

# ANNUAL REPORT

2020



Carbon Finance and Impact Investing for  
Clean energy and Water solutions









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## INTRODUCTION

The 2020 world proved full of challenges and surprises. This was certainly true for Nexus. Globally, greenhouse gas emissions plummeted as a result of the COVID-19 pandemic. One of our clients – an airport-purchaser of carbon credits – suddenly had almost no emissions to compensate! Carbon markets suggested a cautious comeback, even amidst the uncertainty around future rules for carbon projects which are awaiting the COVID-postponed UN climate negotiations.

For Nexus, our longest-running carbon project, the Vietnam Biogas Programme, came to an end, resulting in unprecedented sales of carbon credits. At the same time, we continued to issue and sell credits for a variety of other stakeholders.

Within Nexus' impact investing mandate, we facilitated access to 870,000 USD for projects in Cambodia, the Philippines, Myanmar and Indonesia, consolidating our presence in the SEA region. One of our impact investment funds more than doubled its portfolio and expanded its geographical presence to three different countries. With funds available for reinvestment from the Clean Energy Revolving Fund, Nexus itself became an investor in the Pioneer Facility.

We further collaborated with the UN Environment Programme, the National Committee for Sub-National Democratic Development Secretariat and SHE Investments in Cambodia in Empower: Women for Climate Resilient Societies Project.

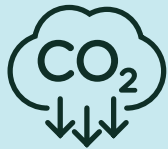








# 2020 AT A GLANCE



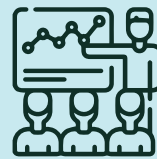
**1.6 million**  
CARBON CREDITS SOLD



**4 IMPACT**  
INVESTMENTS



A TOTAL OF  
**\$5.8 M**  
UNLOCKED



FINANCING  
**10 SOCIAL**  
ENTERPRISES



**6** CLEAN ENERGY  
SOLUTIONS

**4** WATER  
SOLUTIONS







872,000

NEW BENEFICIARIES

IN 2020



604,000

MORE PEOPLE WITH  
ACCESS TO  
CLEAN ENERGY



268,000

MORE PEOPLE WITH  
ACCESS TO  
CLEAN WATER



AN ESTIMATED

905,000 CO<sub>2</sub>

EMISSION  
REDUCTIONS

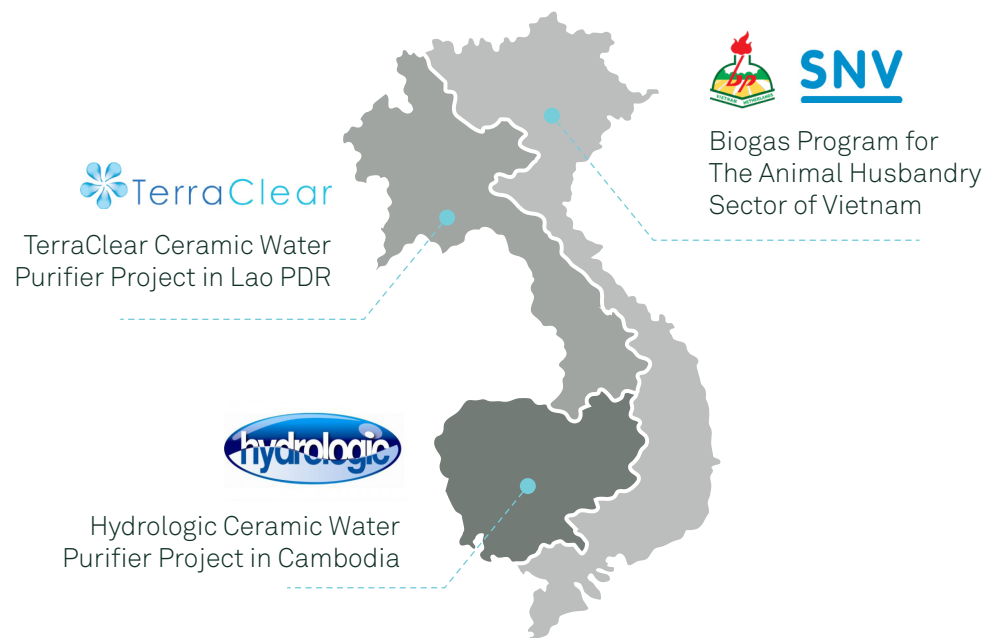


# Chapter 1:

# Carbon Finance

## a. Carbon credits issuances – quantifying SMEs’ contributions to climate change mitigation

During 2020, Nexus finalized the verification and issuance processes for 3 projects:



These projects were verified under the Gold Standard methodologies and issued more than 830,000 tCO<sub>2</sub> emission reduction (VERs) which is equivalent to nearly 6% of the total Gold Standard credits issued in 2019 globally<sup>1</sup>.

VERs quantify the social enterprises’ direct contribution to climate change mitigation. They also demonstrate each project’s capacity to generate social and economic co-benefits.

<sup>1</sup>[https://www.goldstandard.org/sites/default/files/gold\\_standard\\_annual\\_report\\_2019.pdf](https://www.goldstandard.org/sites/default/files/gold_standard_annual_report_2019.pdf)



Along with the emission reductions calculated from the traditional fuels replacement (mainly firewood, agricultural residues and charcoal) for cooking and boiling drinking water, these carbon projects saw a reduction in illnesses related to indoor air pollution and poverty thanks to the energy cost and time saved from traditional solid wood

fuel collection and cooking, leading families to carry on new activities and improve their livelihoods.

The social enterprises also provide training and create jobs for local people in the supply chain (i.e. workers, retailers, masons, technicians, etc.), further amplifying the benefits to their communities.

## b. Carbon credit sales – driving unprecedented levels of funding to projects

2020 was an historic year for carbon credit sales at Nexus. More credits were sold and more revenue was delivered to projects than any other year in Nexus' history, leaving our portfolio 100% contracted. This has been excellent news for our projects as the additional revenue has offered financial support during the difficult times of Covid while also giving projects the financial foundation to move forward with business plans based on contracted revenue scheduled in the future.

These results have been largely achieved by the increased demand from the market for carbon credits. Governments are pledging for concrete actions to be taken. More and more corporate entities are developing net-zero strategies with

carbon-neutral goals to achieve by 2030. Over the next few years we expect to see the consolidation of all of these commitments and the delivery of clear implementation plans.

A strategic shift was initiated within Nexus in 2020 in order to greatly increase efficiencies and meet this growing demand. We utilized some internal innovation to better develop systems to streamline the influx of new inquiries. We adjusted our sales strategies to be able to meet the requirements of large volume purchases in order to capitalize on the present demand and deliver the results to our portfolio projects. In the coming years, Nexus will focus on growing its portfolio of projects to meet the carbon-offsets demand.



HYDROLOGIC –  
CAMBODIA

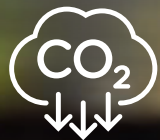
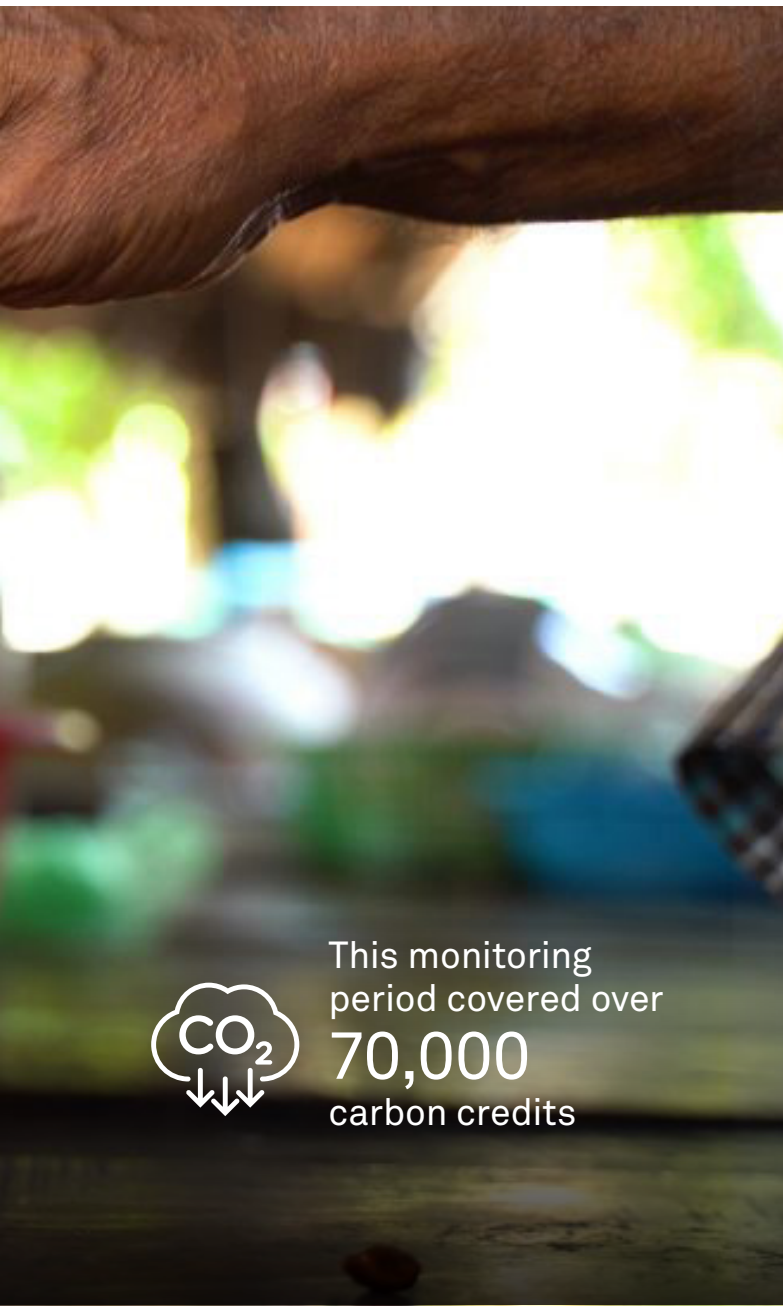




Hydrologic is a social enterprise producing and disseminating ceramic water purifiers (CWPs) that has provided safe drinking water for Cambodian households since 2010. These CWPs treat contaminated drinking water and reduce the demand for conventional water treatment through boiling water with non-renewable biomass.

Nexus has supported their carbon project since 2012 by providing an initial loan for upfront costs and technical assistance to register it as a carbon project under the voluntary standard

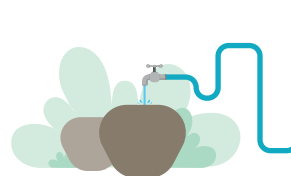
(Gold Standard). Thanks to a climate fund, Nexus was able to offer financing to Hydrologic to secure the upfront costs of that journey, including the feasibility study, the project design, and registration, as well as the first audit and credits issuance. The business model was built in a way that the carbon project would not cannibalize the company resources and their development, yet it delivers revenue in the medium term to sustainably support company growth.



This monitoring period covered over **70,000** carbon credits



Since 2019, Nexus' technical team have worked with Hydrologic to monitor and begin the verification work for the 9th monitoring period. This monitoring period covered over 70,000 carbon credits, which were issued in September 2020 with significant positive impact (co-benefits) generated. These co-benefits included avoiding deforestation, prevention of acute lower respiratory infections (pneumonia), and wood fuel savings.



Revenues from the sale of the carbon credits were particularly crucial for Hydrologic in 2020. Besides helping them to sustain their activities amid the Covid crisis, the funds allow them to:



Invest in business growth by expanding their direct sales throughout the more rural and remote areas in Cambodia, ensuring their technology reaches the families that benefit the most



Invest in the training and development of all 100+ staff, including personal leadership and professional development for all their factory, sales, and support staff



Finance an extensive warranty program that ensures proper maintenance, education and support at the household level and provides a guarantee to replace broken filters free of charge



Ensure a rigorous ongoing program of education for their field staff while also providing the resources to educate customers



Invest in new technologies and improvements in the working environment at the factory



Undergo research and development to continually improve the filter quality and the offering to their customers







TERRACLEAR –

LAO PDR



The project sold  
more than **70,000**  
**Ceramic**  
**Water Purifiers**



Gold Standard  
issuance of over  
**58,000 VERs**



TerraClear, a social enterprise based in the Lao People’s Democratic Republic (Lao PDR), was established with the aim of leveraging carbon finance to introduce Ceramic Water Purifiers (CWPs) throughout the country. The CWPs treat contaminated drinking water at the point of use by effectively removing over 99% of bacteria, reducing turbidity, and reducing household and institutional demand for biomass as compared to conventionally treating drinking water by boiling.

Both the Ministry of Food and Drug and the Ministry of Health in Lao PDR have certified the product, and the Ministry of Health endorsed the CWP as an effective water treatment product.

The carbon project was registered under the Gold Standard in 2014 and successfully transitioned into Gold Standard for Global Goals (GS4GG) in April 2019. The project sold more than 70,000 Ceramic Water Purifiers



(CWPs) up to the end of 2020. In August 2020, its additionality was again recognized through the Gold Standard issuance of over 58,000 VERs for the 4th monitoring period of the project.

With the assistance of carbon finance, this project is economically sustainable and not only mitigates climate change by avoiding deforestation and reducing emissions, it provides a significant improvement in public health and household welfare.



**SNV**

# BIOGAS PROGRAM – VIETNAM



Gold Standard issuance  
**709,192 VERs**



the BP project has reduced  
Vietnam's GHG emissions by  
**3 million tons**



In 2020, Nexus concluded a momentous chapter as the Vietnam Biogas Programme (BPV) came to an end. BPV, in which Nexus partnered for a decade, addressed both climate change mitigation and energy access for 850,000+ users in communities across rural Vietnam by introducing biodigesters. Over the life of the programme, 179,000+ biogas plants were built in 55 provinces.

The BPV was launched in 2003 as a partnership between SNV Netherlands Development Organisation and the Ministry of Agriculture and Rural Development (MARD) in Vietnam. The



objective of the programme was to effectively utilize localized biogas technologies to develop a commercially viable biogas sector in Vietnam, while leveraging carbon finance to support the programme's long term success.

In 2011, Nexus for Development was selected to support BPV through carbon certification and credit management in order to access international financing. Following strict procedures and regulations, the programme received its certification under the Gold Standard – the rigorous, global voluntary standard for carbon offset projects. Since then, Nexus has been monitoring and measuring the project's impacts using the Social Return on Investment (SROI) methodology before moving to the more contemporary Impact Management and Measurement (IMM) practices. All project monitoring surveys and field tests have also been validated and confirmed by accredited third-party auditors in addition to the Gold Standard team and to Nexus's quality assurance process.

This is the first domestic biogas project in Vietnam that is recognized for reducing emissions according to Gold Standard. In 2020, with the issuance of 709,192 VERs from the fourth monitoring period, the BP project has reduced Vietnam's GHG emissions by over 3 million tons of CO<sub>2</sub> and became one of the projects with highest volumes for voluntary carbon credits available on the market.

The achievements of the Biogas Programme make this project an important contributor to the global carbon market – total credits account for 2.6% of the global credits issued since the programme started in 2003. In Vietnam, by the end of 2018, a total of 2.36 million GS VERs were issued for the BP project accounting for 70% of the total issuance. Including the credits issued in the fourth monitoring period, this rate increases to 75%.



# NAZAVA WATER FILTERS – INDONESIA



**more than 100**  
resellers living across  
Indonesia



**57,000**  
Gold Standard certified  
carbon credits



Nazava sells water filters through more than 100 resellers living across Indonesia, providing access to safe drinking water without the need to boil it. Simultaneously, the organization is also focused on education, working at the village level and with local organizations to train households on water purification. This approach was developed through local expertise on the ground, targeting long-lasting change in the archipelago.

Nazava's carbon project was registered in 2016 under the Gold Standard, a rigorous global voluntary standard for carbon offset projects. The emission reductions were achieved via the usage of Nazava water filters over the past three years. Nazava's carbon-credit issuances were Indonesia's first water-filter carbon credits providing international recognition of their climate mitigation impact.

Mid-2020, Nexus signed a 3-year sales contract for over 57,000 Gold Standard certified carbon credits on behalf of Nazava. Now, this multi-year contract guarantees a steady revenue stream for Nazava for three years in order to support their growth and increase their impact on the ground. While the carbon certification process can feel long and costly, the eventual carbon credit revenues can be worth the investment as it allows some initiatives to cover up to 30% of their operational costs.



# Chapter 2:

# Impact investing

2020 has been a big year for impact investing into clean energy and water access companies at Nexus for Development. New investments totaling USD 870,000 were committed to 4 different enterprises across Southeast Asia.

The Pioneer Facility, a loan fund designed to support growth-stage companies that benefit underserved populations in the energy, water and sanitation sectors, was able to finance the scaling up of 3 new companies: a piped water utility in Cambodia, a biogas-to-energy developer in Indonesia, and a technology company for last-mile electrification in the Philippines. At the same time, its portfolio of companies supplied over 61,000 people with clean water and connected more than 1,700 new households in 2020. To increase support to impactful social enterprises in the region, Nexus has been actively fundraising and raised an additional USD 500,000 for the Pioneer Facility, reaching a total of USD 2.7m AUM.

Through our other funds under management, Nexus also continued to provide much-needed financing for the clean energy transition in Southeast Asia. As a Kiva Field Partner, Nexus facilitated a loan to a social enterprise providing solar-water pumps for smallholder farmers in Myanmar. Under our Clean Energy Revolving Fund (CERF), we continued to support the 16 Cambodian farmers in our portfolio to transition from diesel-based generators to solar PV solutions

Nevertheless, 2020 was also undoubtedly a year of uncertainty and challenges for our borrowers. The Covid-19 pandemic impacted revenues for some borrowers and their beneficiaries and led to lower than anticipated levels of new water connections and new sales. Several of our loans to smallholder farmers needed to be restructured. At the same time, access to energy and water have become all the more important during the Covid-19 crisis and elevated the urgency of investing in accessible solutions for underserved communities.



**USD 870,000**  
New investments in  
4 different enterprises  
across Southeast Asia



**61,000**  
more people with  
clean water



**USD 500,000**  
The Pioneer Facility



**1,700**  
new households



**USD 2.7m AUM**  
Total raised





# TAPEFFECT – CAMBODIA



**USD 220,000**  
loan is assisting  
TapEffect in constructing  
and operating piped  
water systems



**1,000**  
households  
**250**  
houses



In May 2020, the Pioneer Facility, an impact fund managed by Nexus for Development, signed a new financing agreement with TapEffect Co., a water utility that builds and operates distributed piped water systems in Cambodia.

The USD 220,000 loan is assisting TapEffect in constructing and operating a new piped water station in Banteay Meanchey province in rural Cambodia. The project will contribute to SDG6 by supplying clean and affordable water to two communes (Kouk Ballangk and Sambour)

with 14,000 people, 10 schools and 2 rural health centers. With a tenor of 3 years, the loan will support the project’s capital need and working capital associated with new household connections.

By demonstrating the efficiency of their activities and the impact generated for communities, this project will pave the way for TapEffect to secure additional fundraising to scale-up their innovative business model and connect more households to piped water.



As of December 2020, the company was able to complete the water treatment plant on schedule, despite some significant flooding in the region. After receiving interest from over 1,000 households, it has already connected over 250 houses to the piped water infrastructure and plans to start supplying clean water in Q1 2021.



# AGROSOLAR – MYANMAR



**USD 50,000**  
Raised for Agrosolar



Farmers to save up to  
**USD \$45**  
per month (30% of their  
operational costs)



In December 2020, Nexus for Development raised USD 50,000 for Agrosolar through the crowdfunding platform Kiva to finance the growing demand for their solar-powered irrigation systems in Myanmar.

Agrosolar distributes sustainable and affordable solar-powered irrigation pumps helping farmers to replace their diesel pump.

This allows farmers to save up to USD \$45 per month (30% of their operational costs), double their yields, and increase their income by irrigating more land. Through a partnership with a local MFI, Agrosolar also provides seasonal lease-to-own financing that is tied to farmers' harvest-based cash flow to facilitate the acquisition of the equipment and support financial inclusion.



The company aims to reach over 2,600+ farming households within three years, thereby reducing over 5,000 tCO<sub>2</sub>e and increasing overall smallholder farmers' income by USD 1.4 million by 2023.







OKRA –

THE PHILIPPINES

InfraCo Asia



**USD 500,000**

Loan will assist Okra in covering their working capital



**1,000**

households

**250**

houses



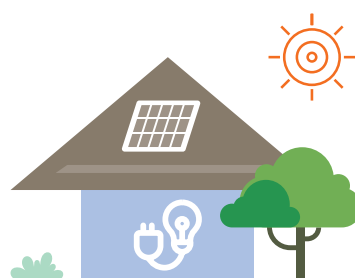
Also in December, the Pioneer Facility closed its last 2020 financing with Okra Solar, a technology company providing a plug-and-play smart grid solution that enables rapid electrification for last-mile communities.

Okra's innovative smart-grid solution enables solar home systems to form interconnected networks that share distributed solar generation and battery storage in a plug & play manner. This approach provides 24/7 power for productive uses such as rice cooking and



refrigeration, and is also equipped with IoT to enable remote monitoring, control, maintenance and mobile payments for the communities.

The USD 500,000 loan will assist Okra in covering their working capital needs to manufacture and distribute over 30,000 Okra Pod in the next couple of years, with a focus on the Filipino market, but also in other geographies in Southeast Asia and Africa. In the next 5 years, Okra's goal is to empower over 1 million low-income people with reliable, affordable and clean energy access (SDG 7). Indirectly, energy access also has positive outcomes such as better education (SDG 4) and decent job creation (SGD 8). With its energy-efficient solar technology, the company also addresses climate change (SDG 13).



A hand holding a glowing orb in a dark space with wooden beams and a glowing blue shape in the background.

Chapter 3:

Consultancies &

Ecosystem Engagement



**CLEAN ENERGY WEEK CAMBODIA**  
12-19 November 2020

**(Energy) Lab**

**កិច្ចពិភាក្សាអំពី ថាមពលកកើតឡើងវិញរបស់កម្ពុជាឆាតពេលអនាគត**  
**Clean Energy Talk: Cambodia's Renewable Energy Future**

9am-12pm  
Monday 30th November 2020  
All participants will be received a T-shirt

**សន សេរីឡាន**  
អគ្គនាយកដ្ឋានសេដ្ឋកិច្ច និងហិរញ្ញវត្ថុ ក្រសួងសេដ្ឋកិច្ច និងហិរញ្ញវត្ថុ  
Executive Director, Research and Consultancy, CDRI

**Dr. Pech Sokhem**  
Executive Director, Research and Consultancy, CDRI

**Afnan Hannan**  
CEO, Okra

**Keo Kaneka**  
Mekong Basin Manager, Oxfam

**Chanvibol Meng**  
(Moderator)  
Technical Services Manager, Nexus for Development

Supported by **Australian Aid**

In partnership with **iDE**, **The NGO Forum on Cambodia**, **OXFAM**

"Celebrating Clean Energy: Opportunities for Cambodia"

## Facilitating the dialogue to advance a sustainable and carbon-free economy.

According to the Global Risks Perception Survey 2020, “failure of climate-change mitigation and adaptation” is rated as the number one long-term risk based on impact and number two for likelihood over the next ten years. Cambodia, where the majority of the Nexus team is located, was ranked 12 of 181 countries most affected by weather-related loss events between 1999-2018 (Global Climate Risk Index 2020). Based on Open Development Cambodia (2016), it is projected that climate change impacts will continue increasing and could adversely affect 61% of the rural Cambodian population, and in particular about

7 million smallholder farmers and 25,000 workers in the construction industry.

At Nexus, we are providing access to finance for climate related impact projects in clean water and clean energy sector but we recognize that combined efforts and pooled knowledge are needed to meet the scale and urgency of the situation. In 2020, we contributed to the promotion of clean energy by participating in Clean Energy Week in Cambodia organized by Energy Lab and its partner Oxfam. We are also partnering with iDE to test uptake of clean cooking technologies and engaging with UNEP and local government partners to conduct a feasibility study for several livelihood options which will enable women to use renewable energy for more resilient livelihoods. We look forward to continuing these and other collaborations in 2021.

# Engaging with our community: Local partners, stakeholders, members

## Clean Energy Week

Nexus was active in the COVID-adapted Clean Energy Week 2020. Nexus' focus on clean energy access places us in a unique position to consider and promote new models and ideas. Nexus' technical services manager, Chanvibol Meng, moderated the Clean Energy Talk, a panel discussion on Cambodia's Renewable Energy Future, organised by Oxfam during the Energy Lab Clean Energy Week 2020. The objectives of this discussion were (1) to understand Cambodia's energy policy and its roadmap to achieve clean and sustainable energy through promoting an energy mix



option, (2) to highlight challenges in achieving sustainable and renewable energy targets by 2023 in Cambodia and possible solutions to help overcome the challenges, and (3) to enhance awareness of clean and renewable energy, particularly solar energy, in Cambodia.





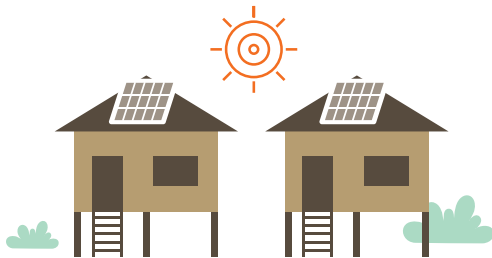
## Partnering for innovation

Together with long-time partner iDE, in 2020 Nexus co-designed a potential project to facilitate uptake of efficient cooking technologies through financing and testing adoption and methodologies for carbon market access. iDE with Nexus coordinated a small consortium of like-minded enterprises to apply to the Cambodia Climate Change Alliance's Innovation Grant Facility.



## Connecting the Phnom Penh entrepreneurial ecosystem

Nexus also participated in the mapping project “Connecting the Phnom Penh entrepreneurial ecosystem” implemented by Swisscontact in collaboration with Impact Hub Phnom Penh. The collaboration demonstrated how a support network is a critical component in the entrepreneurial equation for success. Nexus participated in the project survey and consultation workshop as an ecosystem representative, where we provided feedback and discussed steps that could be taken collectively to build a stronger, healthier ecosystem in Phnom Penh.





## EmPower: Women for Climate-Resilient Societies project<sup>2</sup>

In 2019, Nexus for Development worked with the National Committee for Sub-National Democratic Development Secretariat (NCDDs) and the UN Environment Program (UNEP) team to conduct scoping and prefeasibility studies under the Empower project. Through this work, several candidate livelihood options were identified that would use renewable energy to power small scale business options for individual women and women-led enterprises in Cambodia. Expanding on this earlier work, in 2020 Nexus conducted feasibility studies for four of the identified livelihood options: (1) solar chicken incubation for Tram Kak commune, (2) solar electricity for a clean water social enterprise for Pou Pir village, (3) solar individual water pump, and (4) solar community water pump for Bakan village. In the

process of conducting this study, several meetings and field surveys were made with NCDDs’ staff, farmers, technical providers and financial institutions for data collection and consultation purposes.

Through EmPower, Nexus has worked with SHE Investments to provide financial literacy training to women who would potentially be participating in the four identified livelihood options projects in Takeo and Pursat province. In 2021, Nexus will continue to work with UNEP and NCDDs to complete the financial mechanism study for the EmPower project and to conduct one more feasibility study on cold storage implementation. Finally, Nexus will develop a methodology handbook based on our experience of conducting these studies under the EmPower project in Cambodia.

<sup>2</sup> The EmPower – Women for Climate Resilient Societies project (EmPower) is a joint initiative project between UN Women and UN Environment (UNEP), with support from the Swedish International Development Cooperation Agency (Sida). The project is implemented throughout the period 2018 – 2022 and focuses on Bangladesh, Cambodia and Vietnam. It engages many governmental, non-governmental and civil society organization partners as detailed in <https://www.empowerforclimate.org/en>







# Financial statements







## Financial report introduction

Despite the Covid-19 pandemic, Nexus was able to make historical results in 2020 due primarily to the extraordinary increase in carbon credit sales volume.

Nexus ends the year in a stronger cash position relative to the prior year-end, which allows Nexus' team to continue working on developing strategies to expand activities and reach even more ambitious impact goals.



# STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDING 31ST DECEMBER 2020

	2020	2019
	US\$	US\$
	UNAUDITED	AUDITED
Revenue	5,254,984	1,905,617
Cost of sales	(4,456,828)	(1,534,932)
Gross Profit	798,156	370,685
Other income	164,204	126,911
Less: expenses		
Administrative expenses	(53,022)	(32,211)
Employee compensation	(280,648)	(328,739)
Operating expenses	(27,295)	(58,625)
Total comprehensive gain for the year	601,395	78,021





# STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2020

	2020	2019
	US\$	US\$
	UNAUDITED	AUDITED
<b>Assets</b>		
<i>Current assets</i>		
Cash and bank balances	788,219	575,820
Trade and other receivables	193,974	564,822
Funds held in trust	595,071	953,945
<i>Non-current assets</i>		
Plant and equipment	3,554	-
<i>Intangible assets</i>		
Trade and other receivables		
<b>Total assets</b>	<b>1,580,818</b>	<b>2,094,587</b>
<b>Liabilities</b>		
<i>Current liabilities</i>		
Trade and other payables	283,403	1,048,121
<i>Non-current liabilities</i>		
Amount due to member	148,209	148,209
<b>Total liabilities</b>	<b>431,612</b>	<b>1,196,330</b>
<b>Net Assets</b>	<b>1,149,205</b>	<b>898,256</b>
<b>Funds</b>		
Accumulated deficit	544,994	(56,401)
<i>Reserve fund</i>		
Funds held in trust	604,211	954,658
<b>Total Surplus</b>	<b>1,149,205</b>	<b>898,256</b>

# REPORT ON FUNDING RECEIVED AND DISTRIBUTED

## Funding received

Funds received from carbon sales	4,457,383	1,534,932
Total grant funding received	80,900	116,284
Total funding repayments from projects	178,879	271,515
Membership and consultancy fees	23,194	36,529

## Service provided, and funds distributed

Carbon funds distributed to members	3,792,553	1,304,589
Technical assistance services provided to members	51,872	74,417
Funds disbursed, and financial services provided	178,887	204,297







