



# Shire Oak Vietnam Corporate Profile



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# About Shire Oak International



## Leading UK renewable energy developer - The CEO, Mark Shorrock, founded:

- **Wind Energy Ltd** (2002): A leading independent developer of wind farms in Scotland. It was acquired by AES in 2006 with a portfolio of 967MW in development;
- **Low Carbon Investors**: The sponsor and fund manager of very early stage incubators including the Low Carbon Accelerator, the first Spanish solar fund - the Low Carbon Spanish Solar fund, and the Low Carbon Downing solar VCT for rooftop solar (2006 - 2010);
- Low Carbon became **Low Carbon Group** in (2010), which is now the renewable partner of Vitol Energy and enabled the deployment of more than £500 million in capital into renewable infrastructure with more than 700MW already developed;
- **Shire Oak Energy** (2012): Developed of the largest solar farm in the UK to date: West Raynham (49.9MW);
- **Tidal Lagoon Power** (2012): first-of-a-kind tidal lagoon to be situated in Swansea Bay, Wales, and identified a fleet of lagoons across the British Isles;
- **Shire Oak International** (2018): A leading international developer and financier, accelerating the global transition to renewable energy solutions. Focuses on Asia, especially in Vietnam with 2.1GW+ of solar energy capacity.

**Consented renewable projects portfolio:** Total value USD **\$2.49 bn**

## GLOBAL PRESENCE AS A DEVELOPER



## LARGE SCALE RENEWABLE ENERGY PROJECTS:



Wind – 967 MW



Tidal – 320 MW



Solar – 365 MW





**Start of operations:** Summer 2019



**Business focus:** Developing a portfolio of solar energy projects across Vietnam to meet the fast-growing demand of its emerging economy



**Current team size:** 80+



**Broad international expertise**



**Number of nationalities:** 11



**Current transaction pipeline:** 720 projects and growing



**Main industries:** Furniture, Garments & Shoes, Steel, Logistics, Agriculture, Food Processing, Plastic & Rubber



# Our Development Plan in Southeast Asia



**Our vision:** Become the partner of choice for factories who want to green up their electricity supply via both solar rooftop development and development of projects that can be virtual or direct PPA.



## PHASE 1

*Dec 2019 – June 2020: Completed*

Build out with our own capital a series of solar rooftops, with the total capacity of **12 MW** in Vietnam

## PHASE 2

*July – Dec 2020*

Build out an initial:

- **192 MW** in Vietnam
- **15 MW** in Indonesia

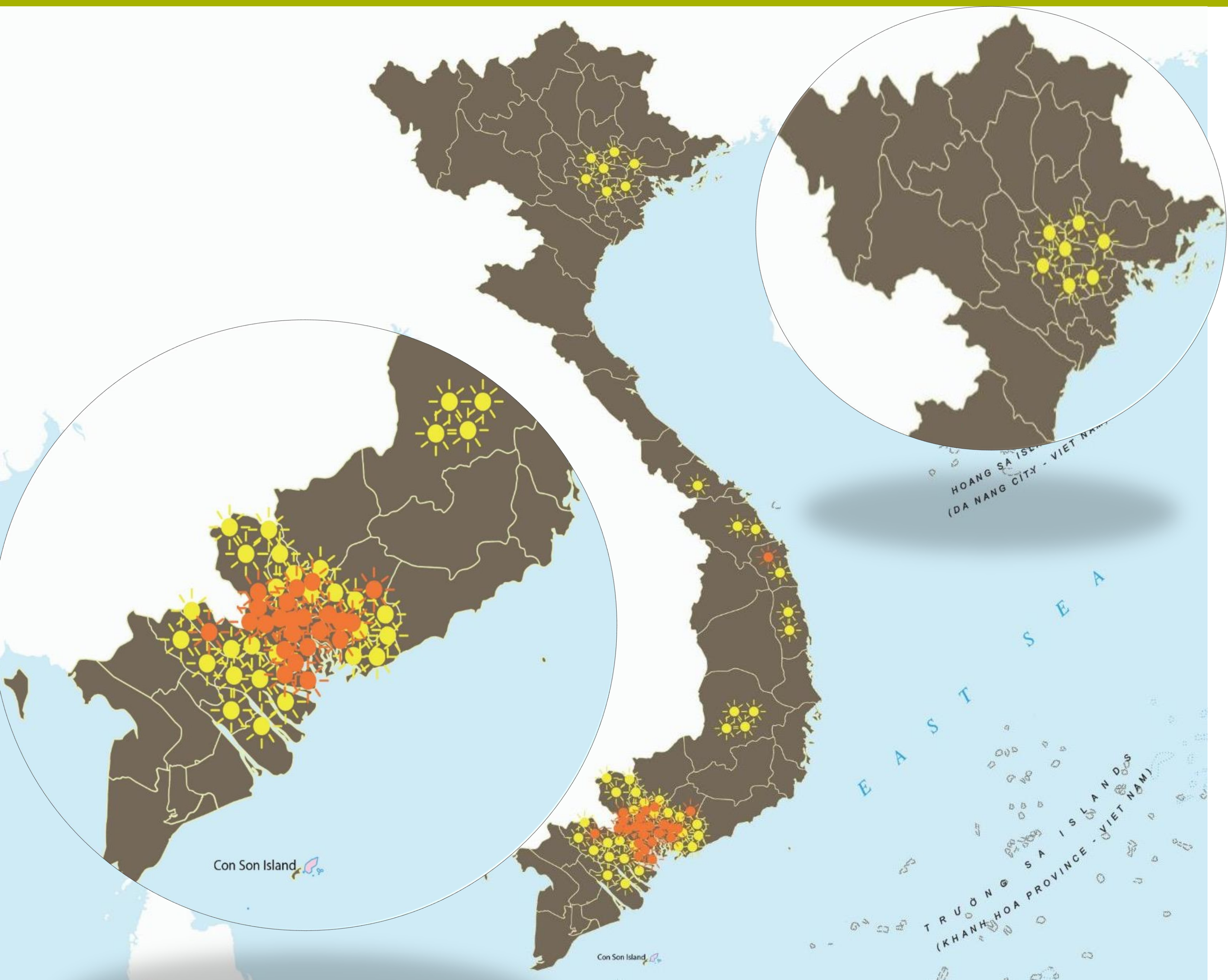
## PHASE 3

*In 2021*


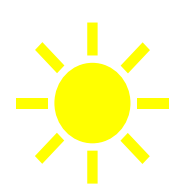
Expand our annual build out to:

- **500 MW** in Vietnam
- **30 MW** in Myanmar
- **100 MW** in Indonesia





In Vietnam, Shire Oak International is developing a broad portfolio of solar energy projects to meet the fast-growing demand of its emerging economy.

-  Operational projects  
29 projects  
Total capacity: 64 MW
-  Under construction projects  
52 projects  
Total capacity: 100 MW





**Mark Shorrock**  
Chairman, CEO

Mark has consented over £1.9 billion of renewable energy projects. He was a pioneer in the UK wind and solar sectors through his businesses Wind Energy Ltd and Low Carbon Developers Ltd. Mark’s fund management business set up one of the first UK solar roof funds, the Low Carbon Downing solar VCT and he is founder and leader of the ground-breaking 320MW Swansea Bay Tidal Lagoon project. Mark was educated at Leeds University and National Cheng Chi University, Taipei.



**Borries Plass**  
COO

Borries Plass is a senior business executive with 20 years of experience within the service industry, of which 12 years in Vietnam. Borries has worked across financial services, manufacturing, retail and utilities. Borries holds a bachelor’s degree from Northumbria University at Newcastle Upon Tyne, UK and an executive master’s degree in business administration from the HULT International Business School at Shanghai, China. Borries sat for several years on the European Chamber of Commerce Board in Vietnam representing the German Business Association.



**Mike Edge**  
Head of Finance

Mike is a renewable energy development and financing expert. He brings 12 years of experience in the low carbon sector and has worked across development, venture capital, corporate finance and project finance working with industry, governments and financial institutions. In Vietnam Mike leads the transaction team that is responsible for the closing and funding of projects in line with Shire Oak’s investment policy. Mike is also a member of the investment committee. Mike studied Natural Sciences at the University of Cambridge.



**Simon Nias**  
Director of Development South East Asia

Simon has held several leadership positions across the world in his work for Singaporean Homeland Security, the UK’s Ministry of Defence, the United Nations and the British Army, including Deputy and Chief of Staff of Singapore’s Armed Response Forces for Homeland Security in Singapore and Chief of Staff of British Forces in Afghanistan. Simon leads client engagement in Vietnam.



**Virginie De Jongh**  
Head of Customer Success

Virginie brings over 10 years of project development and management across several industries. From start-ups, multinationals to non-profits, her experience has led her to set-up factories with Volvo CE in China, implement new processes for SkyTeam at Schiphol Airport (Amsterdam), and manage the Benelux Chamber of Commerce in Shanghai. Virginie studied Business Management at the University of Louvain-la-Neuve, Belgium and now leads the Customer Success Team in Vietnam.



**Nguyen Xuan Quynh**  
Head of Investor Relations

Quynh is an accomplished investment and investor relations professional with over 13 years of IR leadership at Vingroup, Vietnam’s largest listed conglomerate, and Novaland, HCMC’s largest listed real estate corporation. She has deeply involved in a number of Vietnam’s landmark capital markets transactions with total value of up to US\$1.0bn. Quynh studied MSc International Business at University of Birmingham. She heads the IR activities at Shire Oak to engage funders, oversee the fundraising process and manage investor communications.





**Bui An Son**  
Head of Marketing & PR

Son holds an International Master of Management degree from Audencia Management School in France & an MBA degree from CFVG Vietnam. Son has more than 10-year-experience working in the strategic sales and marketing positions focused in B2B & B2C sectors in retail & FMCG industry. His valuable expertise also reflects in outstanding communication and interpersonal skills which facilitate him to carry out plenty of business coach and life coach sessions.



**Vikas Pawar**  
Head of EPC

Vikas has a total 16 years of high voltage electrical experience which includes 5 years in Solar Energy Power Projects where he has been responsible for building 300MW of solar assets. For international experience, Vikas has 6.5 years as a Construction Manager – Project Manager on solar projects.- 5 years in OMAN (Headed Electrical Power Division -Energy Projects and O&M), 6 months in Morocco and one year in Egypt.



**Vo Ngoc Qui**  
Head Of Project Management

Qui majored in Mechanical Engineering of Thermal and Refrigeration Equipment at Nha Trang University. His background includes planning and developing from MEPF scheme design to construction completion, testing commissioning and handover phases. Qui has 14 years of experiences in management and supervision in the MEPF Construction Industry. His experiences include projects of International Passenger Terminal, International 5 - star Hotel, resort, Residential high-rise building, Commercial office, Manufacturing and various water heater systems.



**Minh Le**  
Senior Sales Director

Minh has 27 years working in Diesel Power Generation with Cummins & Caterpillar as the Head of Sales. Minh has long experience and deep understanding with Vietnam power-gen market. At Shire Oak Minh is leading the sales team focusing in F&B, Electronics, public sectors, IPs & EVN.



**Long Tran**  
Senior Sales Director

Long holds both Master of Science Degree and MBA Degree from well-known universities and has worked for more than 22 years in professional environments of Caterpillar Corp, Schaeffler AG and George Fischer AG. Long has great knowledge and experience in business management, sales and product support related to power generation, mining, marine, heavy industries and building technology.



**Vu Nguyen**  
Senior Sales Director – Agriculture farm

After working in the United States, Vu spent more than 6 years in banking and finance. He was also involved in project development of several new banking products. Vu holds an MBA from Angelo State University, Texas, and passed both Chartered Financial Analyst level I and II at his first attempts.



A photograph of three construction workers, two men and one woman, standing on a rooftop under a cloudy sky. They are all wearing white hard hats and high-visibility safety vests. The woman in the center is holding a large set of blueprints. The man on the left is pointing at the plans, and the man on the right is looking on. The vests have a logo that reads "KORE OAK INTERNATIONAL".

**Our business model**



*\*In Vietnam:*

## **ROOF LEASE AGREEMENT**

Shire Oak rents the roof of the factory. The amount of electricity generated by the solar power system will be put directly into the grid and sold to Vietnam Electricity (EVN).

## **POWER PURCHASE AGREEMENT**

Shire Oak invests 100% of the cost of consultancy, design, materials, and installation of the solar rooftop. Businesses can use electricity generated by the system at discounted prices compared to that of EVN. The overspill will be sold to EVN and a part of the profits will be shared with the business.

*\*In Indonesia:*

## **POWER PURCHASE AGREEMENT**

Shire Oak invests in the development of Ground Mounted Solar systems and sell generated electricity to the national grid through a PPA contract.

## **FINANCIAL / OPERATIONAL LEASE**

Shire Oak invests in the development of Solar Rooftops. Through a Financial / Operational Lease, businesses can use electricity generated by the system at discounted prices compared to that of the Indonesian state-owned electricity company called Perusahaan Listrik Negara (PLN).





## OUR SOLUTIONS

In Vietnam, Shire Oak International offers **rooftop solar installations with a 15 - 20 years contracts**.

We build on large commercial rooftops at **no cost to the business** and then **sell the power generated** back to the company at a **discount to standard electricity prices** in Vietnam (EVN).

During the lease, **we manage the operations and maintenance** of the system and at the end of the term we transfer ownership of the installed system to the business for a nominal fee of VND 100.000.

## YOUR SAVINGS

We pay to install rooftop solar systems to ensure efficiency and quality. By working closely with our **trusted EPC partners**, we source premium panels for our clients, manufactured in Europe, North America and Asia.

**Over a 15 to 20-year lease** period, a Vietnamese business with a typical 1MW installed system has the potential to **save up to 25%** – or close **to USD \$1.8 mln** – with a Shire Oak International installed system compared to EVN prices.

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**Target Clients:** *All businesses (C&I as well as Agriculture) with a roof surface area of ~3,500m<sup>2</sup> and above are eligible for our service.*



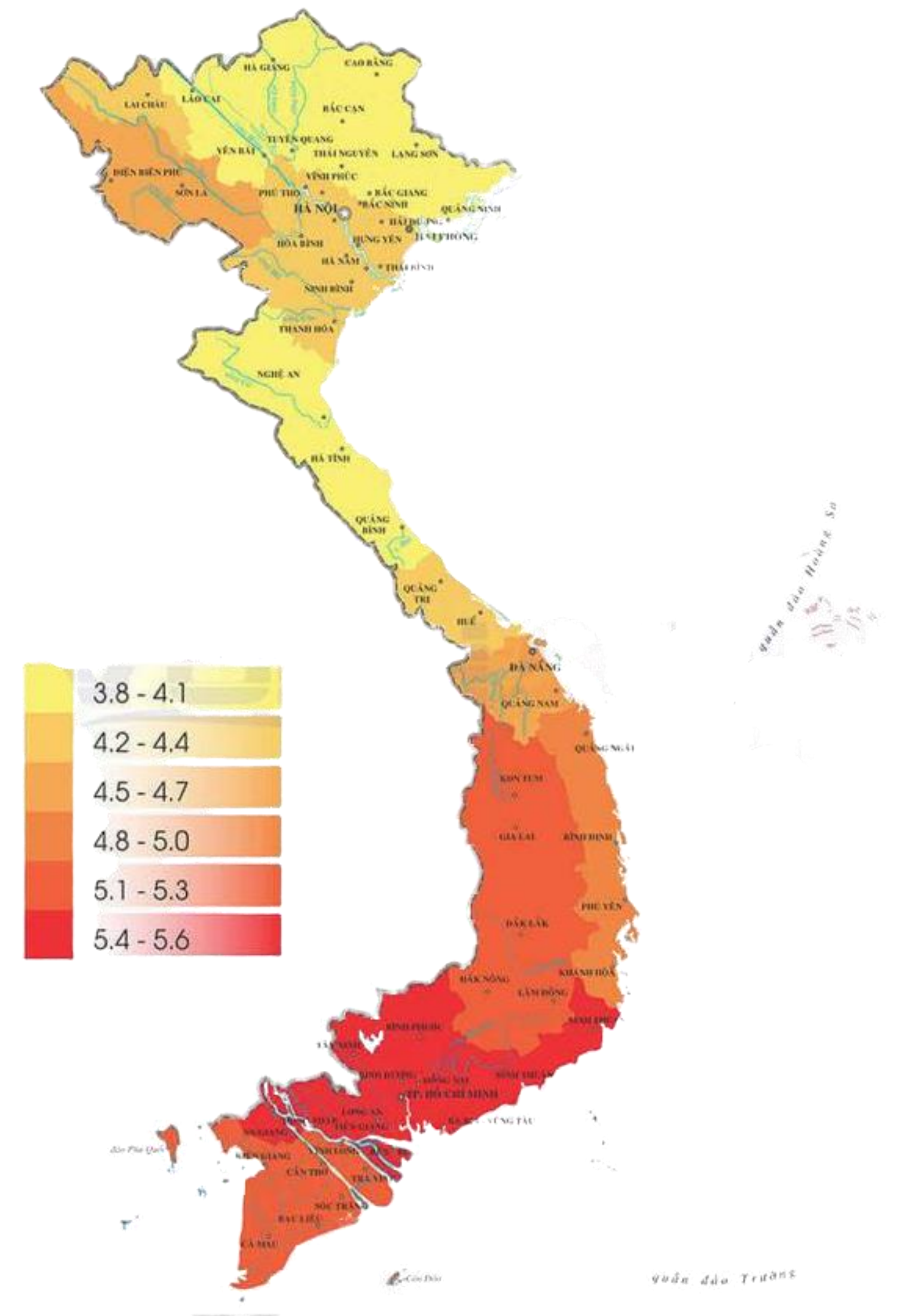
# VIETNAM SOLAR RADIATION

The total solar radiation is about:

5kWh/m<sup>2</sup>/day in the **South** of Vietnam

4.5kWh/m<sup>2</sup>/day in the **Centre** of Vietnam

4kWh/m<sup>2</sup>/day in the **North** of Vietnam





# Contract Options For Manufacturer



# Commercial Option 1: A Guaranteed Discount to EVN Price throughout the Contract Period



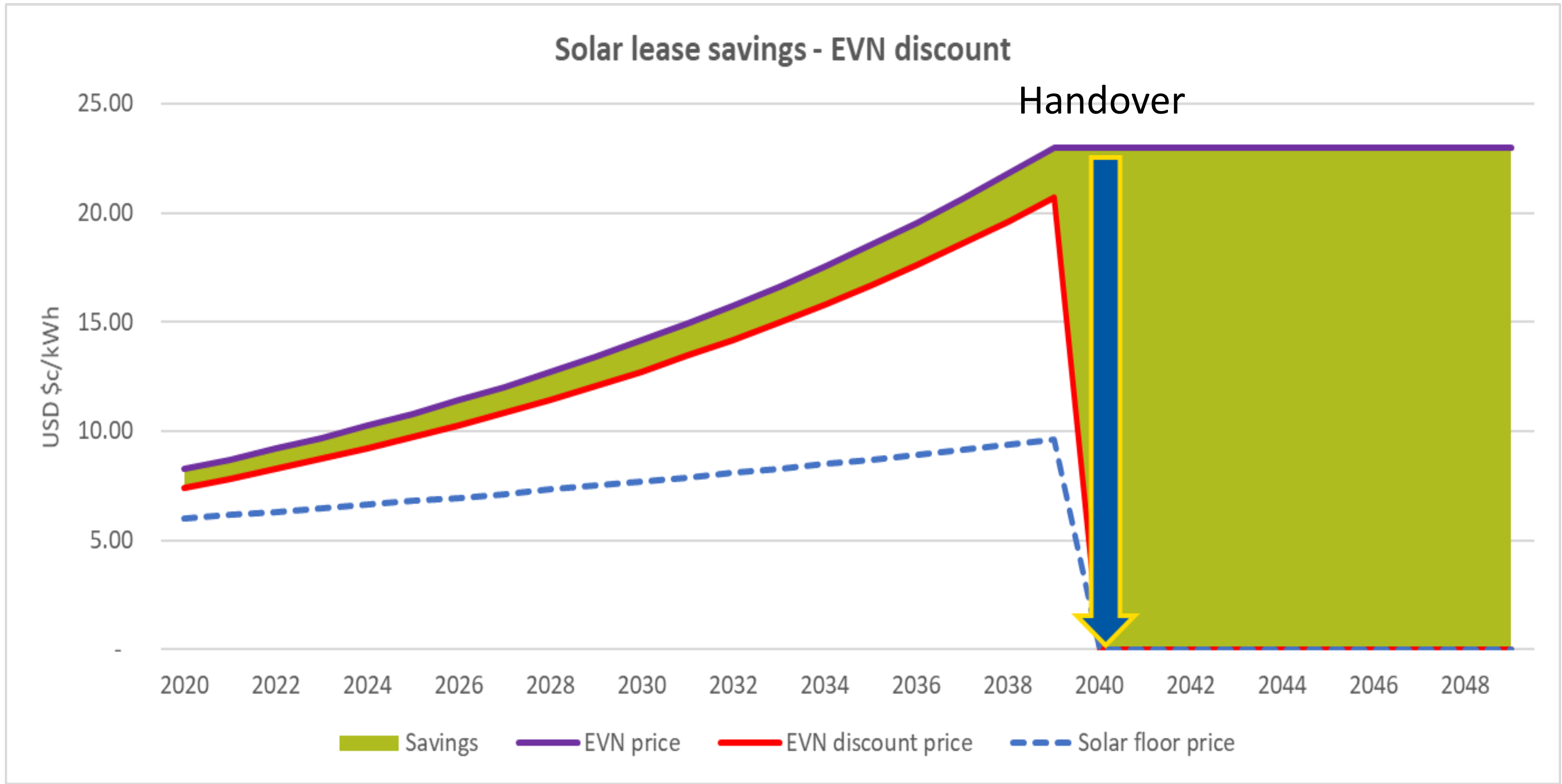
- Lease payments are fixed at set discount to EVN three-stage price tariff
- Floor price agreed to provide bankable projects
- Guaranteed savings over full EVN term
- Table shows potential savings available under two contract length options per MW

Zone	Discount to EVN price *	Lease term	Potential savings over lease term	Potential savings over asset life
#	%	Yrs	USD'000s	USD'000s
North	3 - 9 %	20	279	2,516
Centre	8 - 18 %	20	631	3,166
South	15 – 25 %	20	983	3,833

\* Final discount % depends on sun hour & electricity consumption



# Option 1: The EVN Price Discount Option



- 20-year example
- 25% discount to EVN price
- US \$c6.0/kWh floor price
- Factory inherits solar after year 20

Lifetime estimated savings:  
\$3.8m/MWp



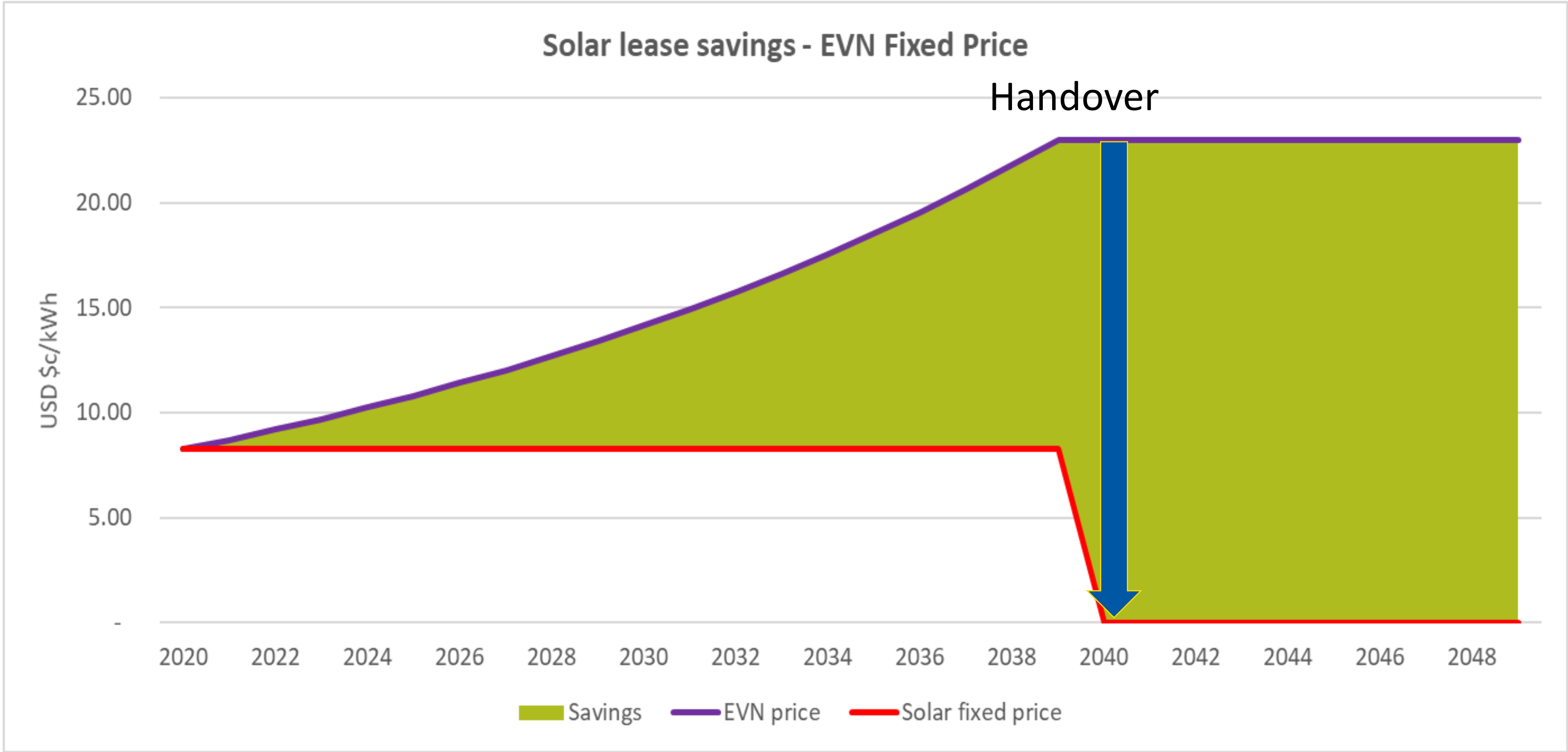


- Lease payments are fixed and do not increase over time
- Starting prices may be slightly above current EVN pricing but are soon overtaken as EVN price increases
- Historical EVN price increases suggest there will continue to be electricity price rises
- Table shows the flat price and savings available under two contract length options per MW

Zone	Lease payment per kWh	Lease term	Potential savings over lease term	Potential savings over asset life
#	US \$c/kWh	Yrs	USD'000s	USD'000s
North	9.0	20	1,138	3,375
Centre	8.2	20	1,483	4,019
South	7.9	20	1,760	4,611



# Option 2: Savings under Fixed Price Option



- 20-year contract
- US \$c7.90/kWh flat
- No escalation
- Factory inherits solar after year 20

Lifetime potential savings:  
\$4.6m/MWp



# Contract Options For Servicing



# Commercial Option 1: A Guaranteed Discount to EVN Price throughout the Contract Period

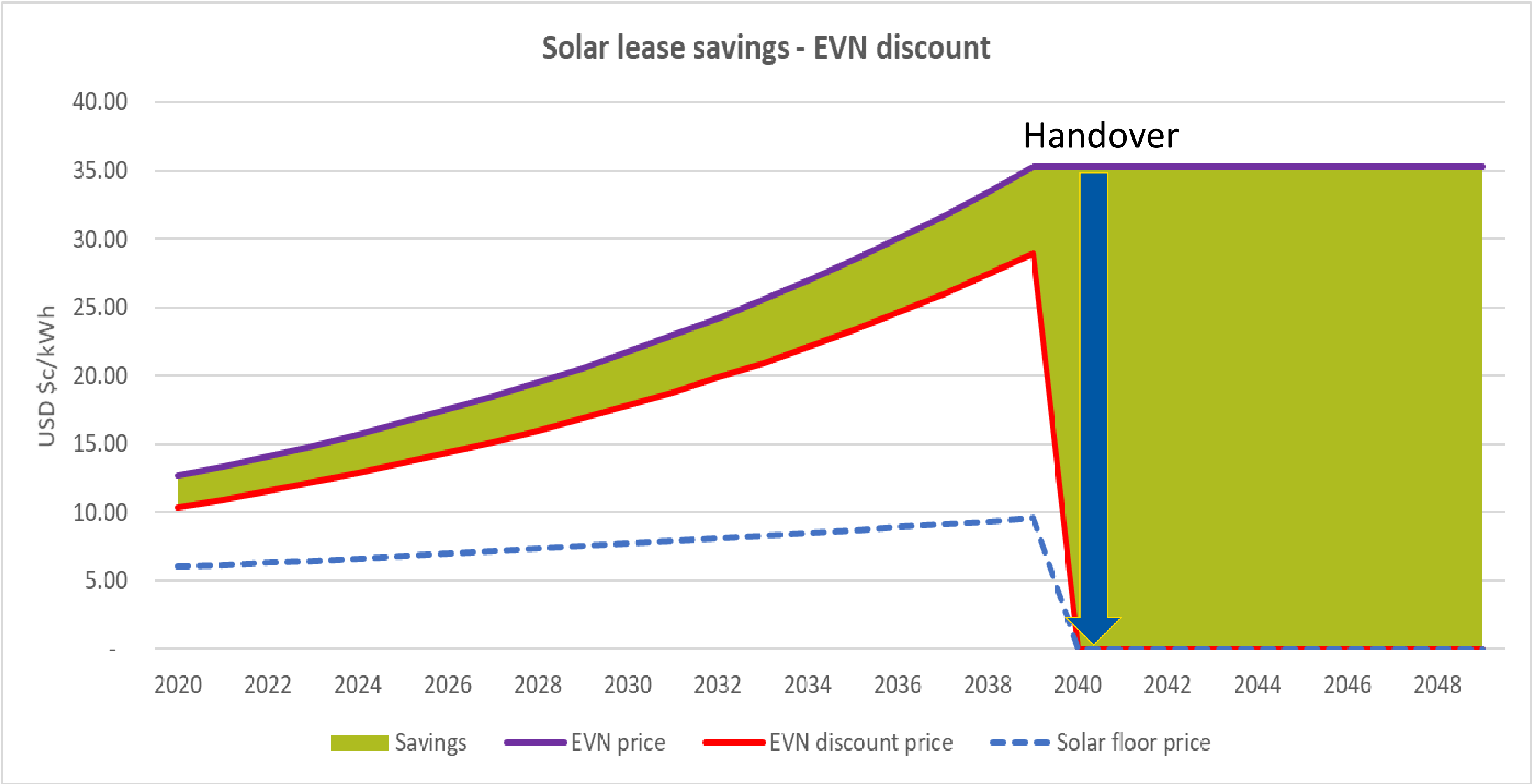


- Lease payments are fixed at set discount to EVN three-stage price tariff
- Floor price agreed to provide bankable projects
- Guaranteed savings over full EVN term
- Table shows potential savings available under two contract length options per MW

Zone		Discount to EVN price		Lease term	Potential savings over lease term	Potential savings over asset life
#		%		Yrs	USD'000s	USD'000s
North		20 – 25 %		20	1,189	4,649
Centre		30 – 35 %		20	1,882	5,800
South		40 – 45 %		20	2,714	7,112



# Option 1: Savings under EVN price discount option - Applied to the South



- 20-year contract
- Up to 45% discount to EVN price
- US \$c6.0/kWh floor price
- Factory inherits solar after year 20

Lifetime savings:  
\$7.1m/MWp



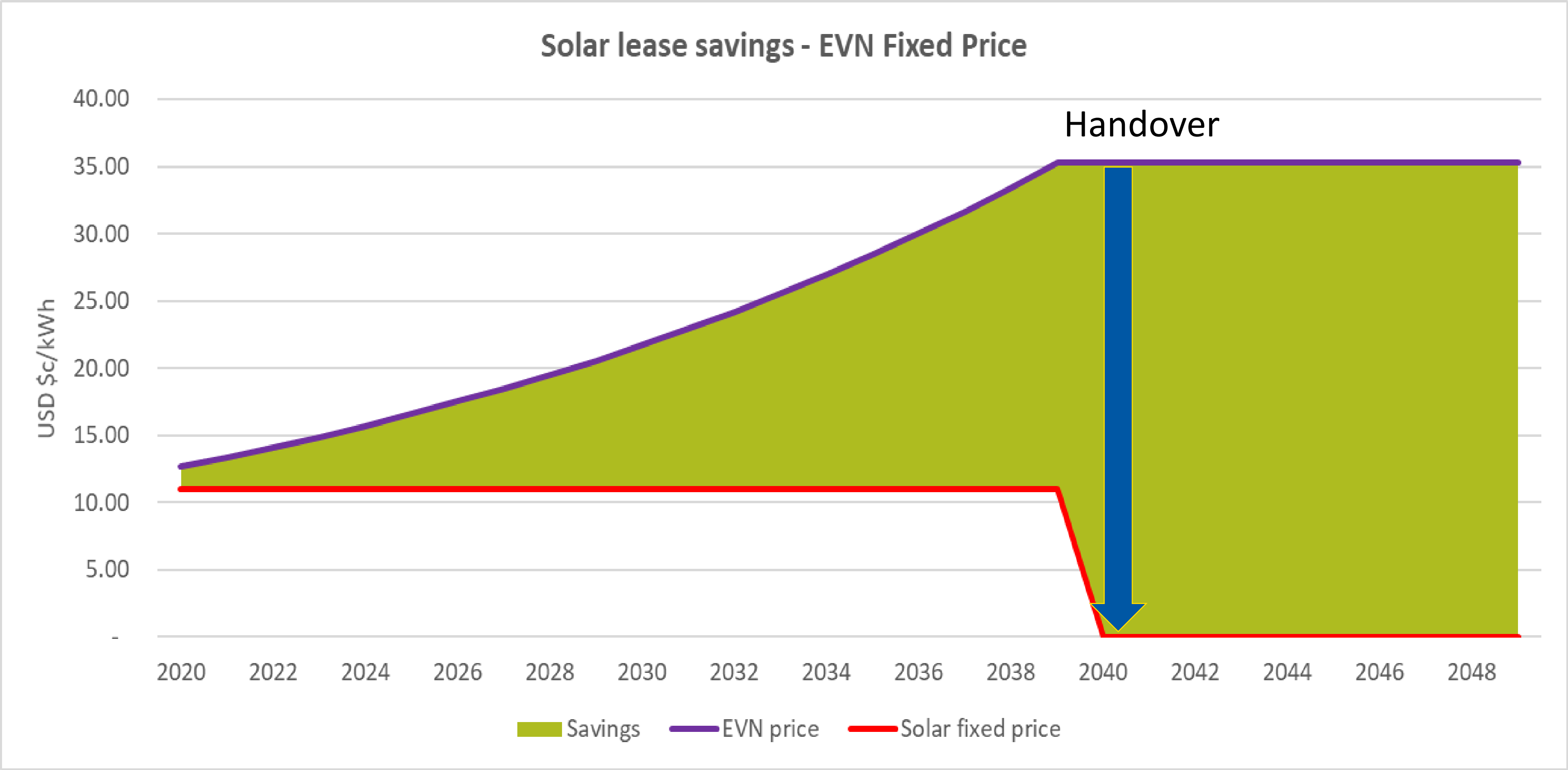


- Lease payments are fixed and do not increase over time
- Starting prices may be slightly above current EVN pricing but are soon overtaken as EVN price increases
- Historical EVN price increases suggest there will continue to be electricity price rises
- Table shows the flat price and savings available under two contract length options per MW

Zone	Lease payment per kWh	Lease term	Potential savings over lease term	Potential savings over asset life
#	US \$c/kWh	Yrs	USD'000s	USD'000s
North	10	20	2,577	6,037
Centre	9.5	20	3,037	6,954
South	9.0	20	3,282	7,681



# Option 2: Savings under fixed price option - Applied to the South



- 20-year contract
- US \$c9/kWh flat
- No escalation
- Factory inherits solar after year 20

Lifetime savings:  
\$7.6m/MWp





Our process will take from **10 to 15 weeks** after signing the offer letter and the Head of Terms



1. Offer	2. Final Design & Contract	3. Investment Approval	4. Installation & Construction	5. Grid-Connection
<ul style="list-style-type: none"><li>Initial Information</li><li>Material Selection</li><li>Offer Letter + HoTs</li><li>(NDA)</li></ul>	<ul style="list-style-type: none"><li>Site Survey</li><li>Final Design</li><li>Contract Signing</li><li>Technical &amp; Transaction Checklist Documents</li></ul>	<ul style="list-style-type: none"><li>System Book/Ready to Close</li><li>PPA with EVN</li><li>Prepare materials and components</li><li>EVN's Check &amp; Approval</li></ul>	<ul style="list-style-type: none"><li>Solar Panels Installation</li><li>Substation Construction</li><li>QA/QC</li></ul>	<ul style="list-style-type: none"><li>COD</li><li>EVN Connection</li></ul>





- 3 local strategic EPC partners & over 10 contracted EPC partners. With their experience of operating in the Vietnamese market, we ensure smooth progression of projects.
- We favor partners who are highly experienced in the solar energy industry, illustrated by their **extensive project portfolio, quality assurance, health & safety procedure** and **technical expertise**.

EPC Partners

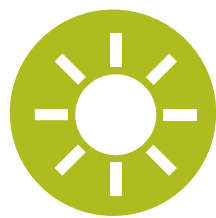


Tier 1 Vendors



Key Partners





**Project pipeline**  
**720+**



**Capacity**  
**2.1GW+**



**System value**  
**USD 1.9 billion**



**Customers**  
**in 45+ provinces**

**Shire Oak International** currently has a pipeline of 720 projects in Vietnam, spanning the length of the country with a total estimated system value over USD 1.9 billion.

Our 2 offices in Ho-Chi-Minh-City and Hanoi cover all provinces, currently developing projects in 45+ provinces.

Have a look at our interactive map, to find out all the provinces that Shire Oak currently operates in.





**The benefits we bring**





## Economic:

- Reduce electricity costs
- Lower operational costs and no upfront cost to businesses
- Reduce cooling bills
- Long term price hedging

## Marketing:

- Reconcile legitimate business interests with sustainable development
- Build a positive, professional and responsible brand image

## Operation:

- Lower operating temperature by 5-7°C
- Protect factories' roof structure

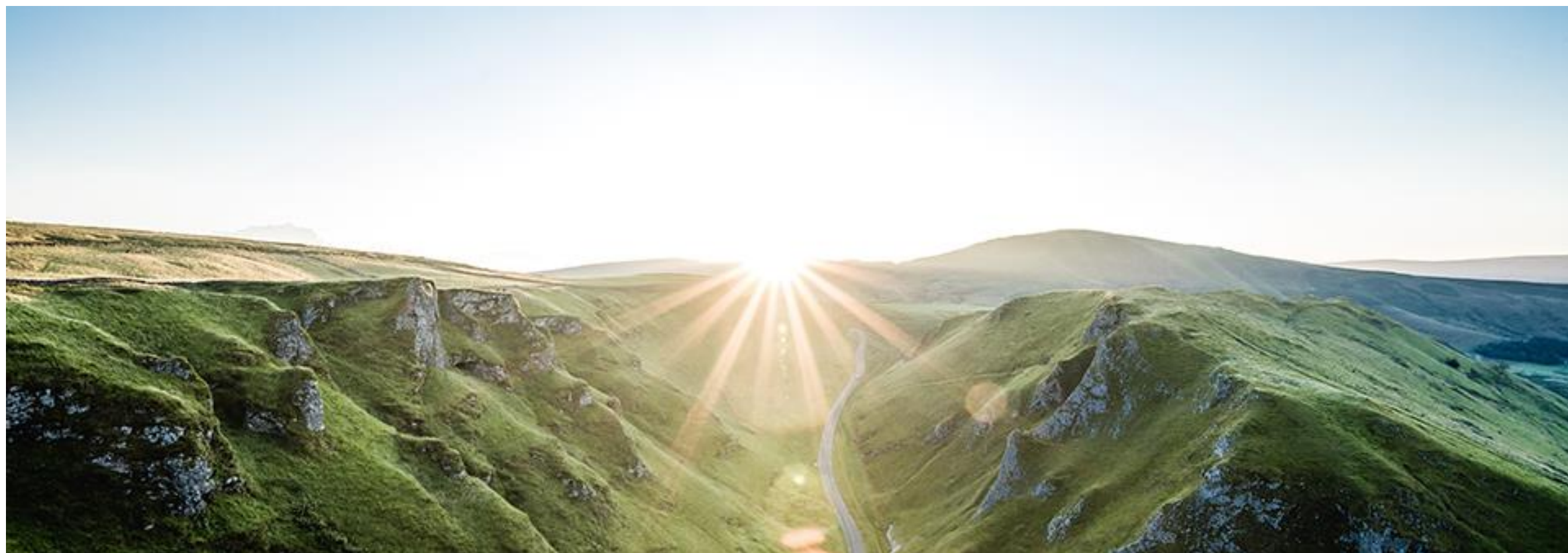
## Green certificate: Leadership in Energy and Environmental Design (LEED)

Be more competitive and sustainable with LEED certificate - the most widely used green building rating system developed by the U.S. Green Building Council





- Help Vietnam lessen its dependence on fossil fuels
- Accelerate the global transition to renewable energy
- Reduce carbon emissions
- Achieve the UN's Sustainable Development Goal 7: *Affordable and clean energy*
- Support the preservation of our natural world



**Our Founder – Mark Shorrock** expresses our green vision for Vietnam's economy.

Watch the video: <https://youtu.be/H2OBjz7UCSM>



# HOW MUCH ELECTRICITY

DOES A 1 MW SOLAR ROOFTOP GENERATE?

*A 1 MW system is equivalent to an installation area of about 7,000 m<sup>2</sup>*



**IN AN HOUR**  
399 kWh

**This amount can power:**

- 3,992 Laptop
- Offsetting 0.26 tonnes of CO<sub>2</sub> emissions



**IN A DAY**  
3,991.9 kWh

**This amount can power:**

- 669 AC system
- Offsetting 2.64 tonnes of CO<sub>2</sub> emissions



**IN A WEEK 30,354.9 kWh**

**This amount can power:**

- 63,239 bulbs
- Offsetting 20 tonnes of CO<sub>2</sub> emissions



**IN A MONTH**  
121,419.7 kWh

**This amount can power:**

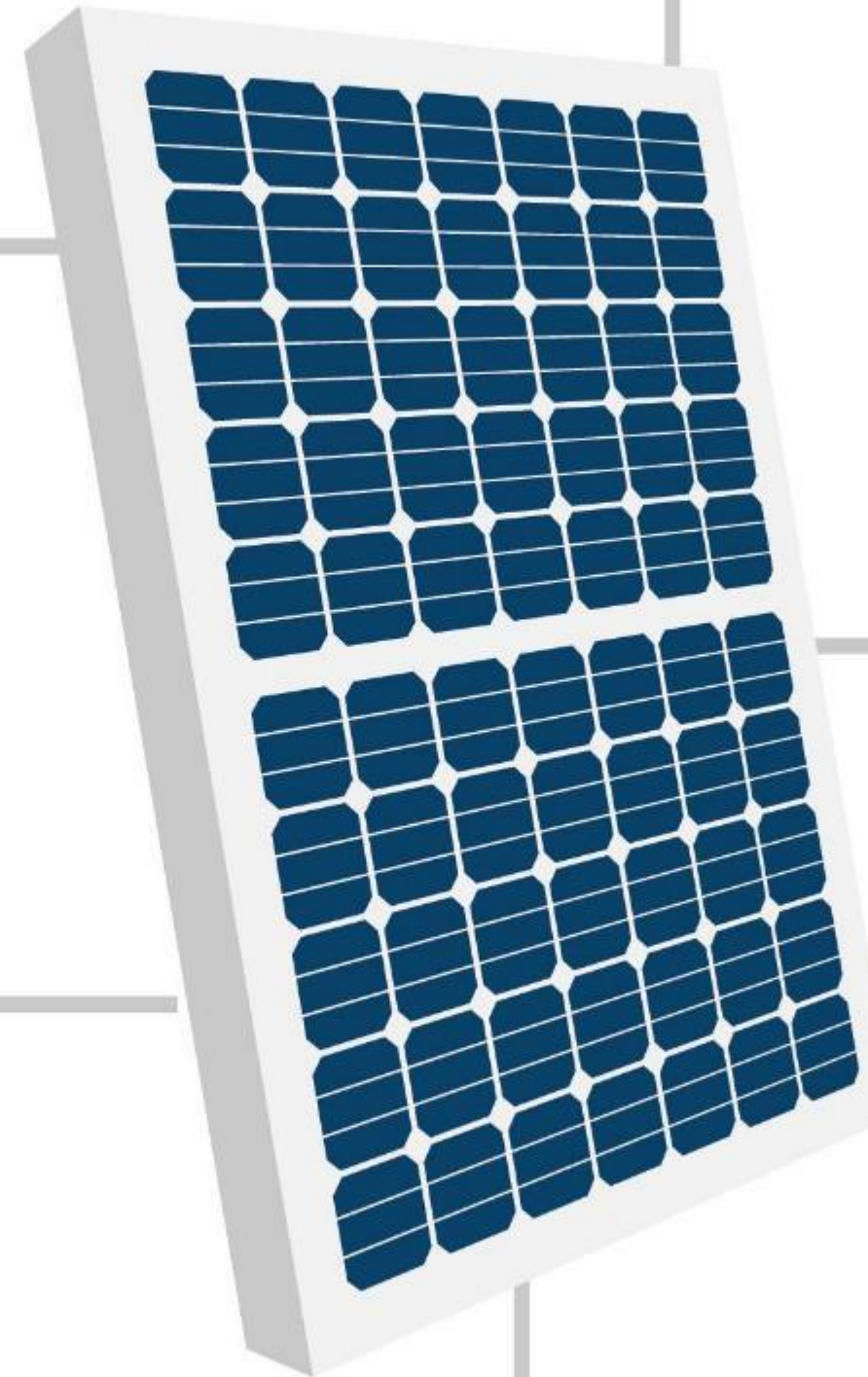
- 379,437 32-inch TV
- Offsetting 80.3 tonnes of CO<sub>2</sub> emissions



**IN A YEAR**  
1,457,036.2 kWh

**This amount can power:**

- 208 electric cars
  - 607 households
- Offsetting 963.5 tonnes of CO<sub>2</sub> emissions





A low-angle, upward-looking shot of a modern skyscraper with a glass facade. The building's grid-like structure of windows and metallic frames is prominent on the left side, extending towards the top left corner. The right side of the image is dominated by a bright blue sky filled with scattered, fluffy white clouds. A semi-transparent dark grey rectangular box is centered horizontally across the middle of the image, containing the text "Our track record" in white. The text is underlined with a thin white horizontal line.

# Our track record



To date, our development team has consented US\$2.5bn worth of renewable energy projects, examples of which are shown below.





# Clients by Industry





- During 2020 alone, our team completed **29 projects** with the total solar capacity of **64 MWp** in Vietnam
- In 2021, we plan to expand our annual build to 500 MW in Vietnam, 100 MW in Indonesia and 30 MW in Myanmar



Dong Khanh, Long An | 4,977 kWp



Tanifood, Tay Ninh | 5,125 kWp



Ngan Hoang Phat, My Phuoc | 2,104 kWp



Fabtek, Binh Duong | 1,105.83 kWp



Mekong Tien Giang | 891 kWp



Viet Phu, Long An | 999.68 kWp



Cam Nguyen, Long An | 4,504 kWp



Daigaku, Binh Duong | 421.98 kWp



Mekong Furniture, Binh Duong | 3,247.8 kWp



Clean Wood, Binh Duong | 760.32 kWp



Boho Décor, Long An | 996.77 kWp



Mekong Ben Tre | 768.96kWp





British Ambassador visits Boho Décor Project

Solar rooftops can help achieve 20% of the total points of LEED certification. BOHO is the first furniture factory in Vietnam to be awarded the LEED Gold Certification in June 2020 by The U.S. Green Building Council (USGBC)



A wide-angle photograph of a large industrial building's flat roof, which is densely covered with rows of dark solar panels. The panels are arranged in neat, rectangular sections separated by thin metal tracks. In the background, other industrial buildings and a distant horizon are visible under a sky filled with large, white, fluffy clouds. A semi-transparent dark grey rectangular box is centered over the middle of the image, containing the text "Why us?".

# Why us?



## INTERNATIONAL TRACK RECORD

We have 18 years of proven experience across the globe, founding pioneering projects in the UK, Europe and beyond

## ESTABLISHED INVESTOR BASE

We have partnerships with investors across the globe, supporting our solid financial foundation

## PREMIUM QUALITY

We only use Tier 1 solar panels sourced from manufacturers based in Europe, North America and Asia



## EXPERIENCED LEADERSHIP TEAM

Our management boasts 5 nationalities with a combined more than 100 years of business experience

## SERVICE EXCELLENCE

We offer full operations and maintenance support over the lifetime of your solar system





**Environment** – **Shire Oak International** has incorporated environmental and social safeguards into our project design and implementation that are in line with the highest international standards.

For every project, we will allocate money to select funds every year, corresponding to the installed capacity. Each fund will be managed by local and community representatives and organizations. It is our aim to primarily support local communities and empower them to preserve their own natural environment and wildlife.



Saving wetlands  
for wildlife & people

**Vietnam**

As part of our ongoing commitment to protecting and conserving wildlife in all the countries we operate in, **Shire Oak International** will spend USD 1,000 per MW every year out of our Operations & Maintenance budget to protect the wonderful habitats and wildlife of Vietnam, commencing with support for a WWF project protecting the endangered Sarus Crane in the Mekong Delta.

This initial project will be the starting point for a broader scope of community support in Vietnam and beyond.





As an environment-focused company, we are working with like-minded organizations like WWF to provide community support and environment protection through this CSR campaign.

IMPROVE LIVING CONDITION OF LOCAL PEOPLE  
IN REMOTE AREAS:



School



Orphanage

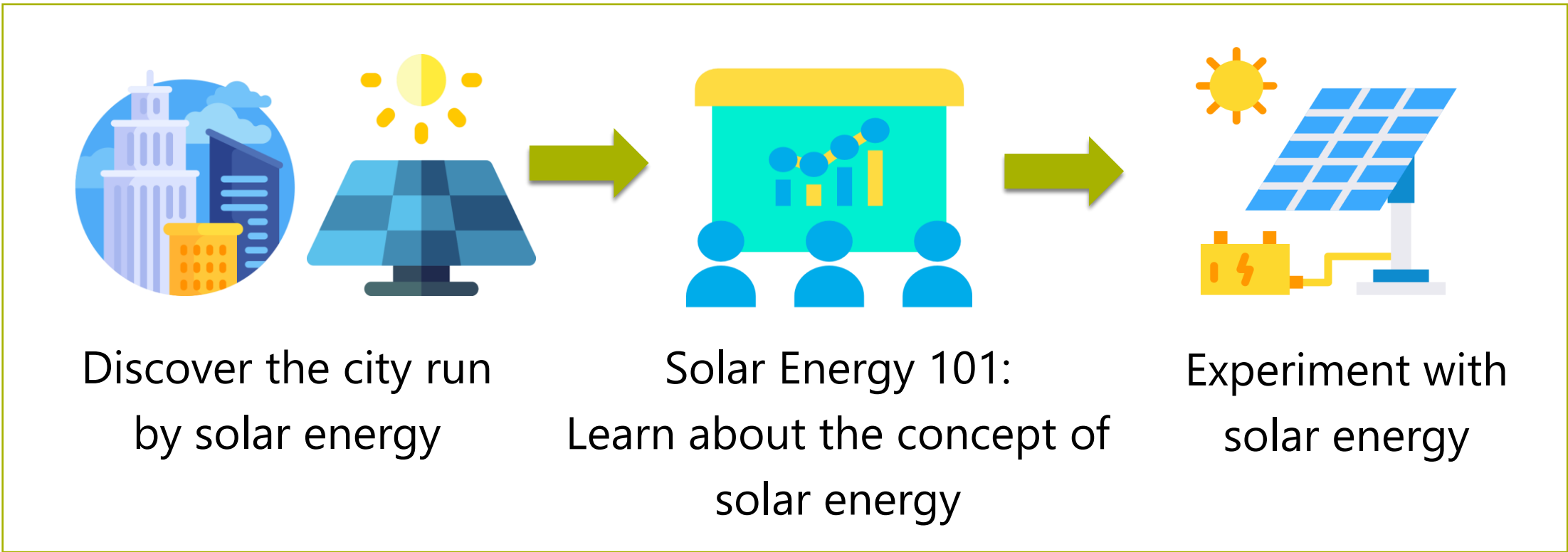


Medical Station

*via enhancing sustainable energy accessibility*

We donate solar rooftop systems to community facilities to improve the local people’s quality of life, giving them the chance to do more and be more.

*School activities*  
SOLAR ONE-DAY CAMPING JOURNEY



Raise Student - The Young Generation the Awareness of Protecting the environment, save the energy and using clean energy for better environment.







**Thank you!**





## Contact Us

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