

BHP | Foundation

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Our Ambitions

The BHP Foundation works to address some of the world's most critical sustainable development challenges.

By working in partnership with others who share these ambitions we seek to raise the bar, find new solutions and set new standards for the future.

These efforts are designed to enhance the contribution the global resources sector can make to the achievement of many of the United Nations Sustainable Development Goals.

Global Signature Programs

Natural Resource Governance

To harness the transformative power of natural resource wealth for sustainable and inclusive human development.

Environmental Resilience

To support new ways of conserving and sustainably managing large-scale, globally significant natural environments for the benefit of future generations.

Education Equity

To harness the potential of young people most at risk of being left behind by enabling equitable access to quality education and learning.

Country Programs

Australia

To enable young people to develop and fulfill their potential, and support Aboriginal and Torres Strait Islander peoples and organizations in their drive towards effective governance and self-determination.

Canada

To harness the potential of young Indigenous people through improved education, learning and career pathway opportunities, and improve the governance and management of water resources to meet the needs of local communities.

Chile

To support the inclusion of more disadvantaged and vulnerable young people in education, enhance the resilience of communities to respond to rapid environmental change, and strengthen the capability of organizations and groups to participate in decision-making.

United States

To harness the potential of young people through quality education, enable positive change for Native Americans by supporting self-determination initiatives, and ensure future generations have access to sustainable sources of clean water.

Our Approach

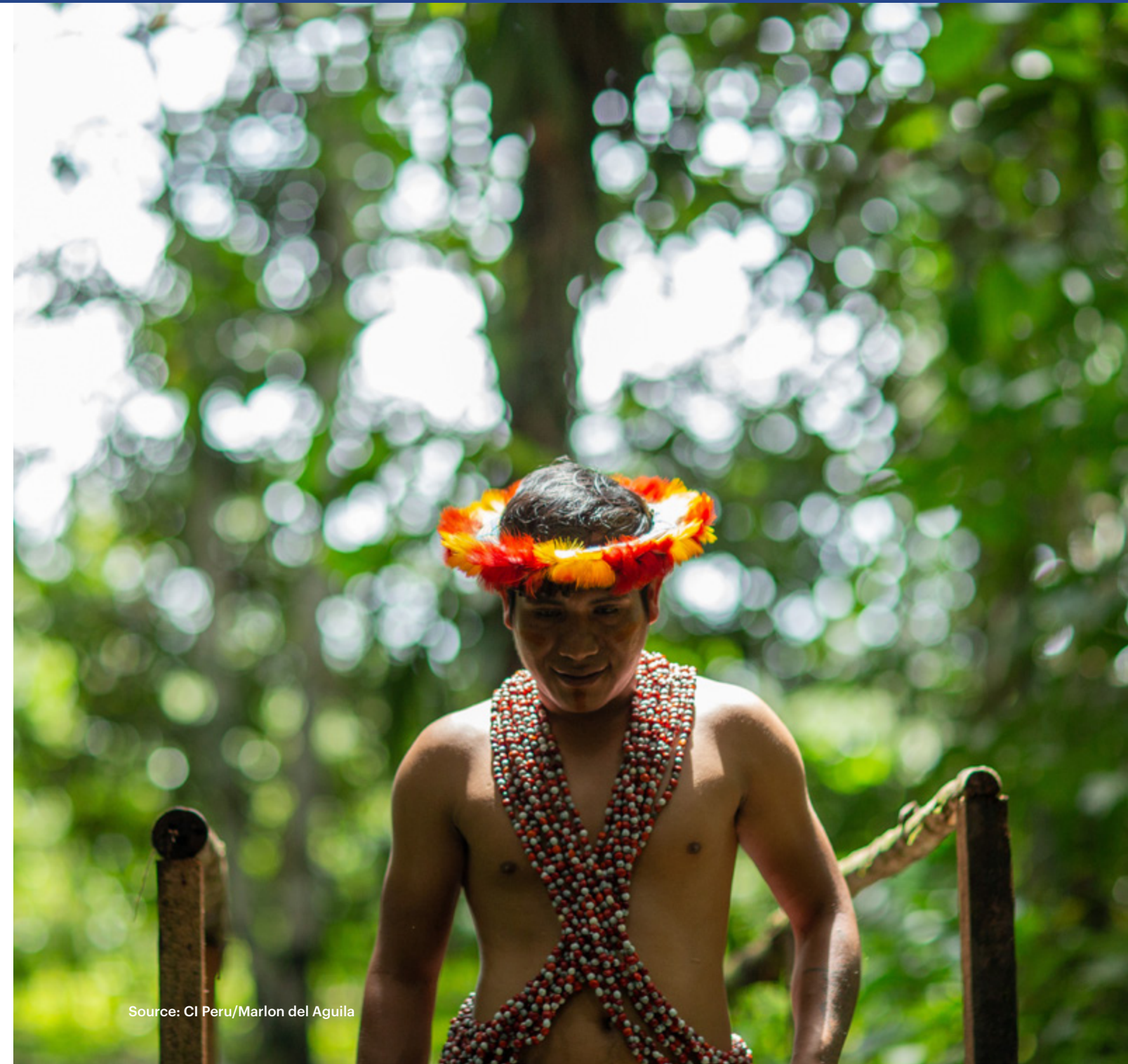
The BHP Foundation has taken a deliberate decision to be bold and ambitious and contribute scalable solutions to some of the world's most critical sustainable development challenges. Our projects aim to drive systemic change, share evidence, set new standards and enable others to take forward what has been learned.

Our work is based on five key principles:

1. **Collaborate** – build genuine partnerships across communities, industry, non-government organizations, governments and international institutions to work towards shared goals.
2. **Sustainable** – ensure projects are designed to deliver practical and long-term outcomes, and build capacity that lasts beyond the lifespan of our investment.
3. **New models** – invest in projects that take on complex sustainable development challenges and set new standards for the future.
4. **Evidence** – contribute to a growing evidence base of what works, measure the impact and be transparent about what is learned.
5. **Advocate** – use our reach and influence across global networks to push for effective solutions.

“Adopting a business-as-usual approach will not be enough to address the scale of the world's sustainability challenges. We focus on the areas where we can make a long-term impact, work in genuine partnership with leading organizations and invest in projects that have the power to drive large-scale systemic change commensurate with the challenges the world is now confronting.”

James Ensor
Executive Officer and President,
BHP Foundation



Source: CI Peru/Marlon del Aguila

Chairman's Message

When I joined the Board of the BHP Foundation in 2018, I was inspired by the scale and complexity of the challenges the Foundation has chosen to address and the way it has approached issues. These are some of the world's most critical sustainable development challenges, all directly relevant to the global resources sector and defining issues for our shared future. However, the BHP Foundation is no ordinary charitable organization. We set ourselves big ambitions to take on these difficult issues, pursuing and promoting innovative solutions that contribute to a sustainable future.

Unlocking the scale of change required to make a systemic difference will not be easy. This is why we work in partnership with some of the world's leading non-government organizations, international institutions, communities and governments fostering genuine collaboration to reach shared goals. It's this spirit of collaboration that is critical to our work.

Over the past four years, the Foundation has worked with our partner organizations to shape our strategy, align aspirations behind common goals and harness our

collective expertise to find new solutions and set new standards for the future. Together, we identified three defining issues for our global future: natural resource governance, environmental resilience and education equity.

Today, we work with more than 33 partner organizations and have a portfolio of projects across 43 countries. The projects pilot new approaches and generate evidence of what works in addressing complex development challenges. We share this evidence with others to enable all of us to learn from our experiences to effectively scale up what works and adjust policy frameworks.

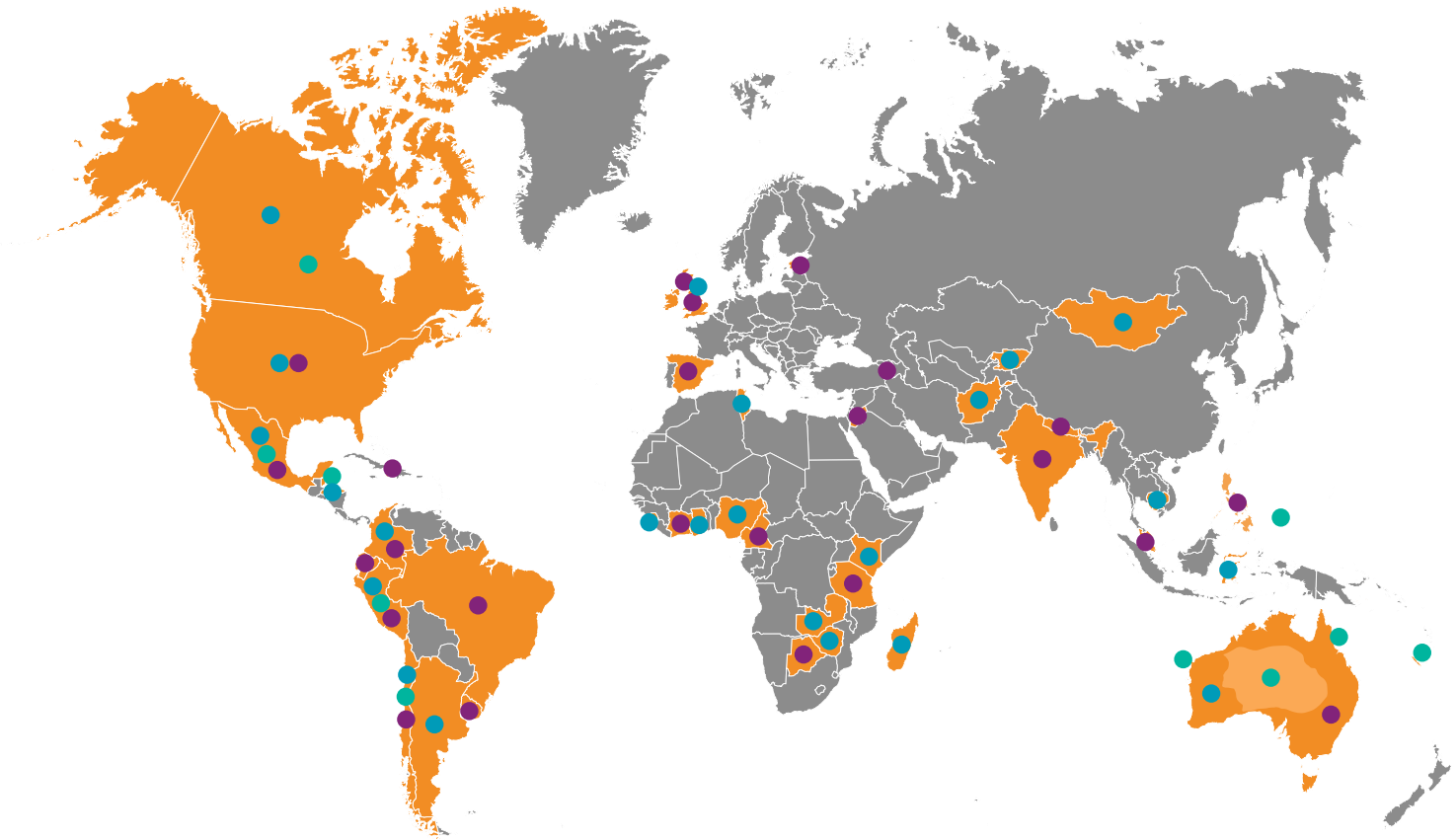
On a recent visit to the Alto Mayo region of Peru, one of the most biodiverse landscapes in the world, I experienced first-hand the impacts our projects have on empowering local communities. Alto Mayo is a complex and challenging environment that since 2001 has lost around 15 per cent of its forests through deforestation! The Indigenous Awajun communities and migrant farmers are acutely aware of their role in meeting the demands of the global coffee market and their

contribution to global conservation. With the support of our partner Conservation International, these local communities of the Amazon are helping turn the tide on deforestation by transforming their farming practices and focusing on sustainable alternatives to deliver the long-term economic outcomes they require.

The Foundation has an ambitious program of work and we are grateful to our sole funder, BHP, for its commitment and contribution. We could not tackle these seemingly insurmountable challenges and play our part in contributing to a sustainable future without the support of BHP, who shares our vision.

Chip Goodyear
Chairman,
BHP Foundation

Our reach across the globe



- Natural Resource Governance
- Environmental Resilience
- Education Equity

BHP Chief Executive Officer's Message

Helping the Foundation make a real difference.

As the sole donor of the BHP Foundation, our ambition is to enable it to make a real difference to some of the most critical sustainable development challenges of our time. We must collectively contribute to better outcomes, whether it be extreme poverty in minerals-rich nations, impacts to our natural environments or access to quality education for the most disadvantaged in society, especially women and girls.

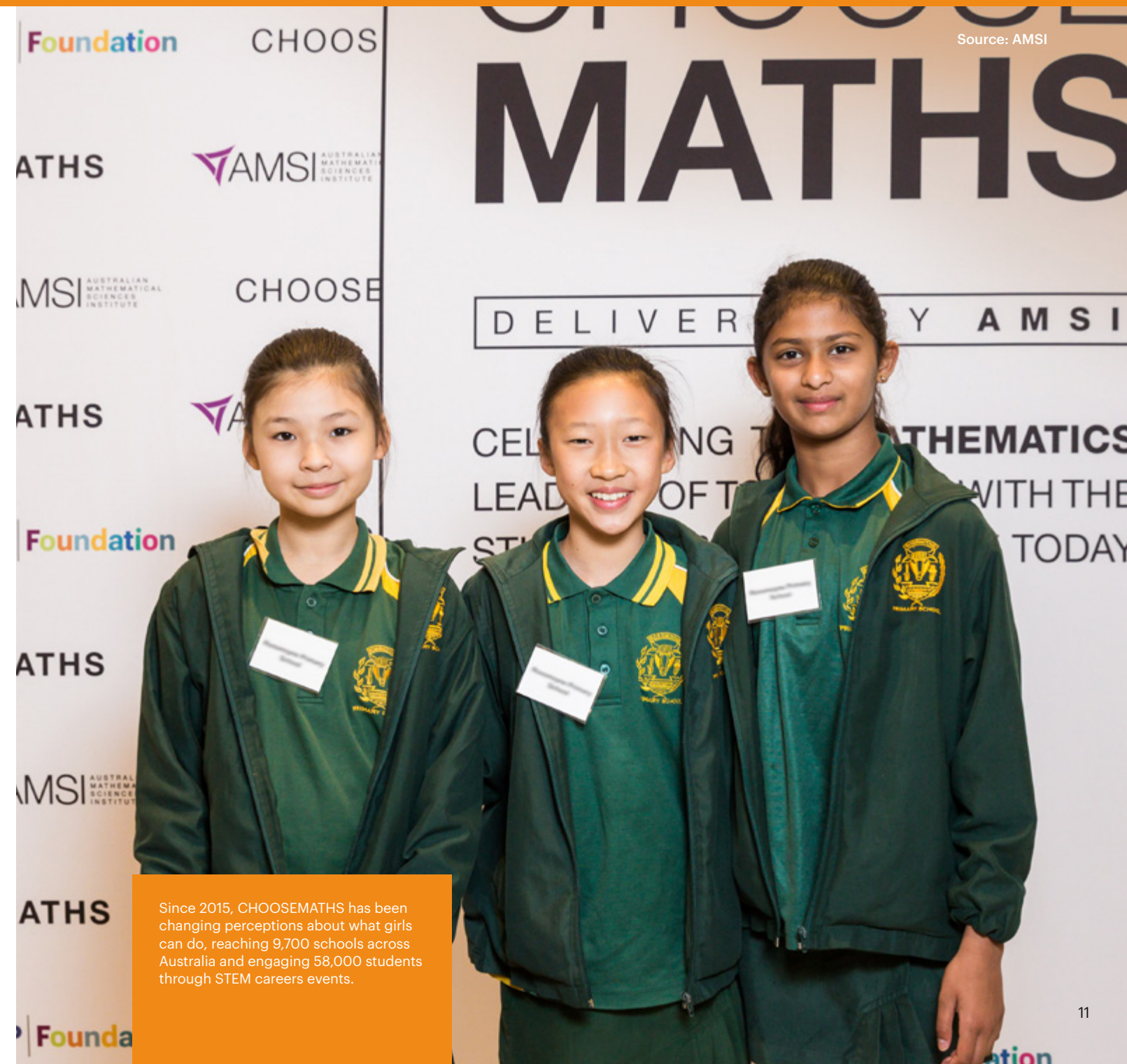
The sheer scale of these challenges is enormous. That's why the Foundation collaborates with global leaders in specialist fields to develop programs that lay the groundwork for future success. The Foundation understands these programs must be bold, ambitious and deliver tangible and long-term benefits to communities, society and the environment.

That's what motivates the BHP Foundation. To date, it has invested more than US\$106 million in 24 projects across 43 countries. These include the Australian Mathematics and Science Institute's (AMSI) Choose Maths program that champions science, technology, engineering and maths (STEM) opportunities for girls and young women. The program gives them the foundational skills, confidence and encouragement to succeed and make a real contribution to future prosperity.

As a producer of natural resources, we recognize that our business impacts the environment and generates emissions. That's why sustainability is always at the heart of our business activities and the daily decisions we make. Our long-term contribution to our host communities helps them thrive socially, economically and environmentally.

We know we must do more. It's imperative that we contribute beyond our core operations and provide our expertise, capabilities and voice to the Foundation to help build a more sustainable future for all.

Andrew Mackenzie
Chief Executive Officer,
BHP



Source: AMSI

Since 2015, CHOOSEMATHS has been changing perceptions about what girls can do, reaching 9,700 schools across Australia and engaging 58,000 students through STEM careers events.

Real World Impact



How open contracting helped fix Colombia's biggest school meal program

With government procurement the world's top corruption risk, BHP Foundation partner Open Contracting Partnership (OCP) is using open contracting to help solve social problems and increase accountability. OCP moves public procurement from a paper-based system to a fully transparent digital service and platform, reducing the opportunities for corruption and improving the confidence of businesses to tender for contracts. This leads to increased competition, drives lower cost and ensures better quality goods and services for citizens. In Bogota, Colombia, OCP's work with the national procurement agency and the city's education department has radically improved school meals for over 700,000 children a day and achieved national savings of up to 15 per cent in government expenditure. The introduction of open contracting helped overcome undue interests, quadrupled the number of suppliers, delivered better regulated prices and improved the efficiency and quality of school meals.

Self-determined governance

Aboriginal and Torres Strait Islander peoples' right to self-determination is about two simple things: choice and voice. By empowering Aboriginal and Torres Strait Islander peoples and communities to make informed choices about their own futures, they have a greater voice in the decisions affecting them.

The Australian Indigenous Governance Institute (AIGI), with the backing of the BHP Foundation, is helping improve outcomes for Indigenous people through the development of world-class governance practice, research, thought leadership and educational resources. In 2018, the AIGI's signature Masterclass series (for Indigenous women and Indigenous youth) was successfully delivered and was again offered in 2019.



Speaking for the moose

More than 40 First Nations representatives attended a regional gathering in northern Manitoba, Canada, to 'speak for the moose'. For the First Nations people, declining moose populations – a cultural keystone species – are a top priority. The gathering was organized by The Nature Conservancy as part of its *Forest Conservation in the Canadian Boreal* project to discuss moose management and Indigenous perspectives on their relationship to moose. Many First Nations have continued or have now implemented moose stewardship initiatives in their communities as a way to take care of the territory and manage resources in accordance with Indigenous values. These include moose-monitoring Guardian programs to guide natural resource management, applying for moose-related funding and completing a moose management plan.





The fire guardians

The 10 Deserts span one-third of Australia are rich in unique plant and animal life and home to many of Australia's threatened animals. To help keep Australia's outback healthy and deliver outcomes for Indigenous communities, the 10 Deserts project is establishing the world's largest Indigenous-led conservation network. Underpinning the project is a focus on Aboriginal cultural and ecological knowledge and an explicit endorsement of Indigenous Australians as the best caretakers of the desert. Given the central role of fire in traditional land management practices and the destructive potential of fires in central Australia, the project is helping Indigenous groups develop their own fire management strategies, creating new ranger jobs and extending opportunities to Indigenous women and men to manage country.

Using evidence to improve student outcomes in Jordan

Each year, millions of dollars is spent on education research yet the results rarely find their way into the classroom where they could transform student learning. The Education Endowment Foundation (EEF) aims to bridge this gap between research and practice, equipping teachers with the knowledge they need to improve student outcomes. In 2019, with BHP Foundation support, the EEF established a partnership with the Queen Rania Foundation in Jordan, where crisis after crisis has impacted the quality of education. The partnership will see the translation of the EEF's Teaching and Learning Toolkit, an accessible summary of the best international evidence on teaching, used by more than two-thirds of teachers in English schools, into Arabic for teachers in Jordan and the wider region. In a country where 94 per cent of second graders are not meeting international literacy standards, starting with educational 'best bets' will give teachers a head start in transforming outcomes for their students.



Helping children reach their potential

When more than 80 per cent of a child's learning takes place outside of the classroom, the community's role in developing and educating a child is critically important. Teach For All, with funding from the BHP Foundation, has embarked on a global program to accelerate community-led approaches to learning. In November 2018, Teach For All launched The Global Learning Lab for Community Impact, bringing together community leaders, teachers and other key partners to share practices and lessons that have led to improved quality learning outcomes for young people. With a focus on the role of community participation and leadership, the Community Impact Lab will support a network of local leaders who are informed by global insights and working collaboratively to provide their children with the education, support and opportunity to shape a better future.



Mongolia hosts a Hackathon for inequality

In Mongolia, the International Finance Corporation is working with innovative organizations to make natural resource data easier to analyze and use to help solve world development challenges. At a Hackathon for Inequality, more than 100 participants worked in 12 teams to develop insights and infographics on topics including education, women in decision-making natural resource revenue. The project established a multi-stakeholder dialogue platform at the national level to discuss natural resource data challenges, supporting improved information flow and a fact-based public dialogue on the resources sector in Mongolia.





The Resilient Reefs initiative is a bold new approach, bringing together local communities, reef managers and resilience experts to develop new solutions for combatting the effects of climate change.

Improving Indigenous STEM outcomes

With only 10 per cent of Aboriginal and Torres Strait Islander students in Australia progressing to university, the BHP Foundation partnered with CSIRO on an innovative pilot Indigenous STEM Education project to increase interest and academic achievement in STEM subjects and related professions. Since commencing in 2014, the project has engaged over 17,898 Aboriginal and Torres Strait Islander students and 1,755 teachers from 166 schools across Australia. The impact of the project is significant with 81 per cent of students who attended the *Aboriginal Summer School for Excellence in Technology and Science* intending to have a STEM career.



Enhancing access to education for women in Mexico

Across the world, 495 million women are illiterate and tens of millions of girls are unable to access education. UN Women are working to break down the barriers to enable participation in education through their Second Chance Education and Vocational Learning Program. UN Women Mexico is currently starting the implementation phase of this program in Indigenous communities in the State of Puebla and in marginalized areas surrounding Mexico City and the city of Guadalajara. The goal of the project is to reach 5,000 women in two years through the establishment of learning centers in these areas. Currently, four learning centers have been opened and women are starting courses on entrepreneurship, life planning and computing skills. A wide spectrum of partnerships has been accomplished in order to ensure that women overcome the main barriers they face for accessing education and labour market opportunities. Some of these include partnerships with the private sector to ensure learning pathways are in line with labour market needs or with local governments to ensure women have access to health and care installations that allow them to focus on their learning.



Natural Resource Governance

The challenge

Across the world, 1.8 billion people in resource-rich countries continue to live in poverty. Corruption and poor governance of the world's natural resources can divert much needed funds from critical development opportunities, which is denying citizens access to quality education, healthcare and other essential services.

We are working across the value chain to enhance governance, help eliminate corruption and effect positive change.



50% of the world's population live in countries that rely on mineral resource wealth as a major part of their economy³.



1.8b people live in poverty in resource-rich countries⁵.

US\$1.5t

estimated to be paid in bribes by businesses and individuals each year, which is about 2% of global GDP⁴.



20% of foreign bribery cases involve the extractives industry⁶.

Our approach

We seek to improve how natural resources are governed across the entire resource value chain – from initial exploration right through to the use of taxes and royalties in providing services to citizens.

To do this, we bring together business, government and civil society to collectively address common challenges aimed at eliminating corruption through purposeful transparency and effective capacity building. We're also giving citizens and civil society organizations meaningful, practical and accessible information about revenue flows from the extraction of natural resources so they can use it to raise standards and create an evidence base about what works to share with others.



Mining for Sustainable Development

Research, assessment and dialogue conducted across 20 resource-rich countries is providing a better understanding of the risks and impacts of corruption linked to the process of awarding mining licenses and helping develop practical solutions to overcome them.

“Corruption in the mining sector hurts everyone. It steals wealth from the public, it causes instability for businesses, it exacerbates social and environmental harms and it erodes people’s trust in government and the private sector. If we ensure a fairer, more transparent and more accountable process from the very beginning, we set higher standards of integrity across the whole mining operation.”

Nicole Bieske
Head, Mining for Sustainable Development Program,
Transparency International

Mining for Sustainable Development is building an evidence base of policies and practices to minimize corruption risks in awarding mining related licenses permits and contracts. Project findings will be used to:

- encourage changes in policy and behavior;
- develop practical solutions to change practices;
- monitor the implementation and enforcement of agreed standards; and
- positively impact the mining sector’s contribution to long-term economic and human development.

A particular focus is on improving business integrity, enhancing beneficial ownership screening of license applicants and ensuring meaningful public participation.

Progress and achievements

The project commenced in January 2016 and has linked local anti-corruption experts and campaigners dealing with similar challenges across the world. This has enabled sharing of valuable information and tools, and strengthened the global movement against corruption.

- TI-Zimbabwe has been working as part of a stakeholder network to support the government’s commitment to join the Extractive Industries Transparency Initiative. Along with other organizations, such as the Zimbabwe Environmental Law Association, they are a reference point for EITI discussions, working collectively to strengthen the transparency and accountability of Zimbabwe’s resources sector.
- Following the success of the first phase involving 18 countries, an additional 23 countries (Transparency International Chapters) requested to join the global initiative, including Ghana, Mexico, Argentina, Madagascar and Kyrgyzstan.
- Chapters that have completed their research are using the new evidence base to identify solutions which strengthen the mining awards process and working with government, companies, civil society and communities to prevent corruption.
- 203 organizations and individuals have been engaged as part of their multi-stakeholder networks to introduce solutions to prevent corruption.

From Disclosure to Development

Transparency and disclosure is only the first step. Making disclosed natural resource data accessible and useful to citizens drives more informed public debate, accountability and decision-making.

“From Disclosure to Development has revealed ever-growing diverse demands for data transparency in natural resource management. Left unmet, these expectations can become a source of community conflict or instability. Widely accessible and useful natural resource data creates opportunities for citizens, companies, and governments to engage in better informed decision-making throughout the investment process. Trusted infomediaries and data users are needed to facilitate this.”

Veronica Nyhan Jones
Manager, Sustainable Infrastructure Advisory,
International Finance Corporation,
World Bank Group

From Disclosure to Development is designed to develop, test and disseminate new approaches which will improve disclosure and the dissemination of data and information.

The project is seeking to build the capacity of infomediaries in industry, media, government and civil society to access, analyze and use data to deliver meaningful, useful information to their target audiences in mining communities and beyond. By establishing a global platform for dialogue and deliberation, the project will promote the use of natural resource industry data and greater consistency and meaningfulness of disclosed information. This will help match the needs of data providers and users.

Progress and achievements

The project commenced in September 2017. Progress to date includes:

- conducting Natural Resource data assessments in Peru, Ghana, Mongolia and Colombia;

- establishing Natural Resource multi-stakeholder groups in Ghana, Peru and Mongolia comprised of industry, government, civil society, media, academia and digital entrepreneurs;
- testing new approaches in pilot countries by working closely with companies, governments, media and civil society to build their capacity to analyze and visualize data;
- catalyzing opportunities for private sector and governments to engage with youth organizations and digital entrepreneurs to develop data-driven solutions to information challenges;
- capturing lessons learned through country pilot interventions in two global research products; and
- convening and promoting a global dialogue on the potential development impact of easy-to-access natural resource data and its re-use.

Translating Resource Revenues into Effective Services & Infrastructure

Adopting open contracting is helping ensure governments of resource-rich countries spend the benefits of natural resource wealth in a fair, efficient and corruption-free way to deliver quality services and infrastructure to citizens.

“From roads to hospitals to medicines to school meals, government spending on public services and infrastructure is vital to citizens. There is huge potential for the wealth from natural resources to translate into real benefits to citizens, rather than ending up siphoned off. Open contracting is at the core of ensuring money is well spent. Even small improvements done systematically can have a huge multiplier effect for better services, goods, and infrastructure.”

Gavin Hayman,
Executive Director,
Open Contracting Partnership

Open contracting is a G20-backed mechanism for governments to open up their public procurement systems and data to reduce corruption, increase market opportunity for businesses, improve value for money and efficiency for the government, and provide everyone, everywhere with the public goods, services and works they need.

This project is working to help prevent the resource curse by ensuring money flowing from natural resources is more effectively converted into public benefit and better outcomes for citizens of resource-rich countries. Working across sectors and the full range of government contracting, the project will use the power of open data to improve public integrity, including in resource-rich countries.

Progress and achievements

- Through implementing Open Contracting in Bogota, Colombia, a corrupt US\$22 million price-fixing scheme in the provision of school meals was exposed. Children were receiving poor quality meals at inflated prices, but now with the Education Department implementing Open Contracting, they have quadrupled the number of suppliers and delivered vastly superior quality food at better prices for 700,000 children every day.
- The project is seeing progress in Chile, where civil society and government are collaborating in tracking red flags in public procurement through a data tool developed on the basis of open contracting data.
- Lessons learned since the commencement of the project have fed directly into the engagement and support model to better seize opportunities that maximize impact overall. These include a focus on digitally re-engineering the system to make it more efficient, transparent and agile, and improved support and training to build the capacity of field partners.

Leveraging Transparency to Reduce Corruption

A research program on transparency, accountability and participation initiatives in the natural resources sector is improving understanding about what’s successful in combating corruption.

“Corruption remains stubbornly entrenched globally, but we are at an inflection point in the battle to tackle it and advance sustainable development. Our project aims to understand when, how and why transparency, accountability and participation initiatives can combat corruption in one of the most challenging contexts of all: the natural resource space. Our goal is to build the evidence base on this issue to help provide public, private and civil society actors with information they need to improve people’s lives.”

Norman Eisen
Senior Fellow,
Brookings Institution

Leveraging Transparency to Reduce Corruption (LTRC) project will study, adapt and pilot a range of transparency, accountability and participation (TAP) initiatives based on the evidence generated around them over the last 20 years. Through this analysis, the project will improve understanding of how and why these initiatives have the capacity to improve people’s quality of life in resource-rich countries.

Sharing these learnings with the domestic and international organizations working on these issues will enhance the impact of their work around the world, ensuring the findings can be used to build the capacity of civic and public institutions to design and implement good governance practices in different contexts.

Progress and achievements

The project commenced in September 2017. During the initial literature review and stakeholder mapping process, the project recognized untapped opportunities to amplify and complement the work being done in prospective focus countries. As a result, time has been invested in exploratory engagement in communities around the world. This investment will enable the development of a sustainable program that is highly responsive to the needs and priorities in each country where LTRC works. Progress includes:

- publishing an online resource in October 2018 regarding TAP efforts in the natural resources sector;
- hosting the inaugural meeting of the LTRC advisory board in February 2019; and
- conducting scoping work for the forthcoming LTRC small-scale studies in Peru and Nigeria, while initiating pre-scoping for research on using ETI data to better fight corruption.

Environmental Resilience

The challenge

Wherever we live in the world, we need resilient natural environments to survive and thrive.

Natural environments preserve biodiversity, maintain water resources and help society respond to climate change. Yet the demands of a growing world population are placing unprecedented pressure on finite land and water resources and accelerating biodiversity loss. This pressure is further amplified by climate change.

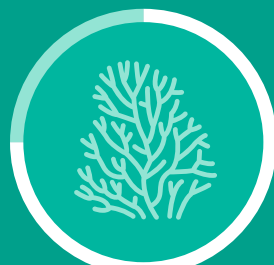
For Indigenous peoples with a profound connection to and dependence on traditional lands, natural ecosystems also support their livelihoods and cultures and must be conserved for the benefit of future generations.



700ha of forest lost every hour due to the growing demand for food and natural resources⁷.



people depend on forests for their livelihoods⁹.



Our approach

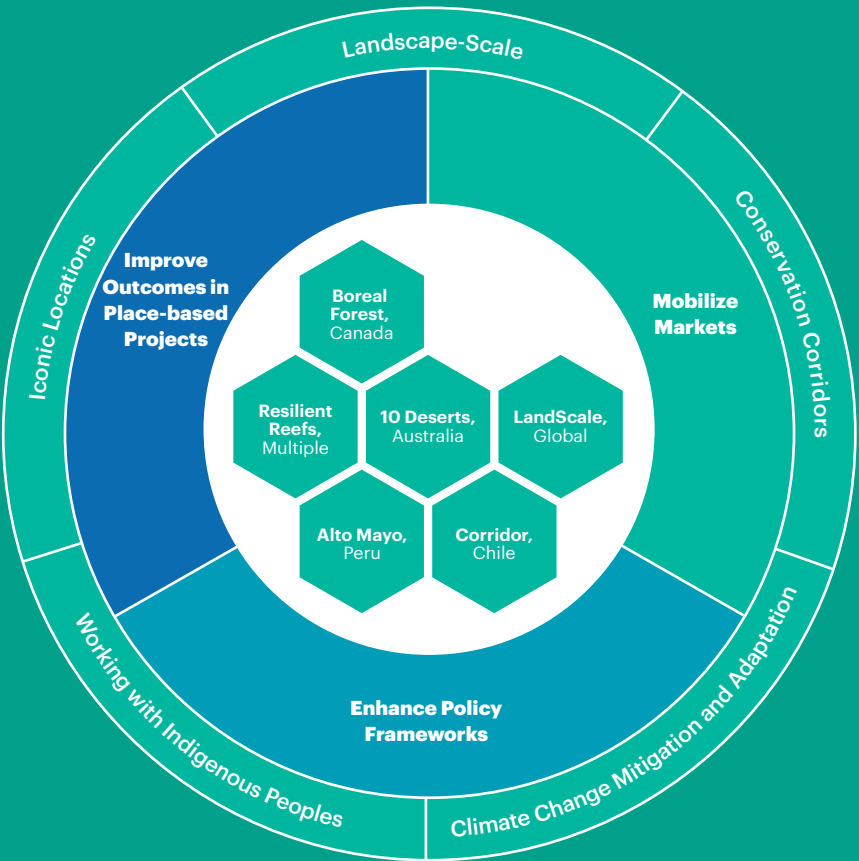
Deliver high-impact, enduring interventions in areas of international significance.

Engage with people who live in the landscapes, involve them in our efforts, build their capacity and support their livelihoods.

Initiate projects that enhance policy frameworks and mobilize markets to better value carbon, water and biodiversity.

Pilot new approaches and share learnings so others can take them on with confidence.

Support the aspirations of Indigenous people to manage their traditional lands for a range of economic, social, cultural and environmental outcomes.



Resilient Reefs

Enhancing the resilience of the world's most treasured coral reef sites and the communities that depend on them will give the reefs the best possible chance to survive and adapt in the face of human pressures including climate change.

"Healthy reefs contribute an estimated US\$10 trillion in ecosystem services" through local tourism opportunities, crucial fish habitats, food, recreation and protection from storms. As such, the loss of reef ecosystems will have major consequences for communities around the world."

Anna Marsden
Managing Director,
Great Barrier Reef Foundation

The Resilient Reefs project brings together local communities, reef managers and resilience experts to develop new solutions for combating the effects of climate change.

This is a bold, new approach that puts people at the center and draws from the global resilience practice to innovate, build capacity and drive a whole-of-community approach to the challenges facing our reefs.

The project will focus initially on five World Heritage-listed coral reef sites: Australia's Ningaloo Reef and Great Barrier Reef, Palau's Rock Islands, the Belize Barrier Reef, and the Lagoons of New Caledonia. With their ecological significance, Outstanding Universal Values, exceptional biodiversity and natural beauty, these reef sites are the jewels in the crown of the world's coral reefs.

The project is a collaboration between Great Barrier Reef Foundation, BHP Foundation, UNESCO World Heritage Marine Program, The Nature Conservancy, 100 Center for Resilient Cities and Landscapes, and AECOM (as delivery partner).

Progress and achievements

Resilient Reefs funds long-term resilience planning, capacity building and implementation in the five pilot sites. Since launching in 2018, the project has:

- developed substantial guidance materials for sites, including a Program Manual, Resilience Strategy Guide and related tools;
- finalised program design including approach to governance, knowledge network, and monitoring and evaluation;
- built strong relationships with sites to understand their priorities and to support them through contracting, Chief Resilience Officer recruitment, and strategy launch; and
- hired the first Resilient Reefs Chief Resilience Officer based at Ningaloo Reef, Western Australia and begun work on a holistic reef resilience strategy with the community.

10 Deserts Project

To keep Australia's outback healthy for the benefit of future generations this project is building the largest Indigenous-led connected conservation network on Earth.

"This Indigenous-led project is designed to have enduring results by building Indigenous people's capacity, developing a strong and effective voice for the deserts through the Indigenous Desert Alliance and leveraging additional funding through market enabling mechanisms and co-financing by government."

Peter See,
General Manager,
10 Deserts Project

The 10 Deserts Project (the project) aims to build environmental resilience by supporting traditional owners to look after and manage their country through a range of strategic and targeted activities from which lessons will be learned and shared.

The benefits of Indigenous land management programs are well-documented and reinforce broader social, cultural and economic benefits. These include the provision of employment and training opportunities, reinstatement of cultural authority, and increased pride and confidence for both individuals and communities.

The project is led by Desert Support Services in partnership with six Indigenous organizations and supported by three conservation organizations.

Progress and achievements

This five-year project was launched in 2018 with all activities gaining momentum with project partners. Key achievements to date include:

- establishing the project steering committee comprising Indigenous representatives from our six Indigenous partner organizations;
- achieving a total of 1,599 days FTE employment for Indigenous people and 1,688 full days of Indigenous participation through project partners;
- supporting the development of 10 new ranger teams, to expand capacity and reach;
- building the skills base and confidence of female rangers through fire management training, an essential step in increasing effectiveness and reach as men are restricted from engaging in burning operations on women's country;
- enabling ranger training where more than 60 rangers shared knowledge and learnings; and
- supporting the Indigenous Desert Alliance in engaging with over 200 Indigenous rangers and other stakeholders at their annual conference.

Alto Mayo

Reversing the trends of forest loss and degradation in the Amazon is one of the most pressing global sustainable development challenges of our time. This project is empowering Awajun Indigenous communities and migrant farmers to become effective stewards of the Alto Mayo landscape's natural resources.

"We aim to improve a sustainable development model for Indigenous communities, that can be replicated in at least another four million hectares of the Peruvian Amazon, as well as the other seven countries with forests and Indigenous people in the broader Amazon basin."

Claudio Schneider
Senior Technical Director,
Conservation International Peru

Conservation International is working to turn the tide against deforestation in one of the world's biodiversity hotspots – the Alto Mayo region of the Peruvian Amazon.

The Alto Mayo landscape covers approximately 700,000 hectares and has a population of more than 230,000 people. Since 2001, this area has lost around 15 per cent of its forest cover, with the deforestation frontier expanding in the mostly intact Indigenous Awajun territories.

This deforestation is driven by unsustainable farming practices, much of which stems from migrant farmers who rent land from the Awajun and use practices poorly suited to the region's tropical soils.

This project will enable the conservation of remaining forests while promoting sustainable business activities in Alto Mayo, including coffee and cacao agroforestry systems and alternative economic activities such as tourism and products derived from medicinal plants or other non timber forest products. In this way, the Project will support Peruvian government efforts to reduce deforestation and associated greenhouse gas emissions, and contribute to long-term green economic development and biodiversity conservation targets.

By helping Alto Mayo's Indigenous and farming communities achieve economic self-sufficiency based on the region's biodiversity, the project will empower Indigenous communities and migrants to become effective stewards of the landscape's natural resources and help secure the future of the Amazon.

Forest Conservation in the Canadian Boreal

The Nature Conservancy is working with First Nations to create a new model for land management and a resilient future for the people and nature of Canada's boreal forest.

"This project is so important because the work is led by the communities, ensuring the outcomes, learnings and skills to do this work is driven and built by local people, so they can continue this work in the long term. It's also important because the approach is holistic, looking at community well-being as the foundation but also considering conservation of cultural and ecological values as well as supporting livelihoods and long-term economic benefits."

Amanda Karst,
Manitoba Program Director,
The Nature Conservancy

This project aims to secure lasting conservation results in nine million hectares of Canada's boreal forest by demonstrating a new model of shared land management among First Nations, the Manitoba Government and forest industry.

By transforming the way natural resource decisions are made the project aims to strengthen and support the voices, choices and actions of Indigenous peoples as they determine how to manage and develop the natural resources in their territories.

Progress and achievements

Since commencing in 2017, this five-year project has supported knowledge exchanges about Indigenous-led efforts in their communities. This has included:

- organizing a learning exchange on Healthy Country Planning (Indigenous-centered land-use planning methodology) for communities;
- organizing a regional gathering with more than 40 First Nations representatives in attendance to talk about moose management and Indigenous perspectives on their relationship to moose; and
- supporting two key First Nations in the Manitoba project area to further develop their Guardian programs through grants, technical assistance and sponsoring a Guardian exchange between Manitoba First Nations and the Gitanyow First Nation.



El Boldo to Cantillana Conservation Corridor

Achieving transformative conservation of Chile's Mediterranean habitat through the Derecho Real de Conservación.

"This project focuses on an overlooked landscape where a great proportion of the people in this country live. It is a highly threatened habitat which secures the quality of life of millions of people. The project also actively engages the private sector in conservation."

Victoria Alonso
Executive President,
Fundacion Tierra Austral

With new conservation legislation being implemented in Chile, this project is helping achieve conservation goals within a corridor of the country's most threatened ecosystem, the Chile-Mediterranean habitat.

Fundación Tierra Austral (FTA) is Chile's first land trust, a non-governmental organization that focuses specifically on protecting private conservation land through partnerships with landowners. In the two-year pilot phase of the project, FTA is collaborating with willing landowners and stakeholders who live and work in the region (including those whose livelihoods depend on their property), to implement the Derecho Real de Conservación (DRC) at three high priority sites.

The DRC is a legally binding agreement which gives private landholders the right to protect land they own for its conservation and natural heritage attributes and characteristics. The protected land remains private, and could also support sustainable land uses such as forestry, agriculture and tourism.

The project commenced in 2019, and the intent is to document and encourage best practice in the use of DRC and increase awareness about the importance of threatened and priority sites in the Chile-Mediterranean habitat.

It is about setting a precedent by demonstrating for the first time how legislation can be used for sustainability.



LandScale: driving improvements in sustainability at landscape scale.

The climate crisis, water scarcity, biodiversity loss and entrenched poverty are challenges that affect us all. No individual, community, business, or government can tackle these challenges alone. LandScale will provide a standardized approach for assessing and communicating the sustainability performance of landscapes where key commodities are produced.

"Developing a consistent and robust way to measure critical indicators of landscape sustainability is key to enabling and incentivising diverse stakeholders to collaborate across an entire landscape to deliver tangible improvements for people and planet."

Dr Jeff Milder
Director of Global Programs,
Rainforest Alliance

LandScale complements existing sustainability standards and approaches, including farm-level certification, by assessing the cumulative impact of all activities within a landscape across environmental, social and economic dimensions.

By distilling the complexity of landscapes into reliable information on sustainability performance and trends, LandScale helps drive decisions and incentives that will contribute to improving landscape sustainability over time. Commodity buyers, investors, governments, and those involved in landscape initiatives can use LandScale to help identify landscape risks, inform management interventions, monitor progress, and credibly demonstrate results.

This is a collaborative initiative led by Rainforest Alliance, Verra and the Climate, Community & Biodiversity Alliance, in partnership with EcoAgriculture Partners, the International Union for Conservation of Nature, Nature Conservation Research Center, Proforest and Solidaridad, with input from a broad range of stakeholders.

Progress and achievements

The first version of the LandScale assessment framework was launched for public consultation in 2019, seeking feedback from a diverse range of potential users and subject matter experts. This will ensure LandScale is robust, practical and relevant to a wide variety of landscapes and stakeholders.

A number of pilots are also currently underway in Ghana, Peru, Guatemala, Costa Rica and Mexico. The pilots in Mexico and Peru have been enabled with the support of the BHP Foundation.

Education Equity

The challenge

Inequality and disadvantage lie at the heart of the global education challenge. Despite global progress in access to education in recent years, more than a quarter of a billion children remain out of school today. Hundreds of millions more are not learning when they are in school.

Quality education and learning is the pathway to building the skills and knowledge people need to seize opportunities to enhance their lives and their contribution to communities and societies. This means more children participate in education, are enabled to stay and thrive in school longer to gain a higher level of qualification and skills, and can succeed and prosper throughout their lives.

Our ambition is to harness the potential of young people most at risk of being left behind by enabling equitable access to quality education and learning.



263 million of the world's 1.3 billion children are not in school and a further 330 million who go to school are not learning or gaining basic skills¹².



800 million children, roughly half of the youth generation, will reach adulthood without basic secondary-level skills¹³.



4x more likely that the world's poorest children won't go to school than the world's richest children¹⁴.



750 million adults around the world are illiterate including 495 million women¹⁵.

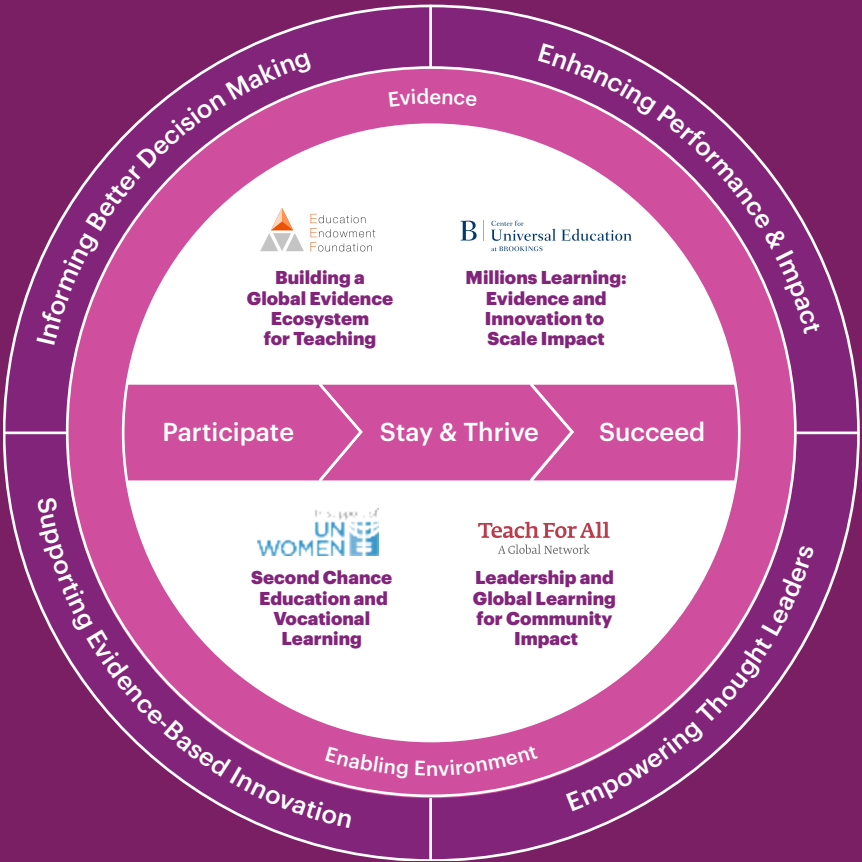
Our approach

Identify new and more effective ways to improve learning outcomes for the most underrepresented and at risk young people and bring evidence to the forefront of decision-making.

Support innovations that show promise and have the greatest potential to be scaled and replicated to increase equality, participation and attainment.

Drive more effective performance in education systems to enhance outcomes and impact including return on effort, investment and resources.

Empower thought leaders and advocate for policy decisions based on what works around the world.



Building a global evidence ecosystem for teaching.

Around the world, teachers are striving to improve the learning outcomes of their students. Through this project, the Education Endowment Foundation (EEF) is equipping teachers with the knowledge they need to enhance and accelerate learning outcomes for the most disadvantaged children and young people.

“Using evidence to inform teacher practice is not an easy task. The evidence produced needs to speak to the key challenges that teachers face; it needs to be summarized in an accessible yet accurate way; and it requires ongoing professional support to help practitioners translate the evidence into their day-to-day work. The more organizations working on this endeavour and learning from each other, the quicker we should be able to find effective strategies to improve outcomes for the most disadvantaged students.”

Stephen Fraser
Deputy CEO, Education
Endowment Foundation

Providing teachers with reliable information about what’s worked to improve students’ learning in similar situations elsewhere enables them to make informed decisions that lead to quality learning for every child. This project aims to transform teaching and learning to leave a legacy of enhanced capability and professional expertise in participating countries.

Generating and using evidence to improve teaching and learning is internationally relevant. This project will get more countries involved in this endeavor to increase the pace of progress, expanding the evidence base for the benefit of all teachers and students.

Progress and achievements

Since launching in 2018, the project has:

- screened over 6,000 education research studies from across the globe for inclusion in the EEF’s Education Database; over 1,300 met our inclusion criteria;

- set up a Global Trials Fund to support the commissioning of high-quality trials of education interventions in their six partner jurisdictions and granted provisional approval for funding of randomized controlled trials in Chile and Peru;
- agreed to the first set of EEF Fellowships which will support the creation of evidence-based tools, and the development of expertise on synthesizing, generating and mobilizing research evidence in partner education systems;
- established new partnerships with “la Caixa” Foundation in Spain and the Queen Rania Foundation in Jordan; and
- hosted the second annual Global Partners Workshop attracting delegates from over 30 organizations and six continents.

Teach For All

A Global Network

Leadership and global learning for community impact

Teach For All is working to ensure all children are able to thrive and fulfill their potential by harnessing the power of community leadership. This project aims to create locally rooted, globally informed leaders who can support their communities as they seek to improve educational equality and opportunity.

“Our first year has been wonderful, fascinating, and very productive. We’ve had the chance to identify great examples of community impact, share lessons with our partners, and inspire more partners to build lasting change within their communities. We’ve seen vivid examples of how leadership, diversity, and working together can create community change. Perhaps most importantly, we’ve recognized that building strong relationships throughout a community is crucial to community impact. This has reinforced our belief that communities are the key lever for creating sustained improvements for children in communities around the world.”

Kaya Henderson
Director, Global Learning Lab
for Community Impact

Sustainable change requires leadership grounded in the realities of the local context, reflecting the perspectives, needs and opportunities of the communities, and the knowledge of successful ideas and practices beyond its borders.

Through Teach For All’s Global Learning Lab for Community Impact, community leaders, teachers, and other key partners share practices and lessons which leads to improved quality learning outcomes for young people.

With a focus on the role of community participation and leadership, the project is developing evidence-based hypotheses about the enabling characteristics of communities with the fastest learning outcomes and identifying the differentiating factors that contribute to that progress.

Progress and achievements

Since commencing in 2018, the project has:

- completed an initial network-wide diagnosis of community impact;
- established innovation partnerships with 11 communities across our global network; six have established draft indicators for progress at the community-level (Ancash, Northamptonshire, Feltham, Estonia, Armenia, and Delhi) and four have begun to map the strength of leadership across the ecosystem (Ancash, Northamptonshire, Tulsipur and Delhi);
- launched an innovation fund for partner organizations to apply annually and secure small-scale grants to fund time-bound projects; and
- reviewed global insights, research, stories, tools and resources around the topic of community impact to serve as the foundation for an action-oriented knowledge base and provide the first selection of resources to be posted to the Global Learning Lab website.

Second Chance Education and Vocational Learning Program

Of the world's 750 million illiterate adults, two-thirds are women. This project aims to provide marginalized women access to quality learning, entrepreneurship and employment outcomes through second-chance education and vocational learning.

"We must ensure that every door to the education of girls and women remains open across the life cycle; that girls and women who drop out of education have second chances; that they have the relevant skills to transition to productive lives and full citizenship; and that the empowerment of girls and women becomes an inseparable part of the return on our investments in education."

Phumzile Mlambo-Ngcuka
Executive Director,
UN Women

In conflict or humanitarian settings girls are 2.5 times more likely to be out of school¹⁶ and less likely to return to school due to burden of care work and gender discrimination. This deprives them of knowledge, skills and opportunities to find decent work and improve the quality of their lives and the lives of their families.

The Second Chance Education and Vocational Learning Program (SCE) is working to bring about transformative change in the lives of vulnerable women and young women, by breaking down the barriers to participation in education and employment. The project leverages technology to ensure greater access to learning, employment and entrepreneurship opportunities. This project also seeks gender-balance policy and fiscal changes at local and national levels to create an enabling environment for long-lasting change.

Progress and achievements

The project commenced in 2018 with a focus on six pilot countries (Australia, Cameroon, Chile, India, Jordan, Mexico). Key achievements include:

- assessing the needs and labour market opportunities of each pilot country to guide the design of country-level SCE Programs and the development of Country Plans;
- undertaking initial content mapping at global and country levels and sourcing content in line with each of the expected pathways – foundational (learn to learn); life skills (learn to be); leadership (learn to lead) and job skills (learn to earn);
- developing an online portal; and
- negotiated formal agreements with implementing partners, government and NGOs to provide safe spaces for the delivery of face-to-face learning.

Millions Learning: Evidence and Innovation to Scale Impact

This project is helping inform education decision-makers on how they can support policies and engage in practices that transform teaching and learning at scale.

"There is a high demand among education stakeholders and decision-makers on how to identify, adopt, and scale educational innovations effectively and sustainably."

Rebecca Winthrop
Senior Fellow and
Co-Director of the Centre
for Universal Education,
The Brookings Institution

Innovations around the world are making an enormous difference in children's learning yet these are not translating to the systemic change needed to solve a global learning crisis disproportionately affecting the world's most marginalized populations – girls, children living in poor households and rural areas, and children impacted by crisis.

While no single country has the answer to how education can drive social development, there are failures to be shared, lessons to be learned and promising practices to be implemented across borders. The question is: what information do decision makers really need to analyze which practices will work in particular contexts and how to scale them?

The Center for Universal Education (CUE) at Brookings project is focused on three strategies:

- identify effective education innovations that have the potential to transform education progress;
- analyze and use data on learning, financing, and school quality in a systematic and effective way to inform decision-making; and

- scale effective approaches through understanding the political and technical strategies required to rapidly scale quality learning opportunities.

Progress and achievements

Over the past 12 months, the project has completed:

- education innovation research to identify the potential for innovations to "leapfrog" – or rapidly accelerate progress – in global education;
- research examining data-informed decision-making in education to identify the types of data needed, as well as the approaches for collecting and utilizing data effectively to achieve education outcomes; and
- the launch of Real-time Scaling Labs in Botswana, Côte d'Ivoire, Jordan, Tanzania, and the United States (city of Philadelphia).

Country Programs

Country programs complement our global efforts to improve long-term economic, social and environmental sustainability at a national level in Australia, Canada, Chile and the United States. Our focus is on progressing key development priorities in countries where BHP’s presence provides capacity and expertise to support our work.

In Australia and Chile our portfolio of projects are well progressed.

Australia

Our innovative partnerships across Australia are designed to:

- support Aboriginal and Torres Strait Islander peoples and organizations in their drive towards effective governance and self-determination; and
- aid the development of young people through initiatives related to early childhood, education in science, technology, engineering and mathematics (STEM) and mental health and well-being.

The challenge



Only seven per cent of higher education mathematics students, in Australia, are girls – the lowest seen in 20 years¹⁷.



75% of fast growth industry jobs need STEM skills¹⁸.



10% of Aboriginal and Torres Strait Islander students, in Australia, progress to university as compared to 46% non-Indigenous¹⁹.

Chile

To address common challenges in Chile, our focus is on:

- supporting the inclusion of more disadvantaged and vulnerable young people in education and strengthening their participation in society;
- enhancing the capability of institutions, organizations and groups to participate in decision-making processes affecting them; and
- enhancing the resilience of communities in response to rapid socio-economic and environmental change.



34m

Nearly 34 million people across the Latin America and Caribbean region still do not have access to reliable electricity, and their communities are often too isolated for connection to the major grids²⁰.



The entire planet could be supplied with energy using only 2% of the solar radiation existing on deserts²¹.

CHOOSEMATHS

The Choose Maths program is helping build a diverse, future-ready workforce by transforming community attitudes towards maths and contributing to a female STEM talent pipeline in Australia.

“Choose Maths has changed the public discourse about mathematics for the better, turning around public perception about girls and maths and raising the profile of the teaching profession and possible careers that Australian students can aim for with mathematics.”

Janine Sprakel
Project Director,
Choose Maths

Choose Maths aims to make women more visible in mathematics, changing community perceptions about what girls can do. By growing teacher confidence and competence in mathematics, the program also encourages and inspires students, including many girls and young women, to think differently about STEM.

From major cities to regional, remote and lower socio-economic communities, the Australian Mathematical Sciences Institute (AMSI) works with students, parents, teachers, careers advisors, young women and Indigenous Australians to increase participation in maths. This program nurtures and supports the next generation of science, maths, engineering and technology professionals, giving them the skills and confidence they need to get involved and make an impact.

Through professional learning, scholarships, networking support, teacher resources and an awards program that recognizes excellence in teaching and learning, the program is nurturing and supporting the next generation of science, maths, engineering and technology professionals.

Progress and achievements

Since 2015, Choose Maths has:

- reached 9,700 schools across Australia with communications and collateral;
- engaged 58,000 students through STEM careers events;
- seen over 5,000 students and teachers participate in the Choose Maths Awards including the submission of 1,1194 student team videos and 108 teacher nominations; and
- increased teacher confidence in the teaching of mathematics from 10% to 29% through the participation of 5,277 teachers in 293 professional development days.

STEM Education

This innovative partnership is helping improve STEM outcomes by increasing interest and academic achievement in STEM subjects and related professions.

“STEM skills go well beyond the classroom. They teach our students to think creatively about problem solving, which will be critical in a future shaped by genetics, synthetic materials, AI and other disruptive technologies.”

Mary Mulchay
Director,
CSIRO Education and Outreach,
CSIRO

In a rapidly changing and complex world, Australia's future success will rely on a highly educated and diverse workforce founded on a strong pipeline of science and technology skills. Diversity of thought among STEM professionals leads to better outcomes, yet women and Indigenous people remain under-represented in STEM education.

The Indigenous STEM Education Project demonstrates the link between the traditional ecological knowledge of Australia's First Nations Peoples and the science curriculum and how it can be taught using inquiry-based methods. The project has a national footprint working with primary, secondary and tertiary students in remote, regional and metropolitan areas. The project targets Aboriginal and Torres Strait Island students as they progress through primary, secondary and tertiary education and into employment.

The BHP Foundation Science and Engineering Awards reward students for creative research projects and engineering innovations, and teachers for their contribution to science education. The Awards are a partnership between BHP Foundation, CSIRO and the Australian Science Teachers Association.

Progress and achievements

Since 2015, almost 18,000 Aboriginal and Torres Strait Islander students, 1,755 teachers and 166 schools have been engaged in the Indigenous STEM Project across remote, rural and urban Australia.

Now in their 37th year, the BHP Foundation Science and Engineering Awards continue to uncover and develop the next generation of innovators who want to tackle and solve the world's big challenges. In 2018/19, 12,014 entries were received across the student categories and six student Award finalists represented Australia at the Intel International Science and Engineering Fair in the United States.

Indigenous Governance

Good governance is crucial to building and sustaining strong and self-determining Aboriginal and Torres Strait Islander communities.

“There are many different ways of ‘doing’ Indigenous governance in the Aboriginal and Torres Strait Islander nations spread across this vast continent – but the common thread is that culture must be at the core.”

Mick Dodson
Chair,
Indigenous Governance Awards

Within Australia and across the globe, experience and research shows that Indigenous peoples’ ability to be self-determining through exercising choice and voice is the only long-term sustainable solution to addressing issues of disadvantage.

Reconciliation Australia’s Indigenous Governance Program aims to progress reconciliation by recognizing, supporting and celebrating strong Aboriginal and Torres Strait Islander governance and self-determination.

Since 2005, the Indigenous Governance Awards have celebrated outstanding Indigenous governance through strong leadership, good management, effective partnerships and brave, creative thinking. In 2018, the Awards were delivered for the first time in partnership with the Australian Indigenous Governance Institute (AIGI). Through the Supporting Self-Determined Governance for Indigenous Development Outcomes project, AIGI is helping improve outcomes for Indigenous people by supporting their economic, social and cultural aspirations and connecting them with world-class governance practice, research, thought leadership and educational resources.

Progress and achievements

- Nine high-performing Aboriginal and Torres Strait Islander organizations and initiatives were selected as finalists of the Indigenous Governance Awards with each finalist demonstrating exceptional Indigenous governance and delivering positive and long-lasting change in their communities.
- An analysis of the 2016 Indigenous Governance Awards: Strong Governance Supporting Success (the product of collaboration between AIGI and Reconciliation Australia) shows that despite differences in location, industry and community, applicants shared a number of attributes: governance was healthy; culture is the foundation for building strong contemporary governance arrangements; and organizations are the lifeblood of communities.
- In addition to delivering Governance Masterclasses around the country, AIGI in partnership with the Australian Indigenous Leadership Centre, held a very successful one-day leadership and governance symposium, Our Voice Our Truth – Good Governance through Strong Leadership at the National Museum of Australia.

Narragunnawali: Reconciliation in Education

This program is helping foster a higher level of knowledge and pride in Aboriginal and Torres Strait Islander histories, cultures and contributions.

“Historically, educational institutions have perpetuated myths and misinformation about Aboriginal and Torres Strait Islander peoples, cultures and contributions. Schools and early learning services engaged in the Narragunnawali program have a powerful role to play in fostering positive change towards reconciliation in Australia.”

Karen Mundine
CEO,
Reconciliation Australia

Narragunnawali, from the language of the Ngunnawal people, means alive, well-being, coming together and peace. As a nation, Australia values the central role of education in building a society that is prosperous, cohesive and culturally diverse, and that recognizes Aboriginal and Torres Strait Islander cultures as a key part of the nation’s past, present and future.

However, Aboriginal and Torres Strait Islander perspectives have been left out of classrooms and as a result, generations of Australians have grown up with an inadequate understanding of Aboriginal and Torres Strait Islander cultures and very limited awareness of the true histories of Australia.

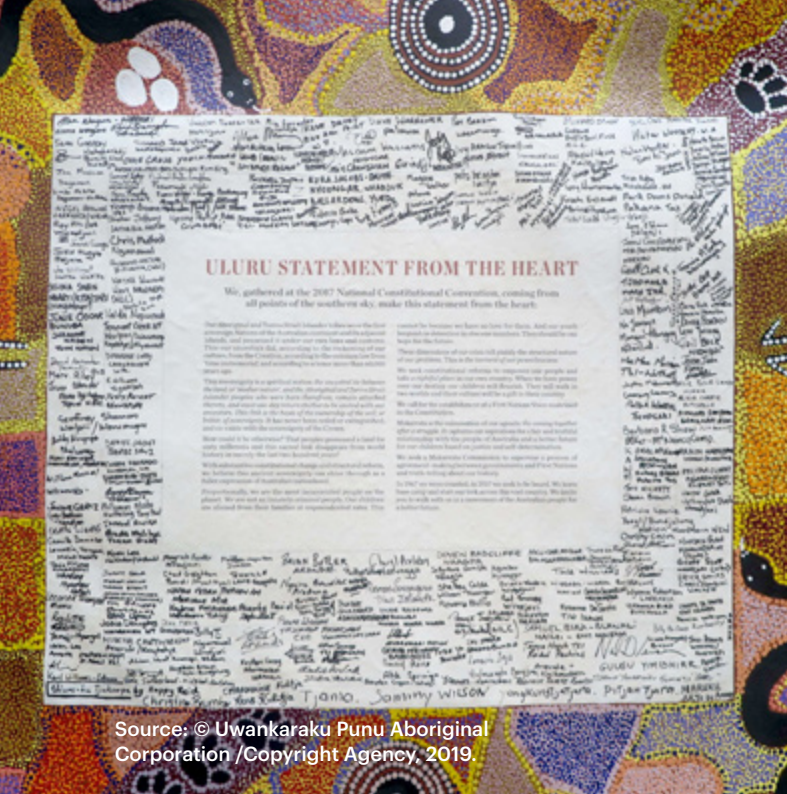
Narragunnawali was developed to support the 26,000 schools and early learning services within Australia build relationships, strengthen respect and create opportunities in the classroom, around the school and with the community.

Progress and achievements

Since the program was officially launched in March 2015, almost 5,000 schools and early learning services and 45,000 individuals have registered on the Narragunnawali online platform. This reflects a real commitment to progressing positive, comprehensive change in local educational communities, all the while strengthening the role of reconciliation in education.

In 2019:

- 17 per cent of all schools and early learning services in Australia have commenced the Reconciliation Action Plan (RAP) process;
- a wide range of professional learning resources which meet the National Quality Standard and the Australian Professional Standards for Teacher;
- resources to promote reconciliation and strengthen children and students’ knowledge and understanding of Aboriginal and Torres Strait Islander histories, cultures and contributions the second biennial Narragunnawali Awards were launched to recognize exceptional commitment to reconciliation in schools and early learning services.



Source: © Uwankaraku Punu Aboriginal Corporation / Copyright Agency, 2019.

Uluru Education Project

The BHP Foundation recognizes Indigenous peoples' rights to self-determination and in Australia supports the ambitions of Voice, Treaty and Truth in the Uluru Statement from the Heart. The Uluru Education Project is designed to develop a range of education tools to build awareness and understanding of the Uluru Statement from the Heart with Australian citizens.



Science fiction – or fact!

In March 2019, the BHP Foundation, partnered with the Queensland Museum to present the World Science Festival in Brisbane to demonstrate how science is accessible to everyone.

The BHP Foundation's support of Street Science! offered the more than 90,000 visitors the chance to explore and celebrate the entanglement of science and art through a curated program of thought provoking conversations, inspiring theatrical performances, workshops education activities and family-friendly outdoor experiences.



Source: Queensland Museum Network

Improving resilience in drought-affected communities

With drought impacting individuals and communities across Australia, the Building Community Resilience to Drought project is ensuring drought-impacted communities can access and benefit from appropriate psychosocial support.

Through this project, the Australian Red Cross is supporting community leaders, volunteers and service providers to address the psychosocial needs of drought-impacted communities and provide a range of needs-driven services to improve community well-being and resilience.

Solar energy powers resilient communities in Chile.

Promoting solar energy in Chile is a unique opportunity to enhance the resilience of communities to changing environmental conditions. The Ayllu Solar project is enabling the Arica y Parinacota region's urban and rural Indigenous communities to harness the power of solar energy and create opportunities for social and economic development.

"The introduction of solar energy projects in northern Chile constitutes a unique opportunity for sustainable development. However, a basic condition for successfully capturing this opportunity is the direct involvement of local communities. This can only be achieved with a solid base of human capital."

Rodrigo Palma,
Director SERC Chile,
Ayllu Solar Project

The high-altitude northern desert region of Chile has some of the world's greatest potential to produce electricity, heat and light using solar energy. However, communities are small and widely dispersed making it challenging to source local technical solar energy expertise. There are also no specific subsidies for renewable energy projects available in Chile, meaning small-scale projects in particular, face difficulties accessing finance and obtaining permits.

The project works with local communities to deliver productive technological solutions and resilient socio-technical systems. The approach allows communities to improve their own living conditions in a lasting, sustainable way over time. Support is provided through technical training and educational programs implemented through a network of schools in the region.

Progress and Achievements

Initiated in 2015, the Ayllu Solar project has implemented six solar reference projects; 36 schools are in the solar network with 115 teachers trained and reaching 1,056 students. Other highlights include:

- installing solar photo voltaic power plants in five projects with online monitoring;
- provided training for communities to operate and manage projects;
- establishing a solar school network with schools that have been participating in the five learning cycles – students creating their own solar projects;
- acquiring a solar photo voltaic mobile laboratory for use in demonstrations and at the local university; and
- developing best practice guidelines, scientific papers and participating in 51 events to share our learnings.

The project has been recognized as a United Nation's best community project (2016), CIREC Chilean International RE Congress best community project (2016), and High Quality Project Based Learning Case Study (2018).



Solar energy at work

The first dehydrated vegetables from the processing center in Vitor. The fruit and vegetable dehydrating plant is powered by solar photo voltaic power plants installed with the support of Ayllu Solar and operated by the Vitorsol cooperative.

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