PROINSO

PROFESSIONALS IN SOLAR

SOLAR ENERGY FOR CLIMATE ACTION

13th Asian Club Managers' Conference
(May 6th, 2019)

AGENDA

What to expert from today's presentation

1. Who are we: PROINSO in a nutshell
2. Climate action: what is it all about?
3. The case for solar
4. Our value proposition
5. Introducing ETIAM Insights: new energy consultancy
6. Offer for Hong Kong Clubs
7. Case studies and awards
8. Corporate social responsibility
9. Conclusion

WHO ARE WE?

ABOUT PROINSO

PROINSO is a global leader in the solar energy market with business units in distribution and integration, technology and project development services.

We offer a full-service portfolio for solar projects of all scales including: procurement, engineering, project development, finance and construction.

OUR MISSION STATEMENT

To grow and increase access to sustainable and decentralised energy through:

HIGHEST ROI OVER THE PROJECT LIFE CYCLE

UNRIVALLED GLOBAL REACH WITHIN OUR SECTOR

LOCALISED CAPABILITIES

ENTREPRENEURIAL SPIRIT COUPLED WITH RIGOROUS RISK MANAGEMENT

3GW+
PROJECTS SUPPLIED

800MW
DEVELOPMENT EXPERIENCE

10+ YEARS
EXPERIENCE IN SOLAR

16 OFFICES
ON 5 CONTINENTS

2,500
QUALIFIED INSTALLERS

3 DIVISIONS
OF FULLY INTEGRATED SOLAR BUSINESS

115%
EXPORT GROWTH IN 3 YEARS

111
COUNTRIES EXPORTED TO

CSR
PROJECTS DONATED GLOBALLY

AWARDS
INCLUDING QUEEN'S AWARD FOR ENTERPRISE

3 BUSINESS UNITS

DISTRIBUTION & INTEGRATION

- ✓ Global Distribution Network
- ✓ Integrated PV Systems
- ✓ Online Stores
- ✓ Qualified Installer Network
- ✓ Training

TECHNOLOGY

- ✓ Structures
- ✓ Trackers

PROJECT DEVELOPMENT SERVICES

- ✓ Identifying project sites
- ✓ Feasibility studies
- ✓ Financial models and planning
- ✓ Project development
- ✓ Engineering
- ✓ Procurement
- ✓ Project Management
- ✓ Project Financing
- ✓ Asset Management

GLOBAL PRESENCE

Offices in all major global markets across 5 continents

SUBSIDIARIES

- UNITED KINGDOM (HQ)
- SPAIN
- UNITED STATES
- JAPAN
- INDIA
- HONG KONG
- SOUTH AFRICA

FRANCHISES

- PHILIPPINES
- INDONESIA
- VIETNAM
- MEXICO
- MICARAGUA
- DOMINICAN REPUBLIC
- COLUMBIA
- NIGERIA
- GREECE

NEW TERRITORIES

- MOZAMBIQUE
- ZAMBIA
- ZIMBABWE
- KENYA
- BOTSWANA
- ANGOLA
- NIMIBIA
- MAURITIUS
- HUNGARY
- BANGLADESH
- GUATEMALA
- PERU
- SERBIA

GLOBAL PROJECT EXPERIENCE

Award-winning projects across all segments

TURNKEY PROJECT SERVICES

- ENGINEERING
- TIER 1 PV SYSTEMS
- FINANCING
- PROJECT MANAGEMENT
- INSTALLATION
- OPERATION & MAINTENANCE (O&M)

COMMERCIAL & INDUSTRIAL

MINI-GRID & OFF-GRID

UTILITY

OUR CLIENTS

Trusted by blue-chip companies and governments around the world

“PROINSO is a fantastic example of a company with a clear, ambitious strategy to target international markets.”

David Taylor, International Trade Advisor at DIT (a UK government department)

WINNER OF THE

QUEEN'S AWARD FOR ENTERPRISE:

INTERNATIONAL TRADE

3GW+

PROJECS SUPPLIED GLOBALLY

111

COUNTRIES EXPORTED TO

115%

EXPORT GROWTH IN 3 YEARS

CLIMATE ACTION

GRETA THUNBERG, 15

2019 Nobel peace prize nominee

#FRIDAYSFORFUTURE

Millennials around the globe made a climate movement in 100+ countries

LONDON

PARIS

BERLIN

WASHINGTON

HONG KONG

MUMBAI

THE UK DECLARES CLIMATE EMERGENCY

The UK has become the first country to declare a national climate emergency

Goalcast
SHE IS
CHANGING
THE WORLD!

SUSTAINABLE DEVELOPMENT GOALS

Climate change is intertwined with each of the 17 goals

1 NO POVERTY

POVERTY MULTIPLIER

3 GOOD HEALTH AND WELL-BEING

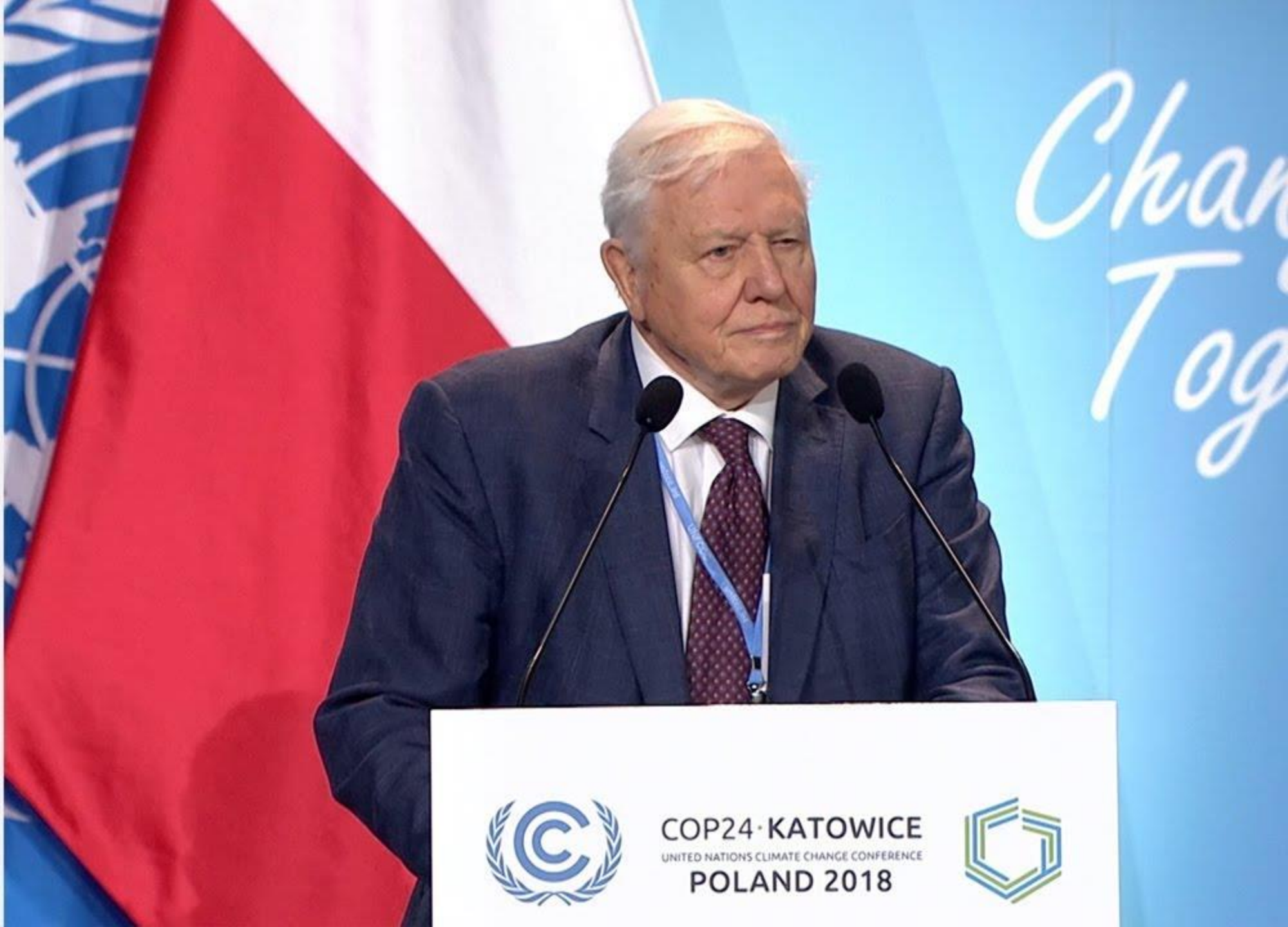
HEALTH CASE COST

15 LIFE ON LAND

EXISTENCE OF ECOSYSTEMS

#TAKE YOUR SEAT

THE PEOPLE'S SEAT



CLIMATE CHANGE IS REAL

Key take-aways from the 2018 IPCC Report

Global warming threshold

1°C

Above pre-industrial levels for the first time

Rising carbon emissions

1.4%

Rise in 2017 with new record high expected in 2018

Accelerated climate action

0%

Carbon emissions to be reached by 2050

DEEP DECARBONISATION

The United Nations call for a global movement

Give up fossil fuels.

Stop emitting greenhouse gases.

Pull the carbon dioxide out of the air.

Cost of “negative emissions” = 7 x Global GDP (2017)

DEEP DECARBONISATION PATHWAYS

Scientifically supported methods to limit global warming

ENERGY EFFICIENCY

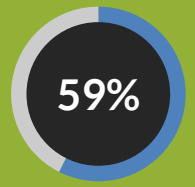
LOW CARBON ELECTRICITY

ELECTRIFICATION & FUEL SWITCHING

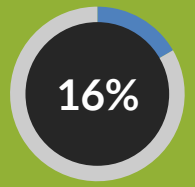
CARBON CAPTURE & STORAGE

GLOBAL CARBON EMISSIONS BY SECTOR

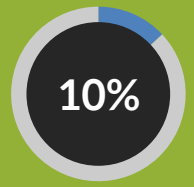
Energy is the largest source of carbon emissions



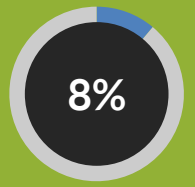
Energy



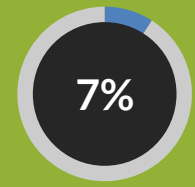
Transport



Residential & Commercial



Agriculture, Land Use and Forestry



Industry & Other Sources

GLOBAL ENERGY TRANSITION TO RENEWABLES

Switching to 100% renewable energy by 2050

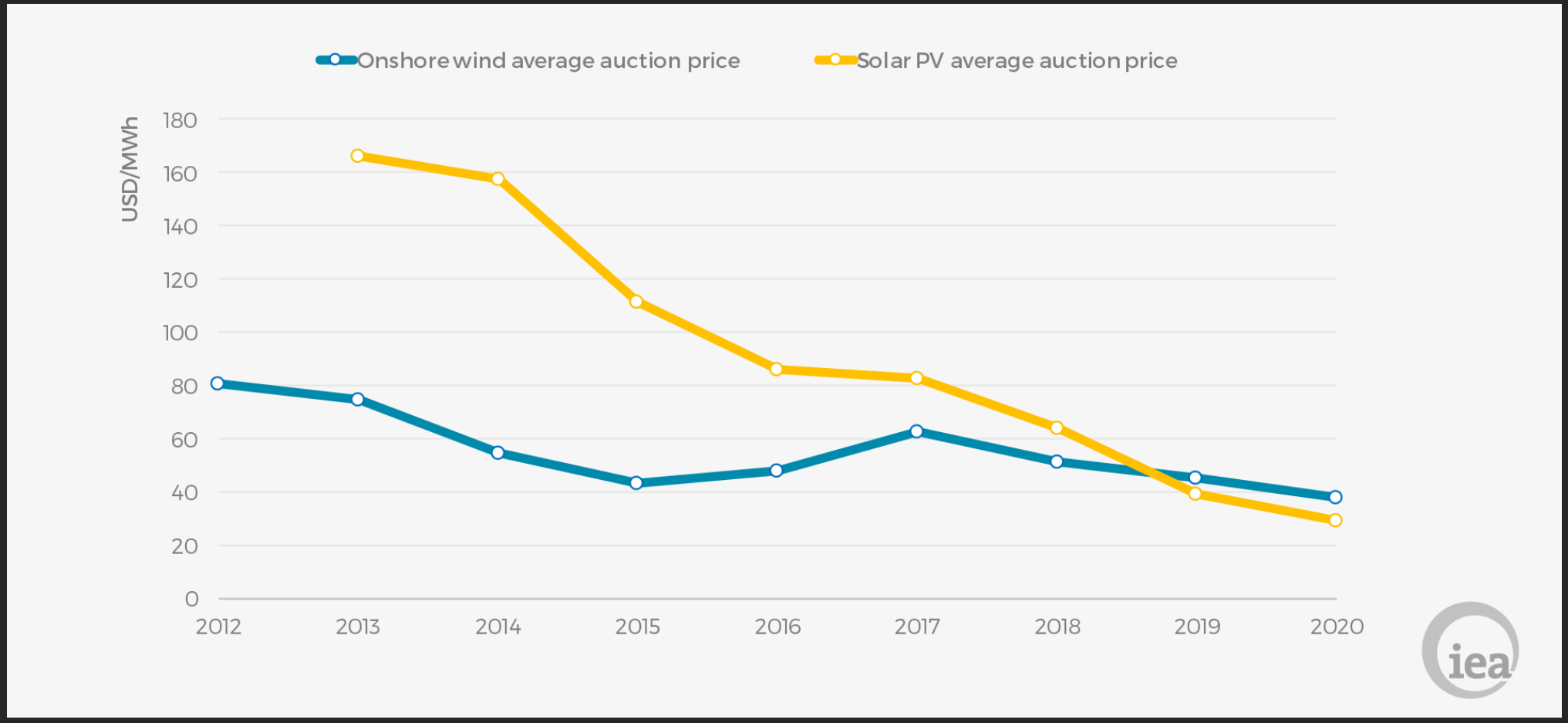
Swiss Re
EQUINIX
Kingspan
AstraZeneca
rackspace
the #1 managed cloud company
TD
salesforce
Bankia
AVIVA
AUTODESK
Carlsberg Group
DSM
RELX Group
helvetia
VOYA
JPMORGAN CHASE & CO.
GM
LA POSTE
Infosys
Goldman Sachs
M&S
EST. 1884
workday.
Bloomberg
TESCO
British Land
sky
proximus
Nordea
PHILIPS
Unilever
YOOX NET-A-PORTER GROUP
CLIF
Google
IKEA
hp
VAIL RESORTS
DBS
Walmart
SWISS POST
P&G
YOUR LONDON AIRPORT Gatwick
Steelcase
facebook
Interface
UBS
BMW GROUP
Danske Bank
Microsoft
SAP
GROUPE L'OCCITANE
AkzoNobel
RE 100
citi
MARS
ELION 亿利资源
RICOH
CALIFIA FARMS
LEGO
Kellogg's
ESTÉE LAUDER COMPANIES
ABInBev
Morgan Stanley
IFF
vf
IHS Markit
H&M
Coca-Cola Enterprises
Nestlé
ebay
Biogen
WELLS FARGO
BT
AXA
ELOPAK
kpn
PEARSON
Telefónica
COLRUYT GROUP
Bank of America
Dalmia Bharat Cement
CaixaBank
Adobe
BURBERRY
vmware
COMMERZBANK
Landsec
novo nordisk
Corbion
BROAD GROUP 远大集团
dentsu AEGIS network
DIAGEO
DNB
Johnson & Johnson
FAMILY OF COMPANIES
CRÉDIT AGRICOLE
Givaudan
SGS
ING
Heathrow
amalgamated bank
VAISALA
JUPITER Asset Management
Hewlett Packard Enterprise
J. SAFRA SARASIN
alstria
TATA MOTORS

Lars Petersson
esident & CEO, IKEA USA
of solar power on the roofs
of almost all our stores and warehouses.

THE CASE FOR SOLAR

WHY SOLAR?

Solar is the cheapest form of renewable energy



RANGE OF APPLICATIONS

Use the abundant power of sun to cut your energy costs and make a sustainability statement

ROOFTOP

GROUND-MOUNT

SOLAR PV CARPORTS

SOLAR PLUS STORAGE

- HOTELS & RESORTS
- FACTORIES
- WAREHOUSES
- ADMINISTRATIVE BUILDINGS
- SHOPPING MALLS
- AGRICULTURE
- AUTO DEALERSHIPS
- SCHOOLS AND UNIVERSITIES
- ENTERPRISE
- HEALTHCARE

SOLAR IN HONG KONG

Specific conditions make solar attractive for businesses and homeowners

✓ ROOF SPACE

✓ WEATHER

✓ FEED-IN TARRIFS

WHAT ARE THE FEED-IN TARRIFS?

Financial incentives for businesses and homeowners to install renewable energy systems

APPLICABLE FIT RATES	
Less than 10kW	HK$5/kWh
10kW up to 200kW	HK$4/kWh
200kW up to 1MW	HK$3/kWh
Above 1MW	Considered on a case by case basis

FiT rates are expected to be reduced once the installed capacity reaches a certain threshold so prompt action is urged.

FINANCIAL FEASIBILITY

Switching to solar is a smart business decision

5-7

Years payback period

15%

Expected ROI

0%

Carbon emissions

OUR VALUE PROPOSITION

WHY PROINSO?

"PROINSO is a great example of a company with business expertise in renewable energy and low carbon initiatives."

Asif Ahmad, formerly British Ambassador to the Philippines

- TIER 1 PV SYSTEMS
- FULL ENGINEERING AND CONSTRUCTION
- RIGOROUS RISK MANAGEMENT
- FINANCING
- ASSET MANAGEMENT

TIER 1 PV SYSTEMS

Global contracts with world-leading solar manufacturers

SMA

JinKO Solar
Building Your Trust in Solar

mounting systems

MECA SOLAR

OMRON

TURNSOLE
Powered by OMRON

PROINSO PV Rack

HUAWEI

TALESUN

zeversolar

Trinasolar
Smart Energy Together

Tigo energy

BYD

TESVOLT
STORAGETECHNOLOGY

Schneider Electric

HT-SAAE

praxia ENERGY

FORTRESS Power
SECURE YOUR ENERGY

FULL ENGINEERING & CONSTRUCTION

Proven track record working with world-leading companies in the most challenging environments

RIGOROUS RISK MANAGEMENT

Projects built to the industry's highest safety and performance standards

PROINSO'S INSTALLATIONS REMAINED UNDAMAGED

FINANCING

Focus on risk mitigation and optimal return on investment

ASSET MANAGEMENT

Maximise the energy output and extend the life of a solar system

COMMERCIAL & INDUSTRIAL PROJECTS

3.3 MW – PepsiCo, Honduras

1.5 MW - Tampa, FL, USA

500 kWp – Mercedes Benz, Malaysia

2.5 MWp - El Angel, El Salvador

1.57 MWp – Harbeson, DE, USA

5 kWp – Milo Best Center, Philippines

5 kWp - Psaig City, Philippines

100 kWp – Tuyo, Balanga City, Philippines

2.7 MWp – Mexico

100 kWp – Emcor, Philippines

100 kWp –Toyota, Philippines

2 MWp –San Pedro Sula, Honduras

COMMUNITY & OFF-GRID PROJECTS

492 kW – East Sumba, Indonesia

300 kWh – Kepulauan Riau, Indonesia

4.5 kWp - Pok Fu Lam, Hong Kong

2 kWp - Borrett Road, Hong Kong

4.8 kWp – Shatin, New Territories

1.6 kWp – Shatin, New Territories

1.6 kWp - Shatin, New Territories

1.6 kWp – Yaumatei, Kowloon

2.8 kWp – Yaumatei, Kowloon

3 kWp – Sai Kung, New Territories

3 kWp –Leprosy Hospital, Benin

102 kW – Jlanka Technologies, Sri Lanka

UTILITY PROJECTS

9.5 MW - Wisbridge, UK	11.5 MW - Gosfield Airfield, UK	28 MW - Teknaf, Bangladesh	1 MW - Hokkaido, Japan
5 MW – Port Blair, India	8.3 MW – Reed Hertfordshire, USA	2.1 MW - Ehime, Japan	19 MW – Boxted, UK
21 MW – Langenhoe, UK	1.7 MW – Mie, Japan	1.5 MW – Adani, India	2.4 MW – Tochigi, Japan

ETIAM Insights

NEW ENERGY

ABOUT ETIAM INSIGHTS

ETIAM Insights, a PROINSO company, is a boutique consultancy with in-depth knowledge and relationships in new energy sectors.

Leveraging over 20 years' experience in renewable energy by its board members, we offer access to industry leaders and their current insights, knowledge, and best-practice related to sustainability.

OUR MISSION

We are witnessing a global paradigm shift induced by climate change.

Our mission is to help you navigate the paradigm shift
and future-proof your business.

Electric Vehicles

Renewable Energy

Energy Storage

OUR SERVICES

ETIAM Insights is your trusted partner on the sustainability pathway

SUSTAINABILITY STRATEGY

INSIGHTS PLATFORM

NEW ENERGY DEALS

OFFER FOR HONG KONG CLUBS

THE FUNDED MODEL

BENEFITS OF THE FUNDED MODEL

- ✓ **No upfront cost**: With PROINSO you can benefit from zero upfront cost and no ongoing investment required to initiate project development.
- ✓ **No development risk:** Should the project not be completed, all development capital risk is solely the responsibility of PROINSO.
- ✓ **Savings on electricity bills**: Reduced electricity bill which in turn adds to your business' overall passive income over time.
- ✓ **Sustainability statement**: By cutting down your carbon emissions you are joining companies like Apple, Google and Ikea that have made energy efficiency part of their corporate culture.
- ✓ **Peace of mind**: PROINSO provides long-term Asset Management to maximise the energy output and extend the life of a solar system.

SOLAR FUNDED MODEL	
Total system installation cost	0
Installed solar PV capacity	60 kW
Annual solar power generated	66,762 kWh
Feed in Tariff rate	4.00 HKD/kWh
PROINSO PPA price	3.6 HKD/kWh
Customer electricity bill saving	0.40 HKD/kWh
Total savings over project lifetime	**1,386,751 HKD**

REPRESENTATIVE SAVINGS CASE

WE HEARD YOUR PAIN-POINTS

Key constraints faced by Member clubs on their transition to solar:

- Short-term lease agreements: We offer flexible modelling:
  - Maximise the upside
  - Ensure zero liability after the lease expiry
  - No “termination fees” past the current lease
- Technical requirements: Customised system design
- Safety and resilience: Rigorous risk management

HONG KONG COUNTRY CLUB EXAMPLE

60kWp solar rooftop installation

- Current lease valid until 2027
- Zero liability past 2027
- Adjusted revenue share ratios to maximise the upside and savings from the solar system
- Customised penetrative structures for waterproof rooftop

CASE STUDIES AND AWARDS

FIRST UTILITY SOLAR PROJECT IN BANGLADESH

Pioneering project with innovative finance structure

28MW
Installed capacity
in Teknaf, Bangladesh

80%
Regional electricity
demand served

400,000t
Of CO2 emissions
to be prevented

AWARD
Winner of the
Asian Power Award 2018

RURAL ELECTRIFICATION INITIATIVE IN INDONESIA

Over 40MWh of mini-grid projects implemented since 2012

492kW
Installed capacity
in East Sumba, Indonesia

900+
Households and
public facilities electrified

250
East Sumba
residents received training

AWARD
Winner of the
Solar Power Portal Award 2018

CORPORATE GREEN POWER SOURCING

PepsiCo bottling plant project in Emsula, Honduras

3MW
Installed capacity
in Emsula, Honduras

20%
Of factory's energy
use offset by the project

4.7 mil
Trees equivalent

LARGEST
Solar project in Honduras
at the time of launch

YWCA Hioe Tjo Yoeng College

Sai Kung Central Primary School

West Island School

Island School

Leung Kui Kau Lutheran Primary School

TWGHs Wong Fung Ling College

TWGHs Wong Fung Ling College

TWGHs Lo Yu Chik Primary School

CASE STUDY IN HONG KONG

ENVIRONMENT AND CONSERVATION FUND (ECF)

- ✓ **ALL INSTALLATIONS WITHSTOOD THE TYPHOON MANGKHUT**

CORPORATE SOCIAL RESPONSIBILITY (CSR)

SOLAR ENERGY SOLIDARITY

Impact relative to the United Nations Sustainable Development Goals

SUSTAINABLE DEVELOPMENT GOALS

The World Bank estimates that 780 million women and children breathing kerosene fumes inhale the equivalent of smoke from 2 packs of cigarettes a day.

Extended hours of study-time at home, as well as in schools, are crucial for young people residing in communities with limited or non-existent power supply.

According to the International Energy Agency there are over 1.1 billion people across the world who still lack any electricity supply.

Strengthening the informal sector by engaging young people and aspiring entrepreneurs in enterprise development activities is a way to contribute to community development.

By deploying solar energy and promoting renewables, we reduce greenhouse gas emissions and contribute to the worldwide climate change mitigation and environmental protection efforts.

PROINSO's business strategy is based on global experience and local expertise while ensuring that both local capabilities and revenue retention is enhanced.

SM100 SOLAR LIGHT PARTNERSHIP

Replacing expensive and hazardous kerosene lamps

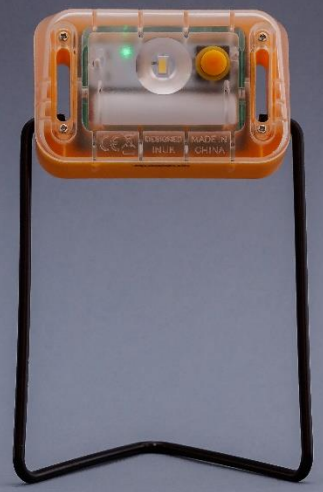
10h+
Of clean lighting

40
Cigarettes equivalent avoided daily

370 kg
Of CO_2 emissions prevented per year

$50+
Long-term savings per year, after initial payback

WINNER
Design for Sustainability
2016 EUROPEAN PRODUCT DESIGN AWARD



- ✓ LED lighting: 0.5W white blue LED
- ✓ Battery: 10+ hours at a constant 10 lumens
- ✓ Brightness: 30 lumen (3x brighter than kerosene)
- ✓ Integrated solar panel: 4V, 75mA polycrystalline
- ✓ Certification: CE certified, PVoC Lighting Global Product Quality verification pending
- ✓ Warranty: 2 years

OUR CSR PROJECTS

Project name: **Ga-Dikgale communities**
Location: **Limpopo, South Africa**
Implementing partner: **Aluwani Foundation**

OUR CSR PROJECTS

Project name: **Madagascar Library**
Location: **Morondava, Madagascar**
Implementing partner: **Mercy Ministries**

OUR CSR PROJECTS

Project name: **Indian Rugby sponsorship**
Location: **India**
Implementing partner: **Indian Rugby Football Union**

OUR CSR PROJECTS

Project name: **Tondu RFC sponsorship**
Location: **South Wales, UK**
Implementing partner: **Tondu RFC**

PARTNERSHIPS FOR THE GOALS

Join our CSR Initiative!

CONCLUSION

KEY TAKE-AWAYS

- ✓ **Climate action:** Limiting global warming at 2 Degrees Celsius requires shift to renewables by 2050.
- ✓ **Consumer movements:** Millennials around the globe demand actions by companies and governments.
- ✓ **The case for solar**: Solar, as the cheapest form of renewable energy, enables you to reduce your energy bill while cutting down your carbon emissions.
- ✓ **Our value proposition**: PROINSO provides turnkey project development services for corporate clients, while ETIAM Insights supports companies along their sustainability pathways.
- ✓ **Offer for Hong Kong Clubs**: The Funded model enables you to switch to solar with zero investment.
- ✓ **Join the RE100 Club:** Make a sustainability statement and future-proof your business.

WHERE TO FIND US

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THANK YOU!

PROINSO

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