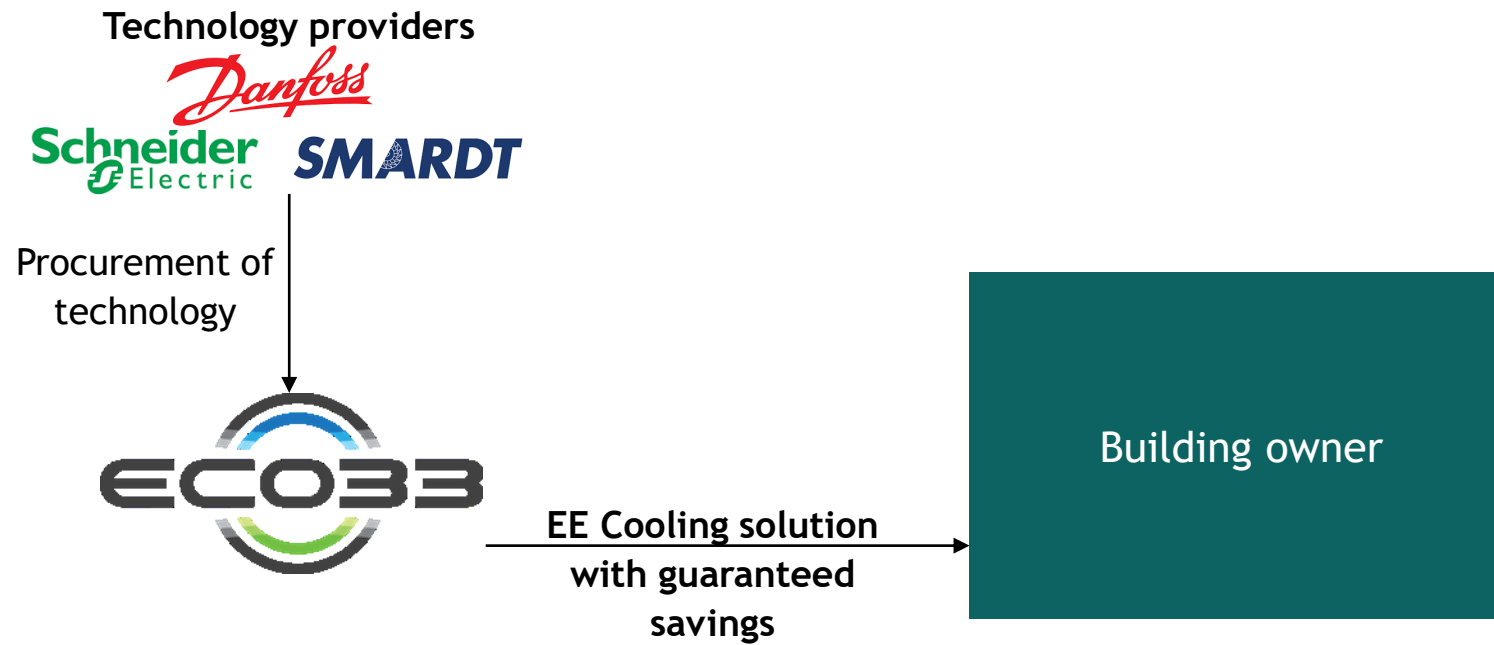
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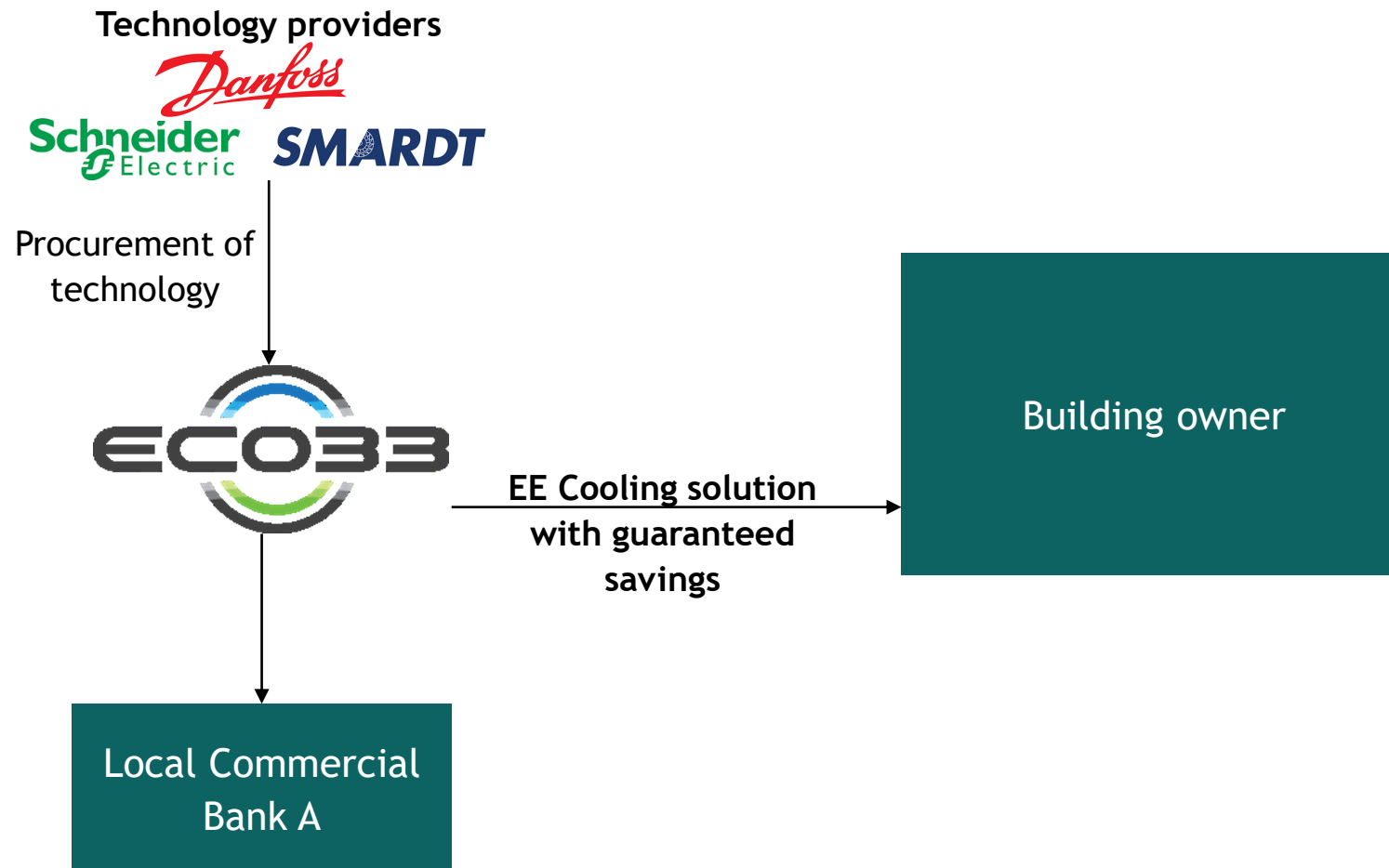
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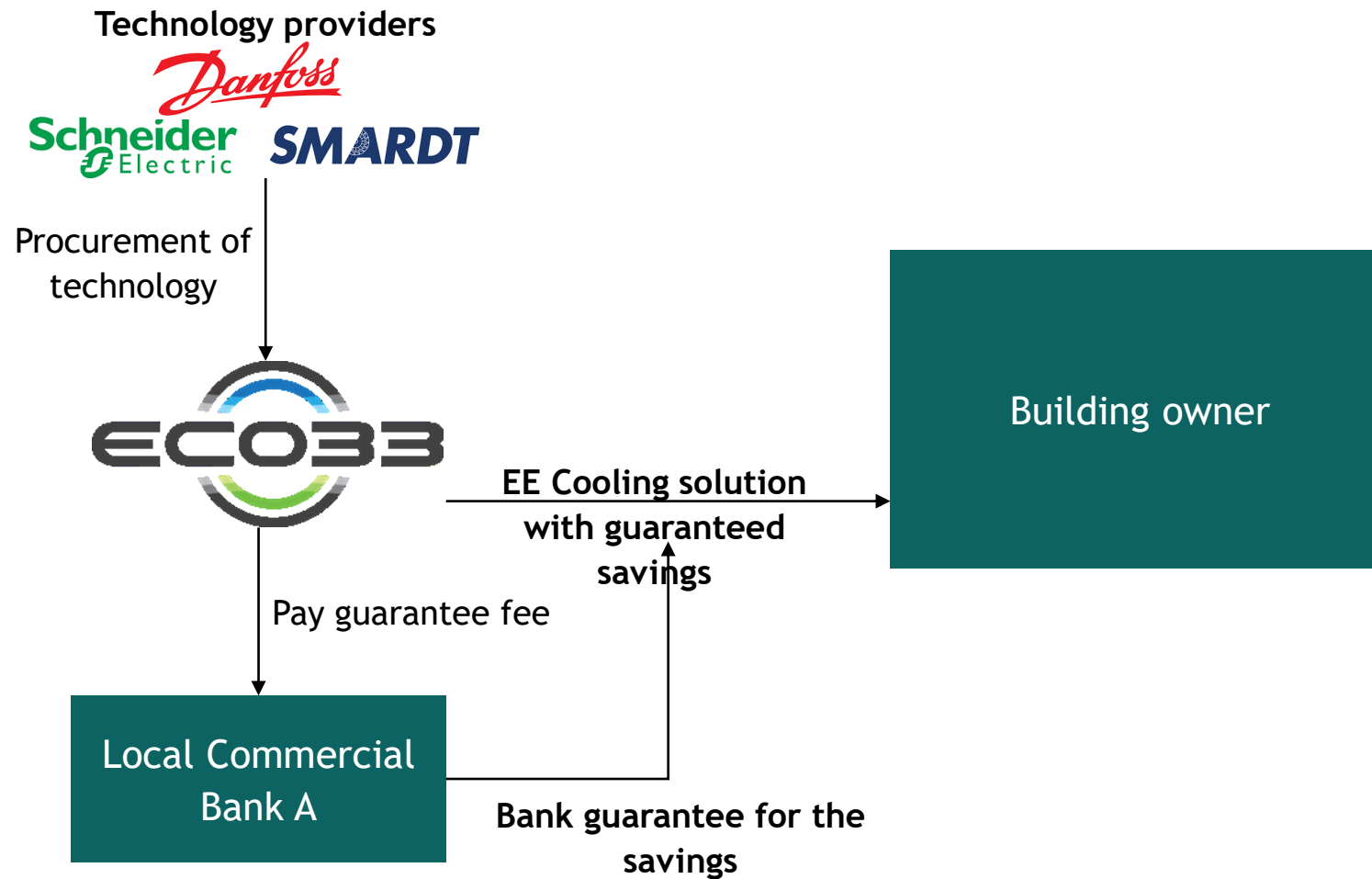
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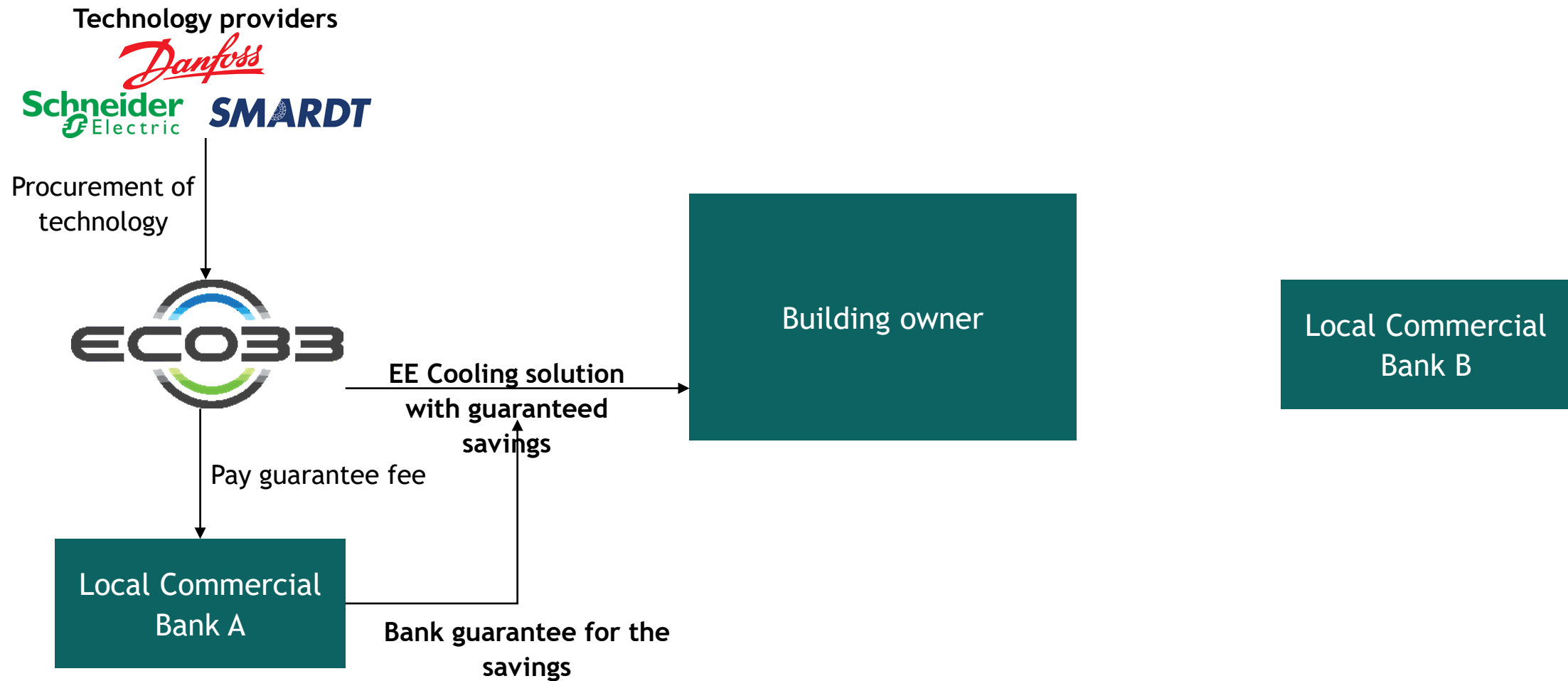
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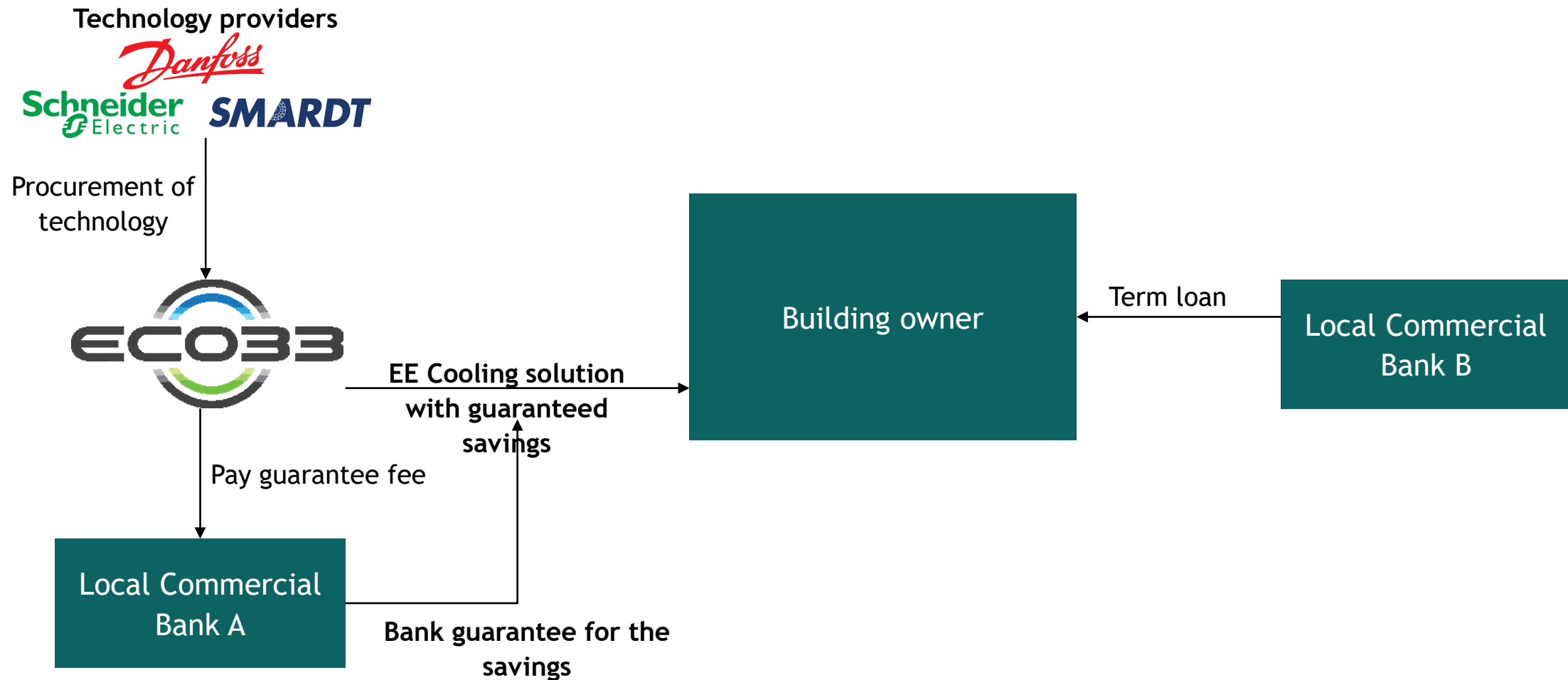
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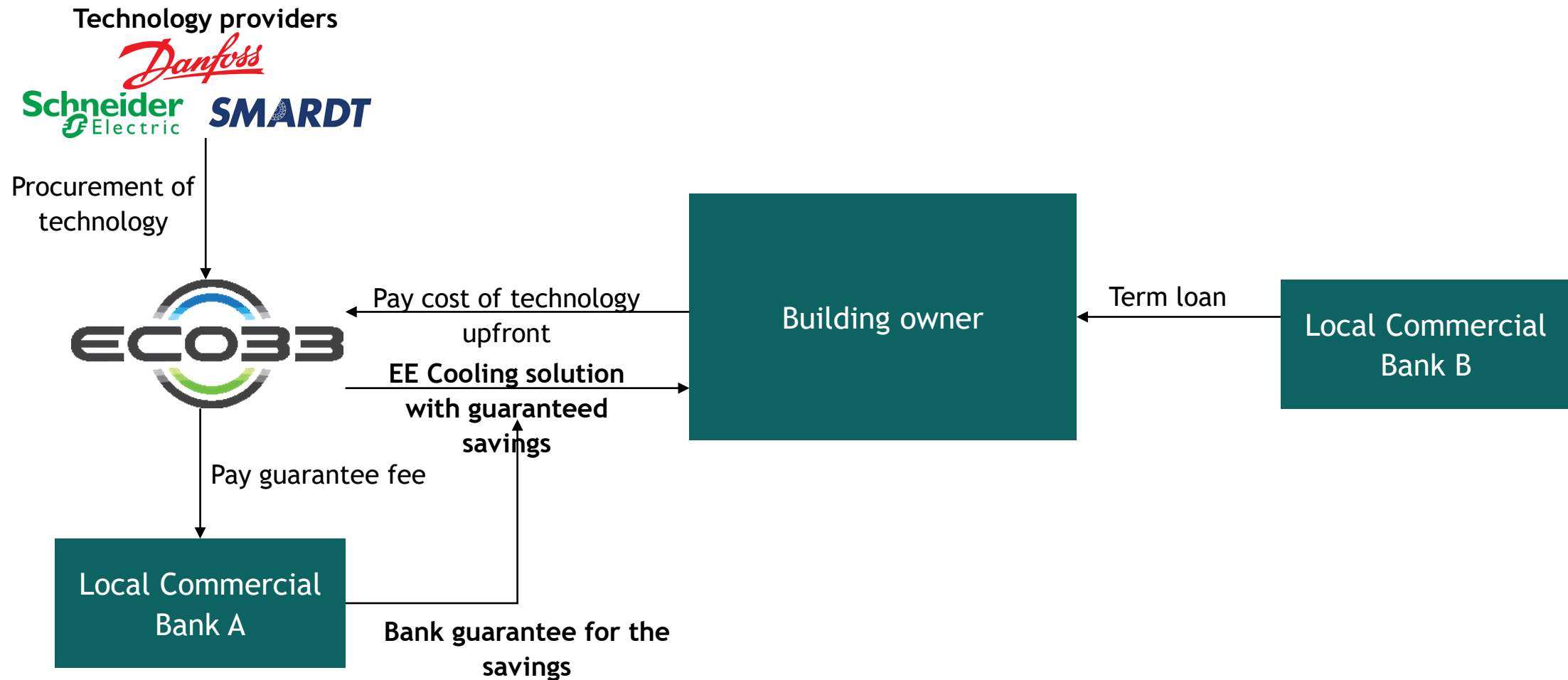
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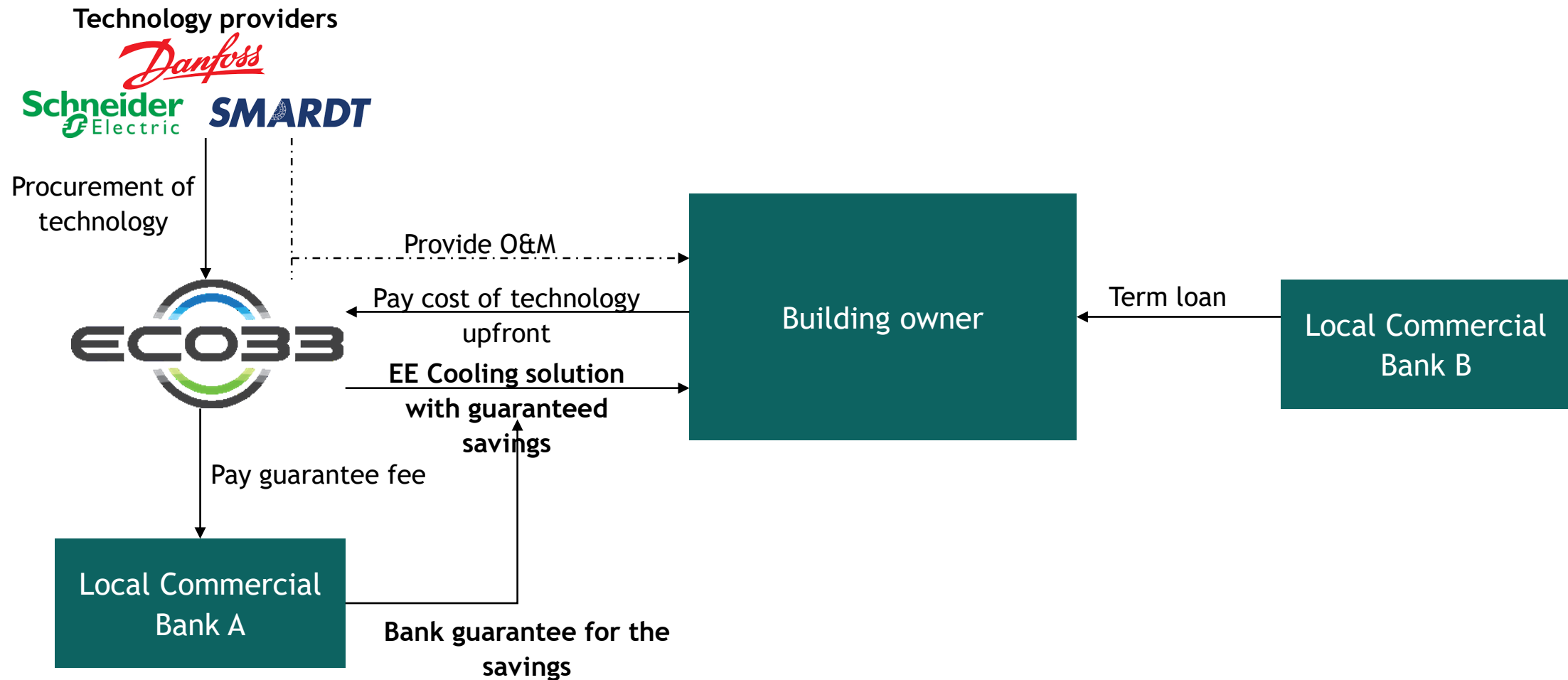
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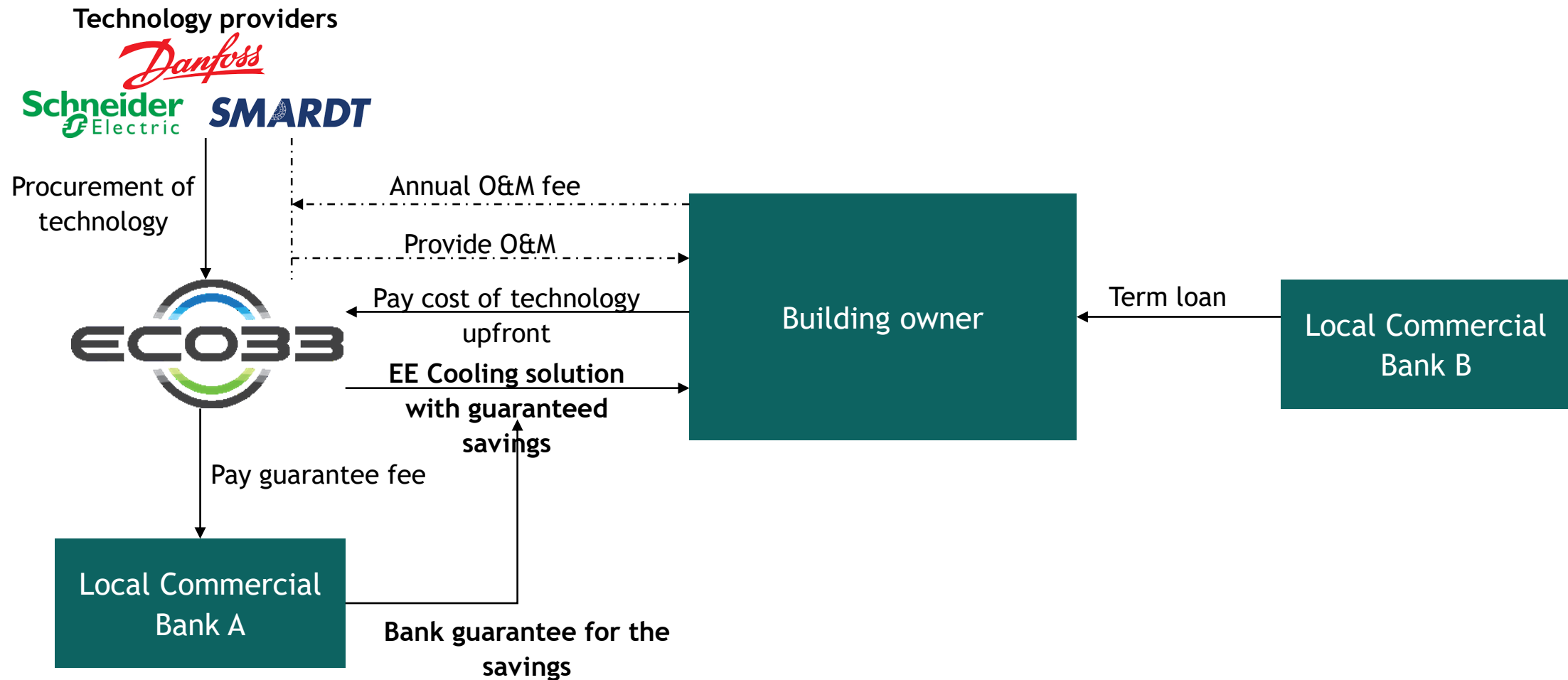
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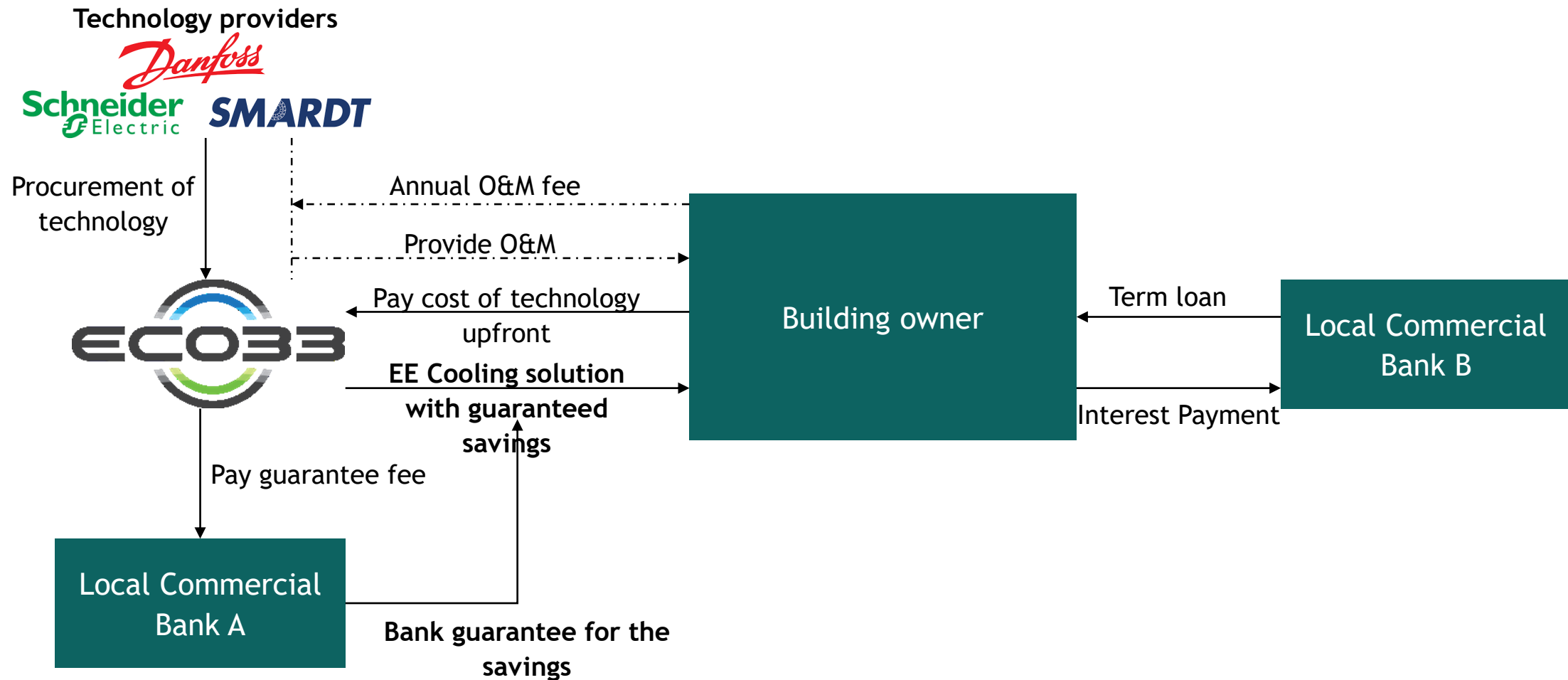
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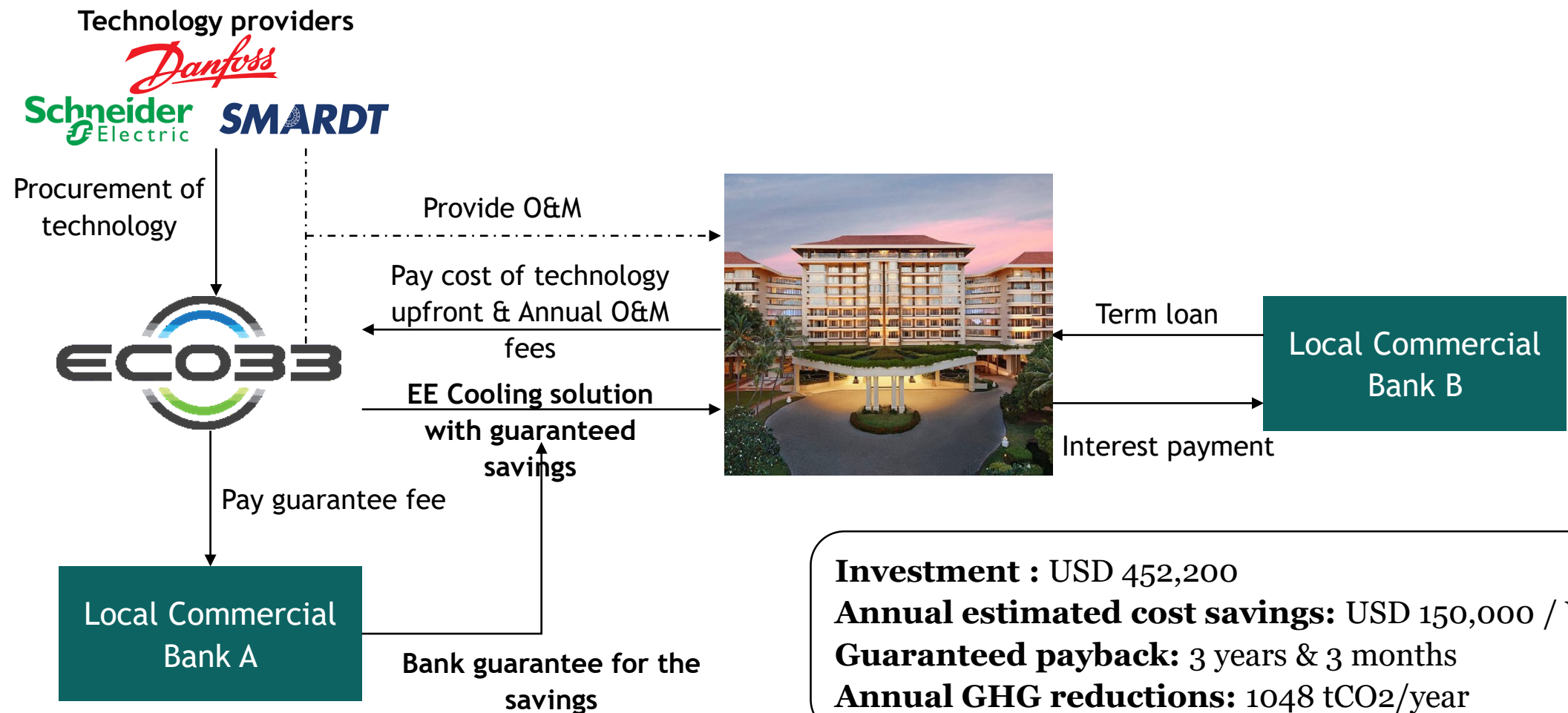
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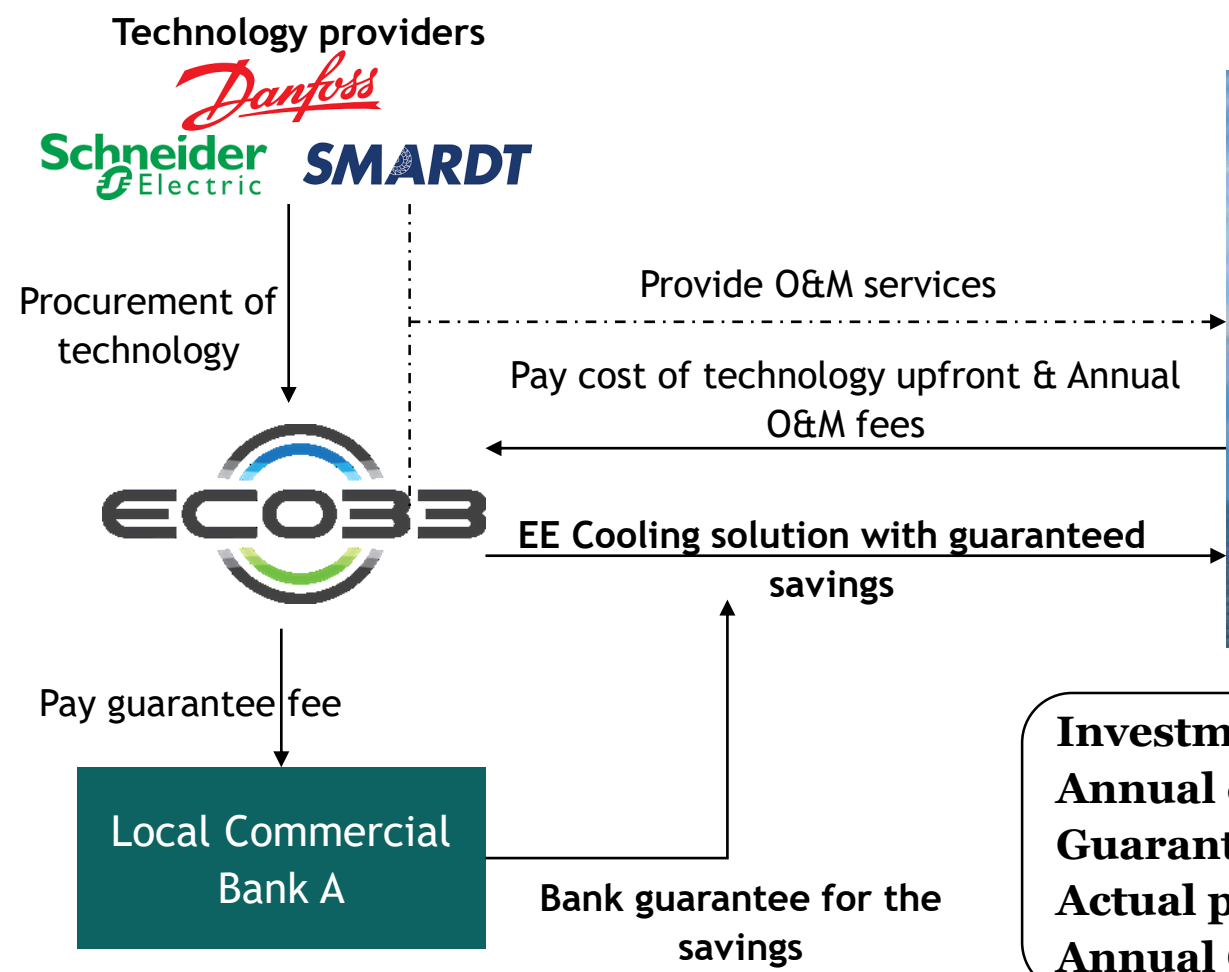


ENERGY PERFORMANCE GUARANTEE STRUCTURE - HOTEL



Investment : USD 452,200
Annual estimated cost savings: USD 150,000 / Year
Guaranteed payback: 3 years & 3 months
Annual GHG reductions: 1048 tCO₂/year

ENERGY PERFORMANCE GUARANTEE STRUCTURE - BANK



Investment : USD 429,307
Annual cost savings: USD 250,000 / Year
Guaranteed payback: 3 years & 3 months
Actual payback: 1 year & 9 months
Annual GHG reductions: 1082 tCO₂/year

CHALLENGES AND WAY FORWARD



- Guaranteed savings model has shown a good uptake in the Sri Lankan market, however the capital requirements to build the credential to avail bank guarantee from local financial institutions might be a challenge
- And with this structure, scaling up to the full market potential might also be a challenge
- Need for innovative business model to address the efficient cooling requirement of the whole market
- Cooling as a Service model could potentially address the scalability issue in the market
- Local commercial banks / NBFIs could play a major role in promoting efficient cooling solutions

GCPF

How to work with us and report projects

GCPF ELIGIBILITY CRITERIA



Eligibility Criteria

How do we ensure compliance?

20% energy savings or CO₂ emissions reductions



Calculations and total savings done by the service provider

75% of the sub-loan amount should be invested in energy efficiency measures and 25% directly in support



To be assessed during the financing process

E&S compliance



To be provided by the partner institution



Cooling as a Service

Refresh the planet

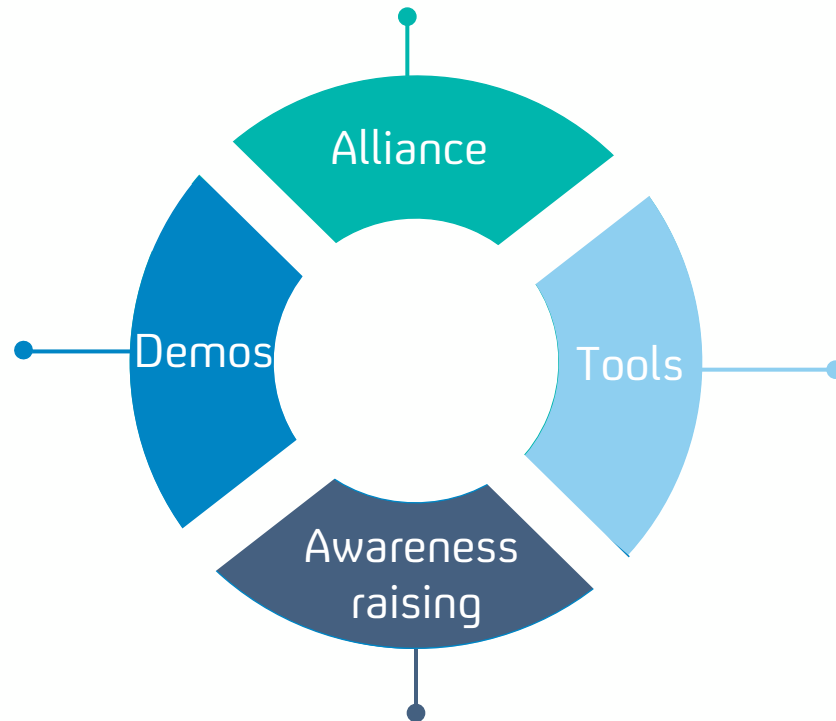
About the CaaS Initiative



About

Partnerships with technology providers,
clients, investors, associations, networks

Dominican Republic, Jamaica,
Mexico, Argentina, Costa Rica,
Grenada, Nigeria, South Africa,
India



CaaS contracts,
Pricing models, financial
structures

More info: www.caas-initiative.org

Matchmaking events, workshops,
webinars, articles, podcasts





Alliance

Join the alliance!

Gathers investors, banks, technology providers, networks and international organizations to:

- Implement the model in different sectors and regions.
- Spread the word about the model
- Build capacity
- Register to the [CaaS Newsletter](#)



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