

# Digital Power - Special Edition

August 2022



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## Editorial: Digital Power

First published: 13 April 2022

### Is Energy Generation enough to Future Proof your Business?

The market value of the global digital asset ecosystem is approximately AUD\$2.8 trillion, with over 221 million users having engaged with cryptocurrencies or used a blockchain based application. It is an innovation filled market which does not lack any courage from its participants.

Buzzwords dominate the discussions around the realm of opportunities of Web3, crypto and blockchain. These three words describe an underlying technological value and add an additional layer of complexity to existing digital transactions – both concepts that may seem foreign to older generations. After all, the Baby Boomer way to value assets and performance in a traditional economy is quite contrary to that in a digital economy. Many members of society still carry cash and find the idea of professional video gamers outlandish.

Why is a law firm talking about the difficulties in generational thinking associated with the digital economy? Well, at Hamilton Locke, we see an intersection between a very tangible industry and the crypto realm of unlimited opportunities – between electrons flowing through poles and wires, and in the digital secret gardens, we see opportunity.

We see that a crypto mining industry and digital economy committed to renewable energy can assist the energy transition.

The Australian National Energy Market (NEM) undeniably has the potential to become a world leading renewable energy market. Our very own Matt Baumgurtel suggests that in future the structure of electricity retail customer plans will be like internet plans, where the majority of costs are for transmission and connection rather than the electricity amount consumed. However, there are some hurdles to overcome.

The Australian Energy Market Operator (AEMO) is working extremely hard to improve the operation of the market that faces unprecedented challenges resulting in a risk management game for New Energy developers and investors.

AEMO may, at times, limit the connection or the export of electricity generators, decreasing revenue certainty for generators and investors. As a result, investor certainty in the NEM has deteriorated. For example, the potential of Australia to become an energy leader is dependent on the development of renewable energy projects. Yet, in 2021, from a \$7.5 billion budget available for potential investment opportunities in renewable energy in Australia, only \$3.7 billion was spent on financial commitments for new large-scale renewable energy projects, leaving almost \$4 billion that could be used for further investment in renewables. We see that crypto mining has the ability to de-risk energy projects for project holders and may be the key to restoring investor certainty in the NEM.





## What is Crypto Mining

In essence, crypto mining, especially bitcoin mining involves the process referred to as proof of work. Meaning there is a calculation that is highly complex which gets more complex over time. The calculation is completed in pools consisting of multiple virtually connected miners (computers). Every miner contributes their individual computing power to the calculation. Whenever the calculation is successful a portion of a bitcoin is found, and the miner receives a bitcoin fraction. That bitcoin fraction can then be exchanged for fiat currency or held as a bitcoin.

We note that there are other currencies and mining opportunities which we do not cover in detail.

Where does crypto mining fit in with the Energy Industry?

Crypto mining can generate revenue for the New Energy asset without any dependency on AEMO or the market. This means the New Energy developers can start the construction of a New Energy facility without bearing the traditional risks associated with the NEM and AEMO.

## Special Edition Content

In this special edition content, we focus on the deep connection between power and the digital economy. Throughout the series, we explore the opportunities that data centres and crypto miners bring to the National Electricity Market (NEM), important digital security considerations for energy asset holders, the ‘tokenisation’ of energy related projects and relevant environmental, social and governance (ESG) considerations when acquiring a digital assets business.

## Green Crypto Mining and Data Centres

Recent trends have seen a high demand for renewable, clean energy; compounded by global pressure to reach net zero emissions. Given this context, modern businesses are well aware that investments are increasingly conditional on the business’ ability to demonstrate sustainable practices and adequate ESG targets – and the data centre and cryptocurrency mining industries are no exception.

Our first article: “Green Crypto Miners and Data Centres” explores the concept of ‘Green Financing’ and its opportunities to reduce a business’ overall carbon footprint by encouraging energy efficient operations and investment into renewable energy, including the construction of energy efficient facilities.

In the following, supplementary article, “Data Centres and Crypto Mining – How to be Green”, we explore some real life examples of ‘green financing’ and the innovative projects being undertaken in the industry

to maximise energy efficiency – from underwater data centres to participating in Power Purchase Agreements with renewable energy facilities to power crypto mining operations.

## Crypto Mining and the NEM

Now, to have ‘green’ crypto mining and data centre industries is all well and good – but, crypto mining actually has the potential to add substantial value to the energy transition in the NEM.

In our third article: “A Crypto Grid? The Opportunity for Crypto Miners in Australia”, we discuss the unique ability of crypto miners to manage the notoriously volatile peak demands in the NEM, specifically its ability to consume large amounts of electricity for its own operations. This removes any excess energy from the grid, creates consistent scalable loads to be distributed by grid operators and provides an additional revenue stream for renewable energy generators.

Everyday consumers are not excluded from the equation either. Our fourth article, “Expert Insights with Guy Dickinson from BetaCarbon” explores non-traditional investment opportunities that allows consumers to drive demand for carbon credits and green projects by purchasing cryptocurrency tokens.

## Tokenising your New Energy Project

After our focus on the opportunities in crypto mining, our final two articles provide guidance on crypto application for your project and whether tokenising is the right step for you, taking into consideration:

1. The current status of cryptocurrency in Australia;
2. Your obligations, whether or not your token is a financial product;
3. Whether a token is an essential component of the project; and
4. The nature of the token and how it is to be used.

## Conclusion

Overall, the crypto mining and data centre space is undergoing rapid development in support of the New Energy transition, with plenty of opportunities for stakeholders at all levels to become involved.

We hope this special edition content will serve as your practical guide to navigating these new industries – and perhaps, even identify the next exciting step for yourself, or your current and future projects.





## Watt's happened



The New Energy Team published their energy predictions for 2022

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New Energy Team attended Clean Energy Council's Large-Scale Solar Forum in Brisbane

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Matt Baumgurtel and Cedric von Düring spoke at Ammonia Energy Association's Quarterly Members Meeting

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Hamilton Locke and Quintas Energy Networking session

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New Energy Team joined the 2022 Smart Energy Council Conference and Exhibition

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The fold legal prepares submission on the future of crypto regulation

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## Watt's crypto mining in the Market

Australian green Crypto Mining Companies we have been watching:



### Iris Energy

The Sydney based crypto mining company listed on the NASDAQ raised over US\$500million for its mining activities in the United States. Iris Energy has not yet ventured into the Australian market.



### Mawson Infrastructure

The Sydney based crypto mining company listed on the NASDAQ has the first pilot project in NSW powered 100% by renewables. The majority of Mawson Infrastructure's activities are in the US.



### Arkon Energy

Arkon Energy is an early stage start-up that has entered the Australian market to explore the crypto mining potential. Arkon has raised AU\$2.6 million in pre-seed funding.

## Watts Crypto at the Fold

The Fold is an industry-focused firm, providing specialist regulatory, corporate and commercial advice to financial services and credit businesses.

The Fold has helped businesses innovate and grow since 2002. The Fold is known for its technical expertise and industry knowledge which it uses to provide practical solutions for clients.

The Fold supports clients across multiple sectors, including:

- Cryptocurrency
- Fintech
- Financial Planning and Wealth Management
- General Insurance and Insurtech
- Credit and Payments
- Discretionary Mutual Funds
- Managed Accounts

### Fintech

The Fold has been deeply steeped in the fintech space since early 2013. They work with fintechs across multiple sectors, including general insurance, wealth management, payments, credit, buy-now/pay-later, crypto and lending.

### Cryptocurrency

The Fold has been helping businesses innovate in the crypto industry since 2015 and are members of Blockchain Australia. They are technical specialists that have a broad and deep understanding of blockchain technology, crypto assets, exchanges, DAOs, alternate platforms and crypto product and service offerings. The Fold's crypto knowledge combined with its financial services expertise is market leading. The Fold delivers practical, compliant and innovative solutions for clients. They have worked with crypto exchanges, miners, crypto payment businesses, crypto platforms, DAOs and crypto token issuers to design innovative and compliant offerings. The Fold has advised on token listings, token design, payment solutions, yielding solutions, staking solutions, Bitcoin mining, NFTs, margin trading, liquidity pools, crypto futures, DAO protocols and the expansion into traditional financial services such as share trading.

## Market Recognition



AFR Features Hamilton Locke – One of the Largest Increases to Law Firm Partnerships in Australia

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Chambers and Partners Recognises Hamilton Locke in 2022 Asia Pacific Guide

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Hamilton Lock Partners Recognised in 2023 Edition of The Best Lawyers in Australia

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Legal 500 Recognises Hamilton Locke in 2022 Asia-Pacific Guide

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Chambers and Partners Recognises Hamilton Locke in 2022 Global Guide

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Lawyers Weekly Recognises Hamilton Locke as 'One of the Fastest-Growing BigLaw Firms in the Country'

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Hamilton Locke Recognised In Doyle's 2021 NSW Guide

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Technology Scale-up Awards 2022 Launch Announced

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## Watt's next



### Regulation of Crypto

The Select Senate Committee on Financial Technology and Regulatory Technology Final Report was released in October 2021 following an inquiry into the regulation of cryptocurrency (as well as a number of other matters). The Committee made twelve recommendations for the future of cryptocurrency. The Government released its response in December 2021, agreeing with or noting all 12 recommendations, except for Recommendation 7 which it does not consider a current policy priority. Work is underway and Treasury is spearheading the charge.

Much turns on the upcoming election, but the regulatory regime for cryptocurrency is likely to change in the near future if Australia wants to be a country of choice for cryptocurrency. The change process is already underway with Treasury having recently released a Consultation Paper on Crypto asset secondary service providers: Licensing and custody requirements (March 2022). This is important to bear in mind when thinking about the future of crypto and crypto mining in Australia.





## Spotlight – Cedric von Duering



### Where did you start practising and what do you like about being a lawyer?

I started my practice in a boutique law firm, with a focus on energy law. However, I practiced in all commercial areas including lots of litigation. For me, the most interesting part of being a lawyer is being an architect – I see my role as helping clients in building a structure that provides for the execution of their business plan.

### If you have taken part in the Da Vinci program, what activity did you undertake and why?

I will register for Piano lessons.

### What do you like most about Hamilton Locke?

Hamilton Locke allows me to learn, grow and be myself. The collaborative nature of the firm allows me to learn rapidly across all disciplines of the firm. Everyone in the firm is willing to share their knowledge in a nice and genuine way which provides the best result for our clients.

### Tips for aspiring lawyers?

Don't believe the clerkship and industry gospel if it does not suit your personality. The traditional way to become a lawyer did not resonate with me. Business fascinates me, I am creative and collaborative. I strive when I am working with people that care about business and people. Most big law firms do not provide an environment that allows you to grow in that way. In short, there are many ways to become a great lawyer – believe in yourself, believe in yourself a lot.

### What does being a part of Halo Group mean to you?

I am a member of a group of highly intelligent and driven people that enjoy coming to work. An environment where everyone puts a focus on being kind, friendly and understanding. A place where the focus is on getting work done and not pretending to work.

### Top reads / favourite movie and why / if you could invite anyone to dinner, who would it be and why?

The situation is hopeless, but not serious by Paul Watzlawick. It is the greatest reminder that life is best lived when not taken too seriously. In developed countries, we can fall into the trap of forgetting how good life can be if we turn our mind to it.

### What is your area of expertise?

I work with renewable energy developers and crypto miners and advise on all areas of the project life cycle. That includes project development, grid connection, financing and construction, as well as the buying and selling of development and operating projects.

### What has been your favourite matter so far?

We are working on a few battery energy storage systems (BESS) projects. These are very innovative projects and contain unprecedented complexities. Simplifying these complexities contractual agreements is exciting and rewarding.

### What are you most proud of in your career to date?

The relationships I have formed over the years. The first 12 years of my career have been very diverse, ranging from running a fitness company to developing an innovative renewable energy technology as the COO of a start-up in Switzerland. In 2017 I then came to Australia and established myself in the energy industry. During that time I have formed meaningful relationships with people from all walks of life – a success that I am very proud of.

## Rising Star – Megan Chau

### What are you most proud of in your career to date?

Learning and cultivating my practical knowledge and legal skills; and then applying them to assist our clients in a variety of complex matters has been very rewarding. In terms of cases I've worked on, I've assisted on reaching settlement of a \$2 million cross-claim against a leading construction company.

### What do you enjoy about working in the legal industry?

No two days – or matters – are the same in the legal industry, so there is always something new to learn.

### If you have taken part in the Da Vinci program, what activity did you undertake and why?

I have not undertaken the Da Vinci program (yet!), but when I do, I would choose either ice skating or playing the guitar! Ice skating because there is a rink close to home and I am regularly tempted to try it out. I also recently started playing guitar as a hobby and would love to dedicate more time to it!

### What do you like most about Hamilton Locke?

Hamilton Locke's dedication to high performance and providing an exceptional experience for both its clients and staff is something that really stood out to me, and this is clearly reflected in the firm's strategies and culture, which encourage collaboration, personal and professional growth. Currently, I work alongside the most down-to-earth, capable and passionate people, who are always open for a chat; and have regular opportunities to attend both personal and professional development events, all of which have provided me with invaluable experience (particularly as a law graduate)!

### What does being a part of Halo Group mean to you?

To me, being a part of Halo Group means being part of a team of like-minded people that are collectively striving for growth. It means being agile and flexible enough to respond to new challenges and perform to a high standard, being open to collaboration and taking the initiative to create exceptional experiences for our clients, the wider community and ourselves.

### Top reads / favourite movie and why / if you could invite anyone to dinner, who would it be and why?

Top reads: the Clifton Chronicles by Jeffrey Archer and The Lost Flowers of Alice Hart by Holly Ringland.

My all-time favourite movie is Morning Glory – it is the perfect feel-good movie and never fails to make me

laugh! Otherwise, I love Studio Ghibli films for their beautiful animation and storylines.

I would invite Ryan Reynolds and Blake Lively to dinner – I would be an awkward third wheel but the both of them seem so personable with a great sense of humour, so our conversation would never fall flat!

### Favourite cuisine/meal

Cantonese or Japanese cuisine.

### Fun fact

I worked for almost three years as a baker making Kürtősh / chimney cakes and other desserts!

### Do you have a party trick? If so, what?

I can walk and hula hoop at the same time

### Top 3 travel destinations/ Favourite holiday to date

Top 3 travel destinations:

- London, England
- Tokyo, Japan; and
- Seoul, South Korea

Favourite holiday: a family holiday to Hong Kong / Macau / Hainan – there was much good food, a trip to Ocean Park, Disneyland, visiting historic landmarks, rolling around in bubble balls on the river and a wedding (not necessarily in that order).





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# Digital Power – Green Crypto Miners and Data Centres

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This is the first part of our Digital Power Series focusing on the deep connection between power and the digital economy. Throughout the series, we explore [the opportunities that data centres and crypto miners bring to the National Electricity Market](#), important digital security considerations for energy asset holders, [the ‘tokenisation’ of energy related projects](#), and [relevant ESG considerations when acquiring a digital assets business](#).

The data centre and cryptocurrency mining industries are becoming a more prominent part of the Australian and global economy. In 2021, Australia's data storage demand attracted \$3.8 billion in investment and globally amounted to roughly \$13 billion. However, most of the energy consumed by these industries is still generated by non-renewable energy sources and account for an increasing amount of global energy consumption and CO2 emissions.

It is then unsurprising that operators of such businesses are actively looking for ways to reduce their carbon footprint. This is in no small part due to environmental, social and governance (ESG) targets being under increased scrutiny at board and governance levels, with companies setting robust targets for improvement. Investors are also increasingly focussed on ensuring their investments are sustainable and so it is in companies' interests to ensure that their business is as sustainable as it can be to attract capital.

The benefit of strong ESG commitments was demonstrated by the successful Nasdaq listing of two Sydney based crypto mining companies, Mawson Infrastructure and Iris Energy. The two companies have raised over \$USD250 million in their NAS with much due to their strong ESG commitments.

Green, or sustainable, financing is an option available to those operating in this space and is one that seeks to assist companies achieve their targets in the conduct of their business (and introduces an element of accountability), and sends a strong signal to the market of a company's sustainability credentials. Customers can also benefit as their supply chains become greener.

## What is ‘Green’ Financing?

Green financing can take several forms and can be structured for the debt capital or loan markets. As for the terminology:

**Green bonds or loans** are debt securities or loans where the proceeds are to be used for green projects (such as renewable energy, energy efficiency, biodiversity conservation, water management etc).

**Social bonds or loans** are debt securities or loans where the proceeds are to be used for social projects (such as affordable infrastructure, access to essential services, socioeconomic advancement etc.).

**Sustainability linked bonds or loans** are debt securities or loans which are structured to incentivise borrowers to meet agreed sustainability performance targets through pricing adjustments.

Guidelines have been developed by various loan and debt market associations in the Asia Pacific, Europe and the United States to encourage consistency in the application and classification of green and social financing arrangements.

According to BloombergNEF global sustainable debt issuances in 2021 increased to US\$1.6 trillion (from US\$760 billion in 2020). Interestingly the majority of these debt issuances comprised green bonds and sustainability linked loans, with the share of other instruments, such as social bonds and sustainability linked bonds ever increasing.

Refinitiv reports that a total of \$9.85 billion was raised in the Australian sustainable debt market in 2020, and by the end of September 2021 \$11.3 billion of sustainable debt was issued in Australia.

The obvious appetite for green and sustainable debt provides an opportunity for operators in the data centre and crypto mining industries to access debt with potentially cheaper pricing, while also furthering their green credentials.

## How can these industries take advantage of Green Financing?

There have been several examples of operators in the data storage industry implementing green financing options, which can serve as a guide for how others in these industries can access these financing options.

Companies such as AirTrunk, DCI Data Centers, Equinix, Aligned, Nabix and Digital Reality have all raised green funds in the past couple of years – both in their respective domestic and international debt capital and loan markets. For example:

- **AirTrunk** converted its existing corporate loan facility into a A\$2.1 billion sustainability linked loan in 2021;
- **Brookfield Asset Management** put in place a A\$160m green and sustainability-linked term loan to refinance its Australian and New Zealand DCI Data Centres; and
- **Digital Reality** (a leading issuer of green bonds in the data centre industry) has raised over US\$5 billion using green financing arrangements since 2015.

Both green bonds and green loans have been put in place by these entities, the proceeds of which are to be used, for example, to improve energy efficiency of their operations, invest in renewable energy, construct energy efficient facilities and better manage water use and waste.

## Conclusion

In conclusion, Australia has a tremendous amount of green capital available for a growing crypto mining and data centre market. Collocating crypto miners or data centres with energy generation assets may not only provide economic benefits, but also open the doors to green financing. In our next article “Data Centres and Crypto Mining – How to be green?” we provide an overview of the most important considerations to obtain green financing.

At Hamilton Locke, we advise across the data centre and crypto mining project life cycle as well as the energy project life cycle. Our team assists in project development, grid connection, green financing, renewable energy purchases and the construction of projects, including the selling and operating of projects.



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# Digital Power - How to Green Finance Data Centres and Crypto Miners

First published: 11 April 2022

This article is part of our Digital Power Series focusing on the deep connection between power and the digital economy. Throughout the series, we explore the opportunities that data centres and crypto miners bring to the National Electricity Market (NEM), green financing available for crypto miners, important digital security considerations for energy asset holders, the 'tokenisation' of energy related projects and relevant ESG considerations when acquiring a digital assets business.

We previously explored the opportunities for Data Centres and Crypto Miners to access green financing options. Now we turn our attention to examples of green projects which may assist crypto mining and data centre industry participants take advantage of green financing arrangements.

## 'Green' Financing Refresher

Green financing can be structured for the debt capital or loan markets. Most commonly it structured as:

- **green bonds or loans** – where the proceeds must be used for green projects; or
- **sustainability linked bonds or loans** – where borrowers are incentivised to meet agreed sustainability performance targets through pricing adjustments.

To illustrate how operators in the data storage industry can implement financing arrangements to their benefit, we provide examples we have seen in the market.

## Green Projects

Examples of data centre operators having used green financing to fund their projects include:

- improvements to **energy efficiency** of their **operations**,
- investments in **renewable energy**,
- construction of **energy efficient facilities**, and
- better **management of water use** and **waste**.

## Renewable Energy

Equinix's recent €1.1 billion green bond issue is an example of this approach. Equinix will use the proceeds of these bonds to fund green energy projects to support their data centre footprint. The interest cost of these bonds was 2.215% lower than Equinix's existing Euro-denominated notes, and Equinix were able to realise €1.1 million in savings by refinancing its existing credit line.

## Construction of Energy Efficient Facilities

Data centre and crypto mining operators can consider using green finance to construct new 'sustainable' buildings which meet one or more verified third-party standards. Green financing could also be available for retrofitting existing facilities to meet such standards. There are many standards in the market to consider, including LEED, BREEAM and NABERS. Certification under the relevant standards assists substantially to meet the requirements of green financing arrangements.

## Energy Efficient Operations

If the refurbishment or construction of an entire facility is too much, then operators can look to invest in systems that improve the energy and resource efficiency of buildings, subsystems and land. For example, green financing could be available for the installation of onsite renewable energy systems (such as solar panels or hydrogen power), energy storage systems or more energy efficient cooling systems.

## Thinking outside the box

Making these energy intensive industries more sustainable will require data centre and crypto mining operators to take new approaches. Examples of innovative thinking in the market include:

- **Microsoft's Project Natick** is exploring the benefits (and difficulties) of housing data centres underwater to increase energy efficiency;
- **BNP Paribas** relocated its data centres to Iceland where low stable temperature makes cooling more efficient (as no need for external air conditioning systems). In addition, Iceland's energy is sourced from almost 100% renewable sources;
- **Mawson** is hosting other crypto miners within their facilities to increase the energy efficiency and decrease the cost of electricity; and
- **Aligned** uses a cooling system that captures and removes heat (rather than pushing in cold air) which has the benefit of reducing water flow requirements (and associated costs).

In addition to the more usual 'green' power sources, there have been recent examples of crypto miners thinking differently when it comes to sourcing their energy, including Mawson's bio waste Power Purchase Agreement in Byron, NSW. These projects would lend themselves to green financing options in a similar vein to those made by the data centre industry.

## Green KPIs

Another avenue of 'green' financing is sustainability linked loans – where pricing benefits are linked to a company meeting certain specific KPIs.

Examples of KPIs in the data centre industry include:

- increasing consumption of energy from green sources;
- maintaining of NABERS 5-star building ratings;
- reducing carbon emissions (scope 1 and scope 2);
- aligning a company's ESG reporting efforts with global standards; and
- reducing water usage.

There have also been examples of KPIs linked to the energy

efficiency of data centres referred to as 'power usage effectiveness' (**PUE**). PUE is the ratio of energy used by the data centre divided by the energy used for computing.

It is important to note that green finance KPIs can also fall outside the traditional 'green' space. For example, KPI's such as diversity and inclusion and other social goals have also been used by data centre operators to access green financing operations.

The lack of standardisation of sustainability metrics makes it difficult to compare progress between operators. There is a push to standardise these metrics across multiple industries to assist with their adoption and progress sustainability. For example, Schneider Electric have recently proposed 23 key environmental sustainability metrics in 5 categories with respect to data centres.

## Conclusion

There is a significant opportunity for crypto mining and data centre operators to:

- take advantage of green and sustainable debt;
- gain access to debt with potentially cheaper pricing; and
- further their green credentials.

With socially responsible investors and financiers growing in number and traditional investors increasingly looking to the sustainability of their investments, crypto mining and data centre should be exploring ways to be green.

At Hamilton Locke, we advise across the data centre and crypto mining project life cycle as well as the energy project life cycle. Our team assists in project development, grid connection, green financing, renewable energy purchases and the construction of projects, including the selling and operating of projects.



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# A Crypto Grid?

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This article is part of our Digital Power Series focusing on the deep connection between power and the digital economy. Throughout the series, we explore the opportunities that data centres and crypto miners bring to the National Electricity Market (NEM), [green financing available for crypto miners](#), important digital security considerations for energy asset holders, [the 'tokenisation' of energy related projects](#) and relevant ESG considerations when acquiring a digital assets business.

## The Crypto Market

The market value of the global digital asset ecosystem is approximately AUD\$2.8 trillion with over 221 million users having engaged with cryptocurrencies or used a blockchain based application. [A report by EY and Mawson](#) predicts that digital asset adoption and deployment will increase 30 fold by 2030, adding approximately AU\$68.4 billion to the Australian economy and creating new jobs.

Despite the growing market, crypto is often scrutinised for its excessive energy consumption. As a result, crypto mining companies focus on using renewable electricity. Recently, Sydney based crypto mining companies Mawson Infrastructure and Iris Energy both successfully listed on the Nasdaq, having raised over US\$250 million much due to their strong ESG commitments. However, both companies operate predominantly in the United States with only Mawson active in Australia.

## Government Awareness

The Australian government has recognised the opportunity to become a global leader in the digital assets space. In October 2021, [the Select Senate Committee on Financial Technology and Regulatory Technology Final Report](#) recommended a 10% tax discount for companies undertaking renewable powered digital asset 'mining' and related activities in Australia.

Although the recommendation was not pursued, it opened the door for the government to create a structured plan and incentives for new energy powered crypto mining. In the meantime, Data Centres, and hence Crypto Miners, enjoy preferential treatment in the NEM under national Energy Laws.

Whilst the move to crypto is increasingly clear, the question remains: can crypto miners actually add value to the energy transition in the NEM?

## Opportunities in the NEM

We have recently written about the electricity [Duck Curve](#) and have seen an increase in daytime negative pricing intervals across the NEM. The NEM is also plagued by grid connection difficulties for electricity generation assets resulting in:

1. stranded renewable generation assets that are incapable of exporting electricity to the grid; and
2. declining investment certainty in the NEM.<sup>1</sup>

Crypto mining possesses the ability to utilise stranded capacity and provide a demand response mechanism for the notoriously volatile peak demand in the NEM.

## Can crypto miners be a demand response mechanism?

In 2019 the Australian Energy Market Commission changed the rules around demand response, incentivising large electricity customers to participate in demand response mechanisms. Few industry participants can however change their electricity demand as quickly as crypto miners.

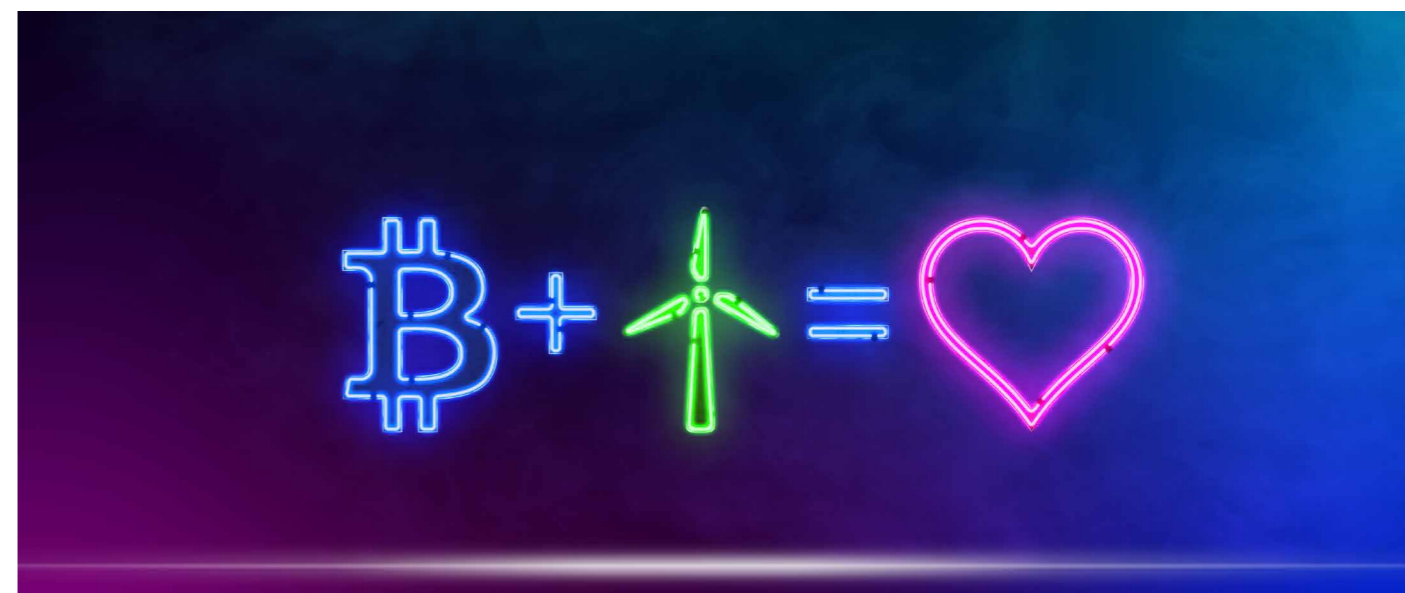
Data Centres often conduct computing processes that cannot be interrupted. Google has however started aligning flexible and non-time-sensitive computations with new energy generation but is limited by the speed at which sudden changes can be adapted to.

In contrast, crypto miners can shut off and turn on with comparatively little response time and negligible losses for stopping the mining process. This makes crypto mining a quicker, more flexible and more responsive alternative than data centres.

## Demand Response Flexibility

Emphasising the following strengths of crypto mining compared to traditional demand response will ensure crypto mining can be sustained and viewed as a viable option in the NEM:

- **Ability to manage fluctuations** - crypto miners can operate 24/7 and have the capacity to increase or decrease activity depending on whether excess power is available. This allows power system operators to fluctuate loads as required and leaves them less reliant on, say, industrial loads which only run during work hours. This leads to the next strength -
- **Consistent scalable loads** - if grid operators can be convinced that crypto mining can create reliable, and highly predictable scalable loads, they will be able to use these assets to efficiently manage peak demand and, conversely, avoid oversupply which may cause the grid to collapse.



- **Flexibility** - crypto mining typically utilises non-time-sensitive computations, partially due to the feasibility of mining for new coins. Without this time-dependence, crypto miners are able to operate more flexibly.

## Utilising Energy Generation

Instead of storing electricity, crypto mining consumes it in large quantities to power their operating functions, deterring the possibility of excess energy causing grid frequency problems and simultaneously providing an alternative revenue stream for renewable energy generators.

The NEM has multiple partially or fully developed generation assets that haven't been able to connect to the grid - unutilised generation capacity. The U.S has capitalised on bitcoin mining to utilise cheap, stranded energy and turning a profit on the way. Three projects ranging from Texas to Montana currently provide electricity to bitcoin mines for under \$0.03/kWh, substantially less than the current median price for bitcoin mines in the US. Additional mines in the Pacific Northwest and Texas are being powered by cheap New Energy respectively. [2]

Capitalising on the unutilised generation capacity in the NEM will provide New Energy developers additional revenue to support and facilitate further developments, which may increase much needed investor confidence.

## Conclusion

While crypto mining's primary function is not to expedite or enable the energy transition, its responsiveness and ability to use stranded capacity present an opportunity to support the NEM's energy transition.

We will explore the abilities of crypto miners to provide value to Virtual Power Plants in our next article.



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# Pick your Poison AEMO or Crypto Miner?

## A Crypto way to Limit NEM Market Risk

First published: 08 December 2021

We have previously identified two ways that crypto miners may assist with existing New Energy generators in the Australian National Electricity Market (NEM). A proof-of-concept project by a joint venture between Blockstream and digital payment company Block Inc now shows that crypto miners can be responsible for New Energy projects being constructed.

### From Follower to Leader

The joint venture is building a solar PV facility with a 12MWh Tesla Megapack for a 209 MW crypto mining facility. It is the first demonstration plant that shows that crypto mining facilities can fund the construction of New Energy generation assets.

In this article, we look at the challenges in Power Purchase Agreements and how crypto miners can solve them.

### PPA's in the NEM

One of the most essential parts to a development of a New Energy asset is an offtake agreement, also known as a Power Purchase Agreement (PPA). In the NEM, we differentiate between Off-Market and On-Market PPAs:

Off-Market PPAs allow for the sale of electricity without any use of the grid. Rather, the electricity is sold by a private generator to a proximate off-taker. Hence, these PPAs are dependent on electricity buyers that have a long-term lease or property rights close to the electricity generator.

On-Market PPAs regulate the sale of electricity from a generation asset through the grid and usually include the transfer of green products (e.g. Large Generation Certificates).

Off-Market PPAs are less contentious, but more difficult due to the required proximity of the off-taker. Common points of contention in On-Market PPA negotiations for New Energy assets are the risk regarding the connection agreement, economic curtailment or negative pricing.

The contentious question is, should those risks be:

Solely with the developer? or

Shared risks, and what are the associated consequences?

First, we should clarify what a connection agreement, economic curtailment or negative pricing are.

### Connection Agreement

A connection agreement is an agreement between an energy generator and AEMO and determines the capacity that a New Energy facility can export to the grid (Connection Agreement).

In the NEM, New Energy projects often face difficulties in obtaining a Connection Agreement that matches the planned capacity. For example, a wind farm project may be for 20MW but the Connection Agreement may only be for 10MW or denied completely by AEMO.

If a Connection Agreement cannot be obtained as planned, developers and PPA off-takers face a significant financial loss and projects often come to a halt.

### Economic Curtailment

AEMO may at any time curtail the amount of electricity a project can export to the grid for various reasons (e.g. frequency control, congestion etc). Such curtailments are referred to as economic curtailment (Economic Curtailment).

Unless a project contains a battery, electricity generated during Economic Curtailment is usually lost generation and may prevent the generator to meet its obligations under the PPA.

### Negative Pricing

During trading intervals where the spot price is negative, and the generator must pay for the export of the electricity to the grid is referred to as negative pricing risk (Negative Pricing).

Again, if a project does not have a battery a generator will lose revenue during Negative Pricing intervals.

### CRYPTO MINERS -NEM How can crypto miners help?

In essence, the above risks all concern situations during which electricity is generated but no cash can be obtained it. Crypto miners can turn electricity into immediate cashflow, with the cash price for the generated electricity only being dependent on the price of the digital currency. This price may be volatile, however, not as volatile as the NEM Spot Price.

### Conclusion

In conclusion, Crypto mining can generate revenue for the New Energy asset without any dependency on AEMO or the market. This means the New Energy developers can start the construction of a New Energy facility without bearing the traditional risks associated with Negative Pricing, Economic Curtailment or obtaining a Connection Agreement.

Taking it a step further, developers can, to a degree, quantify the market risk by the capital and operational expenditure of the crypto miners.

With their potential to change the responsibility matrix in PPA negotiations and reduce the complexities for both off-takers and PPA providers, crypto miners pioneer an innovative way forward for the future of New Energy.



### Navigating through NEM risks

At Hamilton Locke, we help clients navigate through the energy and crypto mining project life cycle – from project development, grid connection, financing and construction, including the buying and selling of development and operating projects.

To discuss innovative approaches to NEM risk allocation for your energy or a crypto mining development send Matt Baumgurtel or Cedric Von Duering a message and we will set up a call with you.



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# Digital Power – Experts Insights with Guy Dickinson from BetaCarbon

First published: 11 April 2022

This article is part of our Digital Power Series focusing on the deep connection between power and the digital economy. Throughout the series, we explore [the opportunities that data centres and crypto miners bring to the National Electricity Market \(NEM\)](#), [green financing available for crypto miners](#), important digital security considerations for energy asset holders, [the ‘tokenisation’ of energy related projects](#) and [relevant ESG considerations when acquiring a digital assets business](#).

The Fold Legal sat down with Guy Dickinson, co-founder of BetaCarbon to learn more about how BetaCarbon is changing the carbon market in Australia.

## What is BetaCarbon?

BetaCarbon was established in 2021 to provide everyone in Australia with the opportunity to respond to their call to action on greenhouse gas outputs. It does this by providing businesses and consumers a new choice in how they manage their carbon liability.

## Why did you start BetaCarbon?

The Australian carbon market is extremely inaccessible. To access the market, you need to open a registry account with the Clean Energy Regulator. This is a long, arduous and expensive process. Currently, there are less than 60 traders in the Australian carbon market. Greater access means more demand, more demand means more green projects.

BetaCarbon’s mission is to democratise the carbon market and open it to businesses of all sizes and everyday consumers.

By involving everyday Australians and businesses in the carbon market, more environmental projects are created, generating more carbon credits. It’s a virtuous circle which connects farmers with carbon credits and carbon markets with consumers via BetaCarbon. Adopting this model, everyone’s a winner. Everyone earns value. Starting with the planet. We call this the BetaCarbon Butterfly Effect – a series of small changes collectively produce wholesale changes. We are jump starting Australia’s efforts to produce more green energy and capture carbon, which is key to working towards net zero.

## How does BetaCarbon provide consumers with access to carbon credits?

To provide anyone and everyone with access to the carbon market, BetaCarbon has designed a cryptocurrency token called the BetaCarbon token (BCAU). BetaCarbon issues 1,000 BCAU for every Australian carbon credit unit it holds in an account with the Clean Energy Regulator. The beauty of the BCAU is it enables customers to get investment exposure

to carbon credits without needing to hold an account with the Clean Energy Regulator. The price of the BCAU will vary based on supply and demand for the token. The BCAU does not entitle the tokenholder to any carbon credit (or fraction of a carbon credit), but because BetaCarbon must hold carbon credits to issue BCAUs, it influences the market. Customers can purchase a BCAU, which in turns drives demand for carbon credits and consequently green projects. It can also be held for investment purposes like many other cryptocurrencies.

## What role does crypto play in BetaCarbon?

BetaCarbon uses the BCAU to provide consumers non-traditional investment opportunities relating to carbon credits, which would ordinarily require an account with the Clean Energy Regulator, via cryptocurrency rails. While cryptocurrency is core to BetaCarbon’s offering, we view the BCAU as more of a digital asset.

The BCAU is built on the Ethereum blockchain using smart contracts and can presently be traded on UniSwap (which is a decentralised cryptocurrency exchange) and can be purchased directly from us for OTC transactions over \$10,000.

## What are the benefits of the token?

Given that we are purchasing carbon credits, we are taking carbon out of circulation, meaning we are forcing the creation of new carbon offsetting projects for new carbon credits to be generated. Everyday consumers are driving this simply by purchasing our token.

When someone owns a carbon credit, for example, let’s say it’s a big polluter who owns a carbon credit, they use that carbon credit to offset themselves. Now, if the tokenholder owns the BetaCarbon token, we’ve taken that right to pollute out of the general market of the polluters, which means we’ve actually stopped that ton of pollution being re-released into the environment. We think this is pretty important when you consider that a lot of the offset schemes will plant a tree today that actually won’t start taking any carbon out of the environment for up to five years. So we think it’s a much better output for the environment to take that potential ton of carbon pollution out of the market today and force the creation of new carbon credits to meet demand.

## What can a customer do with a BCAU?

The BetaCarbon token is a way to participate in the new energy movement. When a customer purchases a BCAU, they enter into a tokenholder agreement with us. That agreement requires us to hold sufficient Australian carbon credit units for all BCAUs minted.

We hold the Australian carbon credit unit in our account on

the National Register of Emissions Units. Each Australian carbon credit represents 1 tonne of carbon dioxide equivalent (tCO<sub>2</sub>-e) stored or avoided by a project certified by the Clean Energy Regulator.

We are exploring different ways for tokenholders to access the benefit of the tCO<sub>2</sub>-e represented by the Australian carbon credit unit. Watch this space – we are looking to launch some new products and features later this year! One of them is the retirement token.

Customers can also hold on to the BCAU like any other crypto asset. Customers may retain BCAU because they anticipate the price for the token will increase over time as demand for the token and access to carbon credits increases. Customers may purchase BCAU today and hold it to access in the future. We have seen a stark jump in the price of carbon credits – the price has increased 150% in the last 5 months. We have created a mechanism where customers can buy carbon at today’s price and access it in the future when prices may be higher.

## Crypto is complex and new. how did you navigate this?

Putting crypto to the side, what we are doing at BetaCarbon is an Australian first, so trying to create and launch a product that has never existed before has its own level of complexity – our product straddled both energy, financial services and tax regulation. Adding cryptocurrency into the mix meant a whole lot of new learning for me and my co-founders. We took a back-to-basics approach, learning the ins and outs of digital currency and surrounding ourselves with the people that had the technical knowledge to execute. We found it much easier to hire motivated experts to join our team, as BetaCarbon is a purpose driven company and these experts genuinely believe in BetaCarbon’s mission.

## What experts did you access and when?

The BetaCarbon team has deep background in commodity trading and markets and understand the operation of carbon markets in Australia and abroad. However, in designing our BCAU, we drew heavily on regulatory and energy consultants, technology and cryptocurrency experts as well as lawyers who understood the intersection between cryptocurrency, financial services, tax and energy. There are very few experts that can do everything – you need to surround yourself with the best in each field and make sure everyone is on the same page. We engaged the experts at concept phase and throughout to ensure that the token was fit for purpose and complied with all the regulatory requirements.

## There is a lot of criticism generally about energy consumption in the crypto industry. How did you balance this with your corporate purpose? What measures did you put in place to manage your carbon footprint?

Our very purpose is to allow mass participation in carbon capture, carbon reduction and avoidance. We have taken steps to ensure that our internal policies don’t differ from our

purpose. We acknowledge that today we are climate positive and have offset our carbon liability by using carbon credits. Like many small businesses, we are willing and trying to make a difference for the planet and have taken the Climate Pledge to be carbon negative.

We have a three-step process for achieving carbon neutrality:

1. Measure Emissions - Use calculation tools to measure
2. Reduce - Identify the areas for reductions in carbon output
3. Offset - Use the BetaCarbon product to purchase and offset emissions

## How do you see the growth of the new energy sector in Australia and what would you like to see in the next 12 months?

New energy is the only future in Australia, and with each passing year we see major new developments in the industry. It is fantastic to see great innovation and initiative in the space, particularly the rapid technological development over the past 12 months. Over the next 12 months, we would really like to see some rapid developments in both clean energy storage and transportation as this will really pave the way forward in the industry.

## What future plans do you have for BetaCarbon?

We are still in our early stages, so we have plenty of future plans. One of our most immediate plans is to launch our own exchange in the near future which will allow customers to set-up an account, use our cryptocurrency wallets and purchase our token. We are also planning the launch and release of our retirement options, which will allow wholesale investors to convert 1000 BCAU for 1 retirement token, allowing us to retire the carbon credit on their behalf and pass on a certificate of retirement that they can use for tax purposes.

At Hamilton Locke, we advise across the data centre and crypto mining project life cycle as well as the energy project life cycle. The Fold Legal is the national leader in all matters crypto and law. Together we assist energy companies to become a leader in the New Energy Crypto age.



**Guy Dickinson**  
Founder and CEO – BetaCarbon



# Digital Power – Powering Greener Pastures, Can Crypto Help? Energy Crypto Part I

First published: 24 March 2022

## Part 1 – Crypto going green

This is part of our Digital Power Series focusing on the deep connection between power and the digital economy. Throughout the series, we explore: the opportunities that crypto miners and data centres bring to the National Electricity Market; digital security considerations in energy; the ‘tokenisation’ of energy related projects; and relevant ESG considerations when acquiring a digital assets business.

In this Part I, we explore the intersection between cryptocurrency and New Energy. In Part II, we will examine the key factors and measures that you should consider before launching a crypto project in the New Energy sector.

### Cryptocurrency and green energy

Mounting international pressure on businesses of all sizes to focus on their ESG efforts and plan for a net zero/ carbon neutral future is leading to an increased focus and demand for:

- Access to green energy;
- Supply of carbon offsets;
- Funding and implementation of green energy projects;
- Consumer access to green investments;
- Widely available energy markets; and
- Global standards for green energy certification.

We are also seeing the rapid expansion and uptake of cryptocurrency and the development and implementation of Web 3.0. These two industries are rapidly growing and will be significant industry sectors in the future. For instance, EY released a report with Mawson in December 2021 titled “Cryptocurrency and the distributed digital economy”, which predicted that cryptocurrency and digital asset deployment and adoption would see a 30x growth by 2030, adding \$68.4 billion to the economy and creating 206,000 new jobs.

To date, the crypto industry has copped a lot of criticism about the environmental impacts of cryptocurrency mining, particularly given the energy drain and green power supply issues. However, we are seeing a growing interest in the role cryptocurrency can play in the New Energy sector by combining miners with renewables and storage projects. This could result in significant returns for project investors and developers by allowing behind the meter use of otherwise curtailed solar and wind power, thus moving more solar and wind projects into profitable territory. From a grid perspective, this would also allow the seemingly unlimited appetite of crypto miners to eat whatever remains of the solar duck curve’s belly.

We are already being asked, “how can we tokenise our project”? But first the basics... what is cryptocurrency?

## Crypto 101

Cryptocurrency is a digital store of value that exists on a blockchain. A blockchain is a decentralised, immutable and infinite ledger that records data in blocks, links those blocks on a chain and shares the blocks across a network of computers. All the data on a blockchain is encrypted with cryptography. No central authority or counterparty can control or change a transaction, blockchain or the network – meaning they are final and cannot be modified once created. All transactions on a blockchain are effected by smart contracts. A smart contract is computer code that automatically executes a transaction in accordance with pre-defined parameters. Importantly, smart contracts are not legal contracts.

There are thousands of tokens available in the market now. Tokens can generally be grouped into the following four categories:

Token Type	Token Type
Commodity token	This is a token backed by a physical asset that has value (e.g. currency, gold, index or oil). Tokens backed by a currency are commonly referred to as “stable coins”.
Utility token	This token is native to a decentralised protocol that has a designated use in the protocol such as providing access to a service or product.
Security token	Security tokens provide tokenholders with ownership rights in a company similar to a share. These tokens are also referred to as “Initial Coin Offerings”.
Non-fungible token (NFT)	An NFT is a cryptographic asset on a blockchain with a unique identification code and metadata that distinguishes it from other tokens. These tokens are non-fungible meaning they cannot be traded or exchanged for each other. NFTs can only be purchased for value. There are different types of NFTs. An NFT can be an original work, provide ownership rights to some other work or simply record existing ownership rights to something i.e. a digital certificate.

Now we know what crypto is... next we need to look at how it is currently regulated in Australia.

### How is Cryptocurrency regulated in Australia?

In Australia, cryptocurrency is treated as a commodity (much like gold). Therefore, the exchange of cryptocurrency to fiat currency, fiat currency to cryptocurrency or cryptocurrency to cryptocurrency is not regulated as a foreign exchange contract (like the exchange of AUD to USD).

Cryptocurrency is not considered to be “money” in Australia. Bitcoin is the most widely used cryptocurrency at present and the Reserve Bank of Australia is of the view that Bitcoin is not

money. While Bitcoin may be used to make payments, its current use is limited and it does not display all the key characteristics of money.<sup>1</sup> This may change as cryptocurrency shifts from being a commodity accruing value to a widely accepted method of payment and as more countries (e.g. El Salvador) designate Bitcoin (or other tokens) as a legal tender.

Given the broad structure and use cases for cryptocurrency, a token may instead fall into another type of regulated financial product depending on how it is structured or used. In Australia, cryptocurrency is most likely to be regulated as a security, managed investment scheme or a derivative (but depending on the design it may be another type). The Australian Securities and Investments Commission (ASIC), Australia’s financial service regulator, has recently updated its guidance in [INFO 225: Crypto assets](#), which provides some high level guidance on the regulation of cryptocurrency.

### Is your token a financial product?

If your token is a financial product, then you will need to work out whether:

- you require an Australian financial services licence;
- any disclosure obligations apply;
- the client money rules apply; and
- any other conduct or compliance obligations apply.

If your token is not a financial product, then you will need to ensure that you comply with, at a minimum:

- the legal requirements under the Anti-Money Laundering and Counter-Terrorism Act 2006 (Cth). Any person that facilitates the exchange of fiat currency for cryptocurrency or vice versa must be enrolled and registered as a Digital Currency Exchange with the Australian Transaction Reports and Analysis Centre (AUSTRAC) and comply with a range of compliance obligations;
- the privacy requirements under the Privacy Act 1988 (Cth), including the Australian Privacy Principles. This usually requires you to have a privacy policy and collection statement that meets all the regulatory requirements; and
- the Australia Consumer Laws relating to unfair contract terms, customer guarantees and misleading and deceptive conduct.

It is likely that your business will already have measures in place to comply with privacy and Australian Consumer Laws. If this is the case, it is critical that your current arrangements are updated to cater for any token or blockchain use.

### Change is in the wind...

The [Select Senate Committee on Financial Technology and Regulatory Technology Final Report](#) was released in October 2021 following an inquiry into the regulation of cryptocurrency (as well as a number of other matters). The Committee made twelve recommendations for the future of cryptocurrency, including:

- Recommendation 1: Establish a markets licence for Digital Currency Exchanges (DCE), which will result in DCEs holding a markets licence similar to securities and derivatives exchanges (e.g. ASX);
- Recommendation 2: Establish custody or depository regime to be managed under the Treasury portfolio;
- Recommendation 3: Treasury and regulators to conduct a token mapping exercise;
- Recommendation 4: Establish a new Decentralised Autonomous Organisation (DAO) company structure; and
- Recommendation 7: Implementation of a company tax discount of 10% if Digital Currency miners source their own renewable energy.

The Government released its [response](#) in December 2021, agreeing with or noting all 12 recommendations, except for Recommendation 7 which it does not consider a current policy priority. Work is underway and Treasury is spearheading the charge. Much turns on the upcoming election, but the regulatory regime for cryptocurrency is likely to change in the near future if Australia wants to be a country of choice for cryptocurrency. The change process is already underway with Treasury having recently released a Consultation Paper on Crypto asset secondary service providers: Licensing and custody requirements (March 2022). This is important to bear in mind when thinking about tokenising your green project or otherwise harnessing the power of cryptocurrency or blockchain.

In Part II we will be taking a deeper dive to what you will need to consider before launching a crypto product in the New Energy sector.

At Hamilton Locke, we advise across the data centre and crypto mining project life cycle as well as the energy project life cycle. The Fold Legal is the national leader in all matters crypto and law. Together we assist energy companies to become a leader in the New Energy Crypto age.



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# Digital Power – How to Tokenise Your New Energy Project – Energy Crypto Part II

First published: 24 March 2022

This is part of our Digital Power Series focusing on the deep connection between power and the digital economy. Throughout the series, we explore: the opportunities that cryptocurrency (or “crypto”) miners and data centres bring to the National Electricity Market; digital security considerations in energy; the ‘tokenisation’ of energy related projects; and relevant ESG considerations when acquiring a digital assets business.

In [Part I](#), we explored the intersection between cryptocurrency and New Energy. In this Part II, we examine the key factors that you should consider before launching a crypto project in the New Energy sector.

## What factors should you consider?

Before you launch your New Energy project on the blockchain, you need to first work out your objective - why do you want to tokenise your project or use the blockchain.

This may seem like a simple question. But, in our experience, businesses often do not spend enough time on this upfront. It can be difficult to pinpoint why you want to use a token or the blockchain for your project. However, the following questions can help you narrow this:

- Will you need a token as an essential component of the project?
- What token standard will you use (e.g. ERC-20, ERC 721 or ERC 777)?
- What blockchain will you use (e.g. Ethereum)?
- Will the token provide any rights?
- If so, what are these rights? Will the token provide any ownership, licensing, voting, distribution or other rights?
- Do you want the token to be tradeable on any cryptocurrency exchange?
- Will the token be used to reward customers?
- Will the token be used to make donations?
- Will the token be used to fund business activities?
- Will the token be used to invest in green projects?
- Will the token be used as a form of payment for your services or other services?
- Can the token be used as collateral for lending protocols?
- Can the token be staked on decentralised protocols?

In answering these questions, you should identify what are your “must haves” and “nice to haves” as this will drive the design of any token solution and what is possible from a legal and regulatory point of view. Also, it is possible that there may be other features or functionality that you will need to consider for your project. The above list is not exhaustive but is a great starting point.

Once you have answered these questions, you will have a better understanding of your commercial objectives and key drivers. It will also help you determine whether the token and blockchain will meaningfully achieve your objectives or simply add unnecessary complexity.

## Partnering with advisers

Once you have settled on your objectives, the next step is to make sure you get sound legal advice. Given the complexity and uncertainty surrounding cryptocurrency, it is important that you have a clear understanding of whether your token will be regulated and, if so, how. This will help inform the design of your token and your legal arrangements. In addition, there may be alternate structures available to you to combat regulatory challenges. Make sure you work with lawyers that have a sound understanding of cryptocurrency and its regulation. It may require expertise across technology, intellectual property, financial services and tax.

The final step is then implementing your solution from a legal perspective. This may require a tokenholder agreement, whitepaper, regulatory and licensing arrangements and other marketing collateral. It is important to remember that a token is not typically a quick-to-market solution and requires significant time investment to get right.

## The ESG cost of cryptocurrency

Given the computer power and significant energy consumption required to operate a blockchain, there has been much talk about the ESG impacts of blockchain.

If you are proposing to use tokens or the blockchain for your green project, you should consider the energy and environmental impacts of using this technology. This is because you do not want to undermine your green project simply because you have utilised the blockchain. There are a number of solutions that you can deploy to reduce or offset any environmental impact and the technology powering the different blockchain solutions can lead to better sustainability outcomes. Make sure you consider this as part of your due diligence process. If you are unsure, make sure you tap into the relevant experts.

## Just remember...

The cryptocurrency industry is rapidly growing and expanding into new markets like New Energy. With that, there is a lot of hype and opportunity. However, it is important that you follow a robust legal due diligence

process before you launch any token or blockchain technology.

At Hamilton Locke, we advise across the data centre and crypto mining project life cycle as well as the energy project life cycle. The Fold Legal is the national leader in all matters crypto and law. Together we assist energy companies to become a leader in the New Energy Crypto age.



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