PHOSPHATE RESOURCES LIMITED

Committee Secretary
Joint Standing Committee on the National Capital and External Territories
PO Box 6021
Parliament House
Canberra ACT 2600

30th March 2021

Dear Committee

Re: Submission to the Inquiry into Economic, Social and Environmental Sustainability in the Indian Ocean Territories

Phosphate Resources Limited welcomes the opportunity to make a submission to the Joint Standing Committee on the National Capital and External Territories Inquiry into Economic, Social and Environmental Sustainability in the Indian Ocean Territories.

PRL is committed to doing what we can to support the economy and wellbeing of our community on Christmas Island. In a practical sense we are acutely aware of the many challenges that IOT face, but at the same time recognise our potential and the many opportunities presented by our unique environment and resilient communities.

By working in cooperation with all levels of government, business and the community we believe we can achieve great things and a bright future for current and future generations of Christmas and Cocos Islanders.

We are very pleased to contribute to this Inquiry and be part of the discussion into the opportunities and challenges before us.

We appreciate the work of the committee in undertaking this comprehensive inquiry and look forward to its outcomes. If you have any questions please contact [redacted] at [redacted]

Best Regards

[redacted]

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Phosphate Resources Ltd – Submission into the Joint Standing Committee on the National Capital and External Territories Report on the challenges, barriers and opportunities for economic, social and environmental sustainability in the Indian Ocean Territories (IOT), with specific reference to:

a. Encouraging innovation and investment that addresses sustainability challenges and provides economic opportunities. This could include innovative approaches to waste management, and capitalising on the unique environmental qualities that represent the marketing and strategic advantage of the Islands in the long term.

b. Building on investments in education and research by encouraging partnerships across the IOT with local, mainland and international organisations with an education, research, biodiversity or sustainability focus to drive investment and innovative economic outcomes.

c. Identifying how the community can contribute to citizen science, and capitalise on jobs flowing from government investment, including in education and research.

d. Socially responsible development that addresses the social impact of cost of living and geographic isolation; and supports community needs and aspirations.

e. Strengthening and diversifying the IOT economies; and identifying future infrastructure needs to support sustainable economic growth.

Background

CI Resources Limited is an ASX listed diversified industrial company with interests in Phosphate Mining, Asset Management, Fuel and Marine Pilotage services on Christmas Island. We own properties in Western Australia, Singapore and Christmas Island, and have agri-business and fertiliser interests on Christmas Island, New Zealand and Malaysia.

CI Resource's wholly owned operating company, Phosphate Resources Ltd (PRL), has operated a phosphate mine on Christmas Island since 1990, providing rock phosphate to primarily South East Asian, Australia and New Zealand markets. The Company was founded by the community and workforce of the previous mining company after it was closed by the Australian Government in 1987. PRL commenced operations in 1991 after convincing the Australian Government to allow the mine to be reopened. Many of those involved back then, are still present in the Company today as employees and shareholders, including our Managing Director Lai Ah Hong.

The Company has been built on strong social and environmental foundations with a track record of supporting the local communities and environments where we operate. Our rock phosphate mine on Christmas Island, has exported over 16 million tonnes of rock phosphate since 1990 to Australia, New Zealand, Malaysia, and Indonesia. We contribute approximately half of the Island's Gross Regional Project ($45Mp.a.) and directly and indirectly employ half of the Island's workforce. Additional information on our economic contribution is included in the 2019 University of Western Australia - Social and Economic Impact Assessment of Phosphate Mining on Christmas Island which forms part of our submission.

Phosphate mining commenced on Christmas Island over one hundred and twenty years ago with PRL being the modern-day part of the deep mining heritage on the Island. It can be argued that

the Island's mining operations help to provide the stability and economic resources to maintain a peaceful, cohesive, well-functioning and largely self-sustaining remote community. Mining has been enmeshed in Christmas Islander identity, history, way of life and sense of purpose for four to five generations. For the majority of the community at this point in time, the most significant threat to their social fabric is for mining activity to end prematurely.

Phosphate Resources is committed to contributing to the economic development of Christmas Island and the wellbeing of the community. There are many challenges to economic development on Christmas Island including the availability of land for economic development purposes. To that end the Commonwealth initiated Christmas Island Strategic Assessment (CISA) process is an important initiative by enabling access to land with environmental pre-approval for identified economic activities. Once approved, it will support the economic diversification opportunities identified in the 'Our Christmas Island 2030 Strategic Plan'.

Under the Strategic Assessment we have requested access to a modest quantity of high-grade resources on unallocated crown land, which would allow the mine to operate up until 2034, when the mining lease ceases. If successful it will allow an orderly transition to a new economy, no longer wholly dependent on mining, and able to sustain into the future the Island's unique community, history, culture, and environment. There have been some delays in the timeframes of the Christmas Island Strategic Assessment and its vitally important that it is accelerated to enable development planning and build investor confidence in Christmas Island;

The Company has since its inception been actively pursuing a diversification strategy over many years; Current subsidiaries of PRL include the following:

- Christmas Island Maintenance Services Pty Ltd (CIMS) – CIMS provides asset management services to the Department of Home Affairs, to support the Christmas Island Detention Centres, along with providing other general on-island maintenance services, including for PRL.

- Indian Ocean Oil Company Pty Ltd (IOOC) – IOOC is the sole supplier of petrol, diesel and burner fuel on the Island and is contracted by the Federal Government to supply diesel to the Navy, Australian Border Force and Power Station.

- Indian Ocean Stevedores Pty Ltd (IOS) – IOS provides pilotage, agency, survey and consulting services to vessels calling in at Christmas Island. This service is largely underwritten by PRL.

- Investment in a biological fertilizer company in New Zealand, Pacific Biofert Fertilisers.

- Phosphate Resources Shipping (PRS) – Recently invested in a vessel, the Red Titan, a freight and Phosphate Bulk carrier vessel. The operation of PRS has been able provide much needed competition and reduce the cost of freight to the Island by bringing freight in, and backloading phosphate out.

We are pursuing further diversification, through a new phase of tourism, infrastructure and agricultural projects, including a solar energy facility, potential investment in Hidden Garden Sustainable Farms, an Eco-Resort Development and a Mountain Bike facility to help create new and exciting tourism products for the Island. These projects are future looking activities, part of a business strategy to accelerate diversification of the Christmas Island economy away from one largely dependent on mining.

Our future looking strategy, aligns with government policy settings which were identified by the 'Our Christmas Island 2030 Strategic Plan' and the Joint Standing Committee Report into the Strategic Importance of the Indian Ocean Territories in 2017. The report assisted in defining the strategic importance of the Indian Oceans Territories to the Nation, and the importance of maintaining economies in the IOT, capable of sustaining the unique communities that have lived there for many generations.

Executive Summary

The Joint Standing Committee on the National Capital and External Territories is reporting into the challenges, barriers and opportunities for economic, social and environmental sustainability in the Indian Ocean Territories (IOT).

The Indian Ocean Territories (IOT) are a unique and pristine environment. Both Christmas Island and Cocos (Keeling) Islands have natural wonders, large parts of which are protected, and heritage sites of interest to Australians and the rest of the world. The communities are culturally diverse, unique and resilient, with a strong sense of community spirit and belonging.

Despite these strong and resilient communities, there are also challenges and barriers which are well documented. Those challenges facing small, remote communities on the mainland are also present in the IOT. Remoteness and isolation result in a high cost of living, attributed to low populations and high transport costs, and the fact that food and most goods and services have to be air or sea freighted in from the mainland. Employment is limited, meaning when young people leave the islands for education many do not return. There is a limited supply of land, infrastructure and services. The islands are also vulnerable to extreme weather events which at certain times of the year can severely impact on access and freight services to the Islands.

This year with the prolonged wet and swell season, the IOT suffered flight delays, offloading of baggage, freight and mail, which disrupted residents and the growing numbers of tourists taking advantage of the safe travel zone with Western Australia. Sea freight was also restricted, particularly Christmas Island which ran out of milk, some foods and beer. Supplies of jet fuel also became dangerously low, prompting the Commonwealth to consider flying in fuel. The situation wasn't helped by the behaviour of the main sea-freight provider which needs to be urgently addressed. This behaviour exposed Christmas Island's heavy reliance on a single sea freight provider to provide critical supplies to the island.

The Islands economies, particularly Christmas Island, have been subject to cycles of boom and bust generally driven by externalities beyond the control of the islanders. Examples include the construction and operation of the detention centre and earlier, construction and operation of the Casino, followed by its closure.

Phosphate mining (on Christmas Island) and government services have provided the enduring economic base for the islands, with a small contribution from tourism (more Cocos than Christmas Island). Various attempts to develop alternatives have generally not succeeded.

There is substantial untapped tourism potential, particularly on Christmas Island. It has an utterly unique offering to visitors seeking a special experience that cannot be achieved anywhere else in the world: a tropical rainforest environment that is disease free, with unique natural experiences in a first world community that is itself a unique cultural experience.

To that end PRL's diversification and investment strategy includes a new phase of eco – tourism develoment, infrastructure and agricultural projects. To support these economic development initiatives and address sustainability challenges it is necessary that sustainable services and infrastructure such as renewable energy, sustainable waste and water management practices, and controlled environment agriculture are developed. The fact that the IOTs are highly dependent on the importation of fresh food is a key vulnerability and cost factor. The development of controlled environment agriculture is well advanced and ideal for the IOT situation, but needs Commonwealth support to be realised. If the IOT are to capitalise on the unique environmental qualities that represent the marketing and strategic advantage of the Islands in the future, these sustainability challenges need to be addressed.

Because of the high costs of any development on the IOT, their remoteness and isolation, it will also require government support to make the IOT attractive to potential investors. To that end PRL, provides the following recommendations to Joint Standing Committee on the National Capital and External Territories for consideration

Recommendation 1

There are many challenges in the IOT due to remoteness and isolation, transport, high freight and living costs, insurance costs, and limited capacity for bank financing. In order to become investment ready, and able to attract private sector investment, it is critical that a suitable Commonwealth funding mechanism be identified, one which can support economic development, diversification and sustainability.

PRL strongly recommends the Commonwealth consider the application of the Northern Australia Investment Fund, (NAIF) to the Indian Ocean Territories. NAIF is a $5 billion development financier program that provides loans to infrastructure projects in the Northern Territory, Queensland and Western Australia. NAIF's mission is to be an innovative financing partner in the growth of northern Australia. A key focus of any financing is to drive public benefit, economic and population growth and Indigenous involvement in northern Australia. It is fit for purpose for the IOT, has substantial funds and is focussed on areas such as energy, transport, agriculture, tourism, infrastructure, mining, education and tourism.

It makes no sense that the Indian Ocean Territories are not considered part of Northern Australian given its geographic location and its political representation in the Northern Territory.

Recommendation 2

The Commonwealth initiated Christmas Island Strategic Assessment (CISA) process is an important initiative by enabling access to land with environmental pre-approval for identified economic activities. Once approved, it will support the economic diversification opportunities identified in the 'Our Christmas Island 2030 Strategic Plan'. There have been some delays in the timeframes of the Christmas Island Strategic Assessment and its vitally important that it is accelerated to enable development planning and build investor confidence in Christmas Island;

Recommendation 3

PRL strongly recommends the Commonwealth initiates and funds a sustainable infrastructure and essential services development plan for the IOT, including renewable energy, sustainable waste and water management practices. This is essential if the IOT is to capitalise on the unique environmental qualities that represent the marketing and strategic advantage of the Islands in the long term, and the development of an IOT brand that is 'eco-friendly' and sustainable.

Recommendation 4

PRL strongly recommends the Commonwealth support initiatives for the private sector to develop sustainable controlled environment agriculture (hydroponics, aeroponics, aquaculture, and aquaponics) in the IOT. These technologies are well suited to the IOT environments and have a proven ability to produce a variety of quality fresh food produce. This will enhance food sustainability and security, improve public health, reduce the cost of living, and create jobs and viable local business opportunities that can be replicated in other remote communities.

Recommendation 5

A critical enabler of tourism is air access and for the IOT this means to and from the north. While the air service from Perth is vital to maintain the links with mainland Australia, it will never deliver the number of visitors that will enable tourism to thrive.

Aviation policy settings in Australia recognise the need to support air services on low traffic routes where no other access option exists and for this reason the Australian Government underwrites the air services to the Indian Ocean Territories to ensure access is available. Unfortunately, the policy and cabotage arrangements do not allow the service to be extended to the north. Without the northern service, a tourism industry of significance will not develop.

The recent opening of a safe travel zone between Perth and the IOT resulted in a significant uplift in tourism visits, however seasonal weather and freight disruption (including shortages of jet fuel in the IOT) disrupted flights and travel arrangements. It has created uncertainty for tourists, and tourism operators and demonstrated the importance of an additional regular service to the north if tourism is to develop.

PRL strongly recommends the Commonwealth consider policy changes to cabotage and aviation arrangements which can support the extension of air travel arrangements to the North.

Recommendation 6

The recent experience with the prolonged wet and swell season, has highlighted the vulnerability of the IOT to the supply of essential goods and services. The Commonwealth should consider the application of Community Service Obligations and controls for essential supplies to the IOT. These measures must be able to ensure the delivery of essentials supplies and protect the community from risks associated with monopolistic behaviour by sea-freight and air-freight providers.

Recommendation 7

PRL strongly supports the initiative of the Assistant Minister for Territories and Regional Development the Hon Nola Marino to evaluate the potential of creating an Indian Ocean Territories Research Centre. The (IOTRC) will leverage the unique environment of the IOTs to conduct world class research. It will strengthen Australia's international reputation in education and research, will help in diversifying the economy of the IOTs to create a sustainable driver of economic growth and employment.

Recommendation 8

There have been ongoing scientific research activities on Christmas Island for many years, mostly associated with the National Park. There is also the potential for additional research through the creation of an Indian Ocean Territories Research Centre (IOTRC). There is an enormous opportunity to promote many of these research activities to the broader community through citizen science

initiatives. This could involve the community, and in particular the schools being engaged early on in the planning process, through the creation of a community scientific association or through the Parks Australia Junior Ranger program and community outreach program. Planned research activities could be advertised in advance and opportunities identified for community involvement. There are various models through which this can be achieved.

The Commonwealth should consider the requirement for all research activities in the IOT, whether initiated by Park Australia, the IOTRC, or others, to ensure a requirement for citizen science to be included in research contracts. To be sustainable appropriate budget allocations would need to be considered.

Report Focus Areas and Reponses

A. Encouraging innovation and investment that addresses sustainability challenges and provides economic opportunities. This could include innovative approaches to waste management, and capitalising on the unique environmental qualities that represent the marketing and strategic advantage of the Islands in the long term.

As mentioned earlier, PRL's Investment Strategy includes a new phase of eco – tourism, infrastructure and agricultural projects. To support these economic development initiatives and address investment and sustainability challenges it is necessary that suitable services and infrastructure such as renewable energy, sustainable waste and water management practices and facilities are developed on Christmas Island. These are a pre-requisite if more sustainable eco-tourism developments, which build on the IOT's unique environmental qualities are to occur. Infrastructure questions are dealt with in section **(E).** This section deals with investment attractiveness, tourism investment and sustainability.

Investment Attractiveness

Economic development for the Indian Ocean Territories has long been the goal of successive Australian Governments for logical reasons. It would reduce the burden on the taxpayer, and provide tangible benefits to the communities.

The reality of the IOTs economy, particularly Christmas Island, has been a continuous cycle of boom-and-bust. This occurred during the construction boom of the detention centre, followed by bust when it went into care and maintenance. The earlier construction and operation of the Casino resulted in a boom followed by a bust when it closed.

Phosphate mining (on Christmas Island) and government services have provided the enduring economic base for the Islands. It can be argued that the Island's mining operations has helped to provide the stability and economic resources to maintain a peaceful, cohesive, well-functioning and largely self-sustaining remote community. However, mining is finite and it is unlikely to go beyond the current mining lease, which will expire in 2034. Various attempts to develop economic alternatives through proposals like the Asia Pacific Space Centre, and bottled water have not been successful.

PRL is pursuing a range of economic development initiatives in eco-tourism, infrastructure and agriculture. The Hidden Garden Sustainable Farms vision is to create a sustainable organic farming model, producing a variety of quality produce that showcases solutions to waste management, food security and create viable local business opportunities. This is dealt with further in section **(D).**

All of these projects require some form of financial support given the challenges of isolation, high freight and living costs, and limited bank financing available in the IOT, if they are to be successful. For the IOT, to become investment ready and being able to attract private sector investment is critical that a reliable funding mechanism be identified.

The current 'Building Better Regions' program has limited funds and is restricted towards the 'not for profit' or Local Government sectors. While it does provide some support, it is not designed to support the kind of private sector projects that are needed to diversify and build a more sustainable economy in the IOT. Likewise Export Finance Australia, is more about helping SME's realise export opportunities or contribute to the export supply chain. Its infrastructure projects are also focussed on the Pacific region.

Application of the Northern Australia Investment Fund (NAIF)

NAIF is a $5 billion development financier that provides loans to infrastructure projects in the Northern Territory, Queensland and Western Australia. NAIF's mission is to be an innovative financing partner in the growth of Northern Australia. A key focus of any financing is to drive public benefit, economic and population growth and Indigenous involvement in northern Australia. It is fit for purpose for the IOTs, has substantial funds and is focussed on areas such as energy, transport, agriculture, tourism, infrastructure, mining, education and tourism. It makes no sense that the Indian Ocean Territories are not considered under NAIF, given their geographic location and political representation in the Northern Territory. The ability to access NAIF in the IOT would be a significant enabler of economic growth, and improve the economic viability of medium to large scale developments in the region.

Transport to Support Tourism Development in the Indian Ocean Territories

A critical enabler of tourism is air access. For the IOTs this means to and from the north. While the air service from Perth is vital to maintain the links with mainland Australia, it will never deliver the number of visitors that will enable tourism to thrive. It is unlikely that any serious tourism investor will make the investment needed, so long as air access is via Perth alone. There have been many local efforts to have a regular service from the north, particularly from Kuala Lumpur, Jakarta and Singapore but these have struggled in the absence of support from Government.

Aviation policy settings in Australia recognise the need to support air services on low traffic routes where no other access option exists, and for this reason the Australian Government underwrites the air services to the Indian Ocean Territories to ensure access is available. Unfortunately, the policy and cabotage arrangements do not allow the service to be extended to the north. But without the northern service, a tourism industry of significance will not develop.

B. Building on investments in education and research by encouraging partnerships across the IOT with local, mainland and international organisations with an education, research, biodiversity or sustainability focus to drive investment and innovative economic outcomes.

PRL has invested in education through its partnership with the Christmas Island District High Schools. It includes annual student recognition awards; study travel subsides and bursary awards for students entering higher education on the mainland. We also offer a range of traineeship and apprenticeships to create opportunities for young islanders, including those from Cocos Island.

On an ongoing basis we undertake specific research to help us improve our approach to mine site remediation and rehabilitation, and product development. We have, in partnership with the Commonwealth, undertaken research investigating the use of old mine fields for agricultural development on Christmas Island, through the 'Mine site to Plant Enterprise Project' MINTOPE. The project identified difficult conditions for food production, such as rainfall, depleted soil, limited water supply and pest management. A fundamental outcome of the research was in identifying the multiple challenges to broad acre farming on Christmas Island and a conclusion that for agriculture to be successful, Controlled Environment Agriculture (CEA) would need to be adopted. The conclusions of the research led to our investment in 'Island Fresh' a joint venture with Hidden Garden to establish a Controlled Environment Agriculture, which is a technology-based approach toward food production via hydroponics/aquaponics in controlled situations. This is ideal for the production of fruit and vegetables in the IOT, and would be transferable to other remote Island communities.

Indian Ocean Territories Research Centre (IOTRC)

The Commonwealth through the Assistant Minister for Territories and Regional Development the Hon Nola Marino has initiated a process to evaluate the creation of an Indian Ocean Territories Research Centre. The (IOT) Research Centre will leverage the unique environment of the IOTs to conduct world class research. It will strengthen Australia's international reputation in education and research, while diversifying the economy of the IOTs to create a sustainable driver of economic growth. Through research and training programs tailored to the needs of the communities of the IOT the Research Centre will promote the IOT as a leader in research and education on small, remote islands, and act as an agent for positive change.

This initiative aligns with the aspirations of the 'Our Christmas Island Strategic Plan 2030' and is strongly supported by PRL and the broader community of Christmas Island. The Assisting Minister has established a working group with representation from both IOT communities, businesses, government and multiple Australian education institutions and is in the process of preparing an Initial Business Case (IBF) for the concept for the 2021/2022 budget considerations.

Proposed Focus Areas for the Research Centre;

Natural sciences
The need for research is evident in the high and ongoing loss/decline of species, impacts of invasive species such as the yellow-crazy ant and wolf snake; incomplete inventory and understanding of the marine and terrestrial species and ecosystems; and the unknown impacts of climate change on the ecological processes that support the unique CI flora and fauna. CI has very high levels of endemism, with more than 250 species found nowhere else, complicated ecological systems and largely intact marine systems. Its biogeographic position in the tropics, Indian Ocean and Asia present unique research opportunities in island ecology, taxonomy, plant and animal genetics and marine and terrestrial biodiversity conservation.

Biosecurity
CI's remoteness and unique flora and fauna present both challenges and opportunities for biosecurity research, including monitoring of the impact of invasive species on threatened species (e.g. impacts of yellow-crazy ants on the red crab population); eradication of invasive species (e.g. wolf snake and giant centipede); study of animal diseases (e.g. lizard disease); and environmental restoration.

Climate change
CI's natural assets and biogeographic position make it a 'living climate change laboratory' providing opportunities for long-term monitoring of climate change impacts on marine, terrestrial and built environments.

Health
The remote and small communities of the IOT present interesting opportunities in health and social sciences research. For example, there are opportunities in tropical health and medicine; community nutrition and wellbeing; lifestyle diseases (e.g. diabetes); intersection between health and agriculture (e.g. medicinal cannabis).

Agriculture and aquaculture
Research is needed to further investigate the agricultural potential of CI, including in tropical niche agricultural products; food science; tropical aquaculture; and horticulture (e.g. CEA and vertical farming).

Heritage
CI has an interesting cultural, built and natural heritage (e.g. WWII history, Early Settlement)

Waste management
There are opportunities to explore alternative waste management practices that can overcome the challenges presented by small islands and remoteness (e.g. dealing with marine debris plastic waste).

Circular and sustainable economies
There are opportunities to explore ways to adopt a circular economy model that ensures economic benefit is driven by sustainable practices

C. Identifying how the community can contribute to citizen science, and capitalise on jobs flowing from government investment, including in education and research.

Scientific research has been occurring on Christmas Island for many years, mostly associated with the National Park. There is an enormous opportunity to promote many of these research activities to the broader community through citizen science initiatives. This could involve the community, and in particular the schools being engaged early on in the planning process through the creation of a community scientific association, or through the Parks Australia Junior Ranger program or their community outreach program. Planned research activities could be advertised in advance and opportunities identified for community involvement. There are various models through which this can be achieved. For this to be successful appropriate budget allocations would need to be considered for the National Park and requirements for citizen research to be included in research contracts.

PRL is also very supportive of the establishment of the Junior Ranger Program on CI by Parks Australia and its extension to the CKI in due course; The proposal for a Junior Ranger program has been developed by Parks Australia in collaboration with the Christmas Island District High School. PRL is providing financial support via The National Parks Conservation Trust (https://parkstrust.org.au/) and Parks Australia to help establish the program which would have dedicated staffing and form part of the school curriculum, providing a new way for students and their families to support and engage in park management.

PRL for the past several years has been conducting research into the use of Nest Boxes to create additional nesting habitat for the Christmas Island Hawk Owl and other species such as the Golden Bosun. The project involved school students, in the construction of nest boxes through their woodwork classes, and in the monitoring surveys and reporting of the research. This helps to build an interest in science, provide improved career options and a practical application to Christmas Island.

Should the IOT Research Centre be successful it would add further opportunities for contributing to citizen science and employment in education and research.

D. Socially responsible development that addresses the social impact of cost of living and geographic isolation; and supports community needs and aspirations.

PRL recently conducted a community survey to gauge their views on a range of economic development initiatives we are undertaking. These include an eco–resort development, a mountain bike track and facilities, and a solar energy proposal. Additionally, under the Christmas Island Strategic Assessment a proposal to access an additional 52 ha of unallocated crown land to mine ~ 1 M tonnes of high-grade phosphate, which would ensure we have enough resources to maintain mining until the current mining lease expires in 2034. Success with these initiatives provides time for the Island economy to

transition from one dependant on mining to one more diverse and sustainable. There was significant community support of between 78% to 96% for the proposals.

In addressing point 'D' of Joint Standing Committee on the National Capital and External Territories Report, PRL proposes the committee consider support for the following socially responsible development initiatives;

Eco-Resort Development

CI Resources has partnered with international consultants Anthill Pty (Dubai) and TOPO (Queensland) to undertake a Tourism Master Planning exercise which will;

- Prepare a tourism masterplan for Christmas Island
- Conduct an initial pre-feasibility study into the potential for an integrated five or six-star luxury resort on Christmas Island.
- Prepare a feasibility study for a smaller targeted tourism development – Phase 1 of the Master Plan

It is envisaged that the indicative project timeframe will be about 6 months ~ mid 2021. The work will cover multiple activities including;

- a site assessment at LB7, and potentially other sites)
- Christmas Island local market assessment,
- assessment of luxury travel, global marketing trends,
- comparative island benchmarking study
- luxury brand operator analysis
- options analysis
- financial and project returns analysis
- Final report

It is envisaged that some form of government support would be required to attract the necessary investment to construct a development of this scale. The Northern Australia Infrastructure Fund (NAIF) is well suited to assist a development of this scale, bringing tourism to a new level in the IOT, resulting in significant opportunities for small business, employment and our communities.

Christmas Island Mountain Bike Initiative

PRL, have partnered with Adventure Freak, 3 Chillies Track Design and Christmas Island Mountain Bike Association (CIMBA) to research and garner support for a Mountain Bike Destination on Christmas Island. Countless hours in the jungle on bike and foot, in 4WD's, meeting rooms and flying back and forth to other destinations for inspiration, have given us the confidence to know that we have everything needed to make this a world class, must see, Mountain Bike mecca, creating a new sustainable tourism product and jobs for Christmas Island.

Our 4-year plan is to create 100 kilometres of beautiful flowing mountain bike trails on Christmas Island for a sustainable mountain bike tourism future. This sculpted dirt pathway will showcase the beauty of the landscape with minimum disruption and ecological disturbance. By focusing on cultural and ecological sensitivity, we will integrate Mountain Biking into the community in a sustainable and economically beneficial manner.

The IOT Regional Development Organisation has provided funding to support the development of a 25 km 'construction ready' track design, using the old South Point railway easement as the backbone of the new track. PRL, through its Community Development Fund has provided funding to support the establishment of the Christmas Island Mountain Bike Association (CIMBA). Similar to mainland models CIMBA will be responsible for managing and operating the track and facilities. CIMBA have recently submitted an application to the Building Better Regions Fund for ~ $1M for the construction of the first 25 km of the track.

The Blue Derby track, located in an old tin mining town in Tasmania was supported by government to the tune of $3.5 M to build 85 km of track. The investment has turned around the economy of the old mining town, producing $35M in regional revenue, $12M directly and creating many jobs, demonstrating how government support can have significant economic outcomes in regional areas.

Sustainability in Fresh Food Production

Research conducted by PRL, and the Commonwealth in partnership with Murdoch University into agricultural development on Christmas Island, through the 'Mine site to Plant Enterprise Project' MINTOPE concluded that broad acre farming on Christmas Island was not commercially viable. However, Controlled-Environment Agriculture (CEA) which is a technology-based approach toward food production via hydroponics/aquaponics in controlled situations is a reliable and tested solution.

The Hidden Garden and more recently Island Fresh entities grew out of the vision of Mark Bennett for food security and passion for sustainable farming practices which was inspired by his first- hand experience of living in an isolated community where you could wait months for fresh produce. The communities of the IOTs have been totally reliant on food being imported from the mainland paying an exorbitant price for often low-quality fruit and vegetables which is the daily reality facing Islanders. It is not uncommon for a normal bag of groceries to cost over 250% more than the price of mainland staples, and individual items such as iceberg lettuce and cauliflower can easily fetch $12 and $15 respectively.

The Hidden Garden and Island Fresh initiative is to create a sustainable organic farming model producing a variety of quality produce that also providing solutions to waste management, food sustainability and security and create viable local business opportunities that can be replicated in other remote communities. It will also lead to improved public health outcomes and reduced cost for fresh food products. PRL have invested in Phase I of Hidden Garden through the Island Fresh venture to procure and install a 1000 mt^2 hydroponics facility to help make the Hidden Garden vision a reality. Hidden Garden has been seeking investment funds via the Building Better Regions Program unsuccessfully, because its guidelines exclude support for private sector investment. Later phases of the project propose to develop poultry farming, fish farming via aquaponics and tourism offerings.

E. Strengthening and diversifying the IOT economies; and identifying future infrastructure needs to support sustainable economic growth.

Energy

PRL approached the Commonwealth with a solar energy concept for Christmas Island which could offer a total solution, reducing costs, emissions and reliance on diesel fuel. In response the Commonwealth, through the Department of Infrastructure, Regional Development, Transport and Communications initiated an Expression of Interest (EOI) process for a 1 MW solar energy facility, (current Island energy consumption is ~ 6 MW). PRL along with other mainland proponents are participating in the EOI process. This is, a step in the right direction; however, it needs to be

expanded to meet current and future energy needs, if we are realistically to build upon the Island's environmental qualities and develop an Island brand that is 'eco-friendly' and sustainable.

The Commonwealth should consider a commitment to a 100 % renewable solar energy solution, this includes the assessment of new battery storage options and, in the future the opportunity for the application of hydrogen technology. We believe if implemented it could reduce energy costs dramatically, by ~ 50%, reducing costs to the Commonwealth and consumers. Additionally, it will build upon the Island's environmental qualities and develop an Island brand that is 'eco-friendly' and sustainable. This is consistent with the 'Our Christmas Island Strategic Plan 2030' which envisages a transition of the IOTs from diesel energy to clean energy sources.

Waste Management

Similarly, the Island's (Christmas Island in particular) waste management systems rely predominantly on the use of land fill to dispose of the majority of waste. The high cost of freight is a major impediment to taking waste off the Island for recycling on the mainland. PRL has subsidized and led several initiatives utilizing our shipping to remove hazardous waste and other materials from the island, such as car batteries and steel.

There are some small-scale initiatives through the Shire and community groups on recycling, including composting and the reduction in the use of plastics, however the bulk of the Island's waste ultimately ends up in land fill and the current tip site is close to its use by date. Investment is needed into available sustainable technologies and practices that can be applied to the Island's waste management system, if we are to build a destination brand and economy that is moving towards sustainability.

The IOT face a continuous tide of plastic waste from the north that ends up on our beaches. On Christmas Island the community works very hard, undertaking beach clean-up activities on a regular basis to mitigate the eye-sore and reduce the danger to native fauna. These initiatives are also supported by organisations like ourselves, the Shire and Administration. Additionally, environmental groups like Eco -Crab try to recycle small quantities of the waste into building materials, but lacks the scale to deal with the large volumes, which again mostly end up in land fill. This issue could be an important area of research, being considered within the auspices of the IOT Research Centre, as it effects both IOTs. This is considered further in section (B).

Water

Water management is another critical element. There is an on-going need to determine the extent of the groundwater catchment and whether development has the potential to impact upon the specific catchment that is used for the Island's potable water supply. Recent investment by the Commonwealth has increased the capacity of the Wastewater Treatment Plant at Smith Point to cater for a population of 6,000. A question remains around the sustainability of available groundwater on the Island and further work needs to be undertaken to implement sustainable water management practices

Ensuring common infrastructure such as the airport, fuel, the port including craneage and the mooring system are maintained will be essential to support economic development, diversification and sustainable growth.

Another consideration, which has become evident through the safe travel arrangement with WA, resulting in an increase in tourism numbers, is the lack of public transport on the Island and the limited availability of hire cars and taxi services.

PRL as part of its Mountain Bike project is investigating a facility which can provide, repair and maintain E-Bikes and scooters, which would go some way towards meeting the transport needs of most tourists. It provides a green and sustainable mode of transport.

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