

3 February 2023

National Reconstruction Fund Taskforce

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## **re: Stone & Chalk Group National Reconstruction Fund Submission**

### **1. Introduction**

Thank you for providing us with an opportunity to comment on the Australian Government's consultation for the National Reconstruction Fund (NRF), led by the Department of Industry, Science & Resources (DISR).

#### **1.1 About Stone & Chalk Group**

As the largest innovation community in Australia, our mission at the Stone & Chalk Group is to transform Australia into a sustainable tech-driven economy.

There are opportunities presented by emerging technologies and it will be important to ensure that we have a sustainable local technology industry in Australia. With a strong innovation ecosystem, this will in turn lead to more job opportunities and enable Australian businesses to become more globally competitive in the long term. This can be realistically achieved if we have an entrepreneurial pathway for accelerators and a more curated innovation ecosystem.

To support this, we need to have access to a sustainable pipeline of talent and skills to meet the demands of the emerging high-tech industries. We also need to ensure that we are a globally competitive environment for investment into the research community, as well as in startups and scaleups, from their early research and development phases through to commercialisation.

As part of this framework, Stone & Chalk Group has played a catalytic role in enabling the growth of startups and scaleups across Australia. Our initial focus began in fintech, where we helped facilitate the growth of that ecosystem, seeing the emergence of iconic fintech players.

More recently, we have been growing a more holistic emerging technology ecosystem including: cyber security, web3, artificial intelligence, quantum, proptech, climate-tech, medtech, agtech, and other scaling businesses with novel products and global ambitions. Further information about Stone & Chalk can be found here: <https://www.stoneandchalk.com.au/resources/>

As part of this growth, AustCyber merged with Stone & Chalk Group in February 2021, consistent with the previous Australian Government's request for Industry Growth Centres to establish a pathway to be financially sustainable. This merger affirms our confidence in the next phase of the evolution of the Australian cyber security sector. Since that time, AustCyber continues to undertake important initiatives to help grow the sector in Australia.

## **1.2 General comments**

As part of the 2022-23 Federal Budget in October 2022, we welcomed the Australian Government's announced measures contributing to the growth and future of our Australian economy. This included the establishment of the Government's \$15 billion National Reconstruction Fund (NRF), which we consider will support, diversify and play an essential role in transforming our economy through targeted co-investment support for Australian Industry.

As the Government progresses its consultation and develops further details on the NRF, we look forward to working closely with the Government to ensure that the Fund can help drive growth in Australia's emerging tech industry.

If co-designed well with key stakeholders, the NRF could address key barriers that inhibit the growth and sustainability of industries, especially in the emerging tech and innovation space. There is an opportunity for the Government to lean into the emerging tech startup and scaleup community that are critical to the future of our economy to help it deliver on its commitments.

Generally, there should be a national focus and long-term vision for a sustainable tech-driven economy, which is critical to our future global competitiveness. A strong national innovation ecosystem will lead to more job opportunities that contribute to our economy and well-being and enable Australian businesses to become more globally competitive in the long term.

With Australia's overall ranking of 25th (out of 132 countries) in the Global Innovation Index (GII) 2022, there is much room for improvement on Australia's innovation performance to be competitive amongst its international peers.<sup>1</sup> This requires increased economic complexity, driven by the creation of new products and services, diversification of industries, and enabled through a tech driven economy, leading to increased economic growth and development. This is becoming a more pressing issue as Australia's innovation performance has declined and remained at this level over the last several years.

Specifically, to the NRF, there is an opportunity for the Government to develop a more ambitious innovation agenda, where the NRF could form a critical function, such as providing direct public investment in innovation ecosystem builders to support the development of an inclusive innovation career path for all Australians. We would welcome government assistance directed towards experts that can enable this, avoiding the Government having to pick winners.

This is an area that could help to improve our GII 2022 ranking in investment, with Australia ranking 28th on finance for startups and scaleups, and 31st on venture capital received (value, % GDP).

For the remainder of this submission, our responses are focused on the key questions raised in the Consultation Paper.

## **2. Investment in industry development and innovation**

We consider that the type of investments that the NRF should be focused on supporting industry development and innovation. Value-add, growth and diversification opportunities could also be effectively delivered through a strong innovation ecosystem.

Our response is therefore relevant to the following three questions raised in the Consultation Paper:

- *What types of projects or investments should the Government direct the NRF to focus on, or not invest in, within each of the seven priority areas to achieve the NRF's purpose?*
- *How can the NRF help build or encourage stronger pathways for Australian developed innovation and research, and encourage additional private investment in priority areas?*
- *What are the opportunities for value-add, growth and diversification in each of the priority areas?*

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<sup>1</sup> [https://www.wipo.int/pressroom/en/articles/2022/article\\_0011.html](https://www.wipo.int/pressroom/en/articles/2022/article_0011.html).

## **2.1 Seeding industry development**

Research translation and commercialisation of early-stage IP will require early stage investment and investment in growth platforms. These are critical to the provision of mechanisms which increase the pool of new companies that will grow into those eligible for later stage NRF funding. NRF could play a key role in seeding industry development.

## **2.2 Investment in innovation ecosystem builders**

It is important that the government empowers innovation ecosystem builder experts with the ability to properly design and create the right environment for industry development. Unfortunately, there have been examples where emerging tech investments have been prioritised over others, creating a scenario where government funded programs are inadvertently “picking winners”. As a result, others are losing out. This outcome unintentionally creates an artificial dichotomy between emerging technologies, where they should instead really be given equal opportunity to dynamically cross-pollinate and produce innovative solutions.

For example, AI and quantum technologies have featured in cyber security solutions through diversity of ideas. Cyber security should be a foundation for many of our emerging tech startups and scaleups to give them a competitive advantage. If venture capitalists struggle in picking winners, it would be difficult to expect government programs to be any different. Caution therefore needs to be given against prioritising between emerging technology investments, especially with respect to the NRF.

As a not-for-profit, our core business is to create an ecosystem for helping startups to build their businesses, from pre-startup all the way through to enterprise, giving them access to capital, infrastructure and guidance. In the course of their journey, we provide Founders and their businesses with guardrails to enable them to scale. By our intended design, we offer a genuine holistic entrepreneurial career pathway for accelerators and a more curated innovation ecosystem. This is our approach to addressing disconnected innovation programs.

This is the challenge for many well-intended publicly funded innovation and acceleration programs. They are created as point-in-time programs with a specified duration period, but do not offer any direction or connection beyond the life of the expiry period for that program.

Applicants that enter the program are then left to their own devices after the end of the program. Without proper integration into an innovation ecosystem, applicants have an increased chance of failure and therefore are less likely to become sustainable beyond the program. This then raises questions about the value for these publicly funded programs.

To enable greater access to our innovation community, we are currently in discussions with various government agencies and private sector entities for their support to expand our national footprint across Australia, as well as global footprint. If well-designed, this not only enables greater access to our innovation community, but there will also be wider community benefits in providing easier access for those in currently under-served regional areas and socio-demographic groups. Federal Government assistance in improving wider community access to innovation, delivered through the NRF, would be more than welcome.

With improvements in strengthening our innovation ecosystem, Australia has the chance to become more globally competitive, driven by a more innovative economy. These may also help to target some of our weaker innovation indicators highlighted in the GII 2022 such as in entrepreneurship policies and culture (ranked 37th), and state of cluster development and depth (ranked 36th).<sup>2</sup>

### **3. Further clarification on priority areas**

The Consultation Paper raises the following questions: *How much detail should be provided on each of the priority areas? How should greater detail and the need for flexibility be balanced?*

While the list of enabling capabilities across engineering, data science and software development may be non-exhaustive, there should be wider recognition of a greater range of emerging technologies and industries in the NRF list of priority areas. This will be important, especially if we wish to develop sovereign capability for leading edge technologies and the future of the digitally enabled economy in Australia.

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<sup>2</sup> [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_2000\\_2022/au.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_2000_2022/au.pdf).

### 3.1 Cyber security

Consider the case of cyber security. In the most pressing time of our nation's cyber security history, with a cyber-attack occurring every two minutes (and expected to double by 2027),<sup>3</sup> we are facing a critical time to grow Australia's cyber security industry and protect our wider economy. A sustainable cyber security sector will be a critical enabler to strengthening our emerging tech and wider industry. Cyber security should therefore be explicitly identified as a priority and given more prominence, which also has enabling capabilities across all investments.

### 3.2 Critical technologies

We would welcome clarification on whether "critical technologies" are defined in accordance with the Government's 2021 list of critical technologies in the national interest. We note that this is subject to being updated following the 2022 update consultation: <https://consult.industry.gov.au/critical-technologies-2022>.

### 3.3 Space industry

"Defence capability" is a priority area that could cover a range of emerging technologies. For example, the Space industry would be an area of interest to Defence, as well as a range of other enabling technologies. There is also a potential range of civilian applications that may also have dual use value to military applications. At a minimum where enabling capability is not explicitly identified, it should also be considered in the defence context such as Space.

## 4. Government policy priorities and complementary activities

The Consultation Paper raises the following questions which we have considered together with respect to government policy priorities and complementary activities:

- *How could the NRF consider Government policy priorities in performing its investment function?*
- *What are the non-financial barriers preventing businesses from making the most of opportunities for value-add, growth and diversification in the priority areas?*
- *Are there non-financial mechanisms that could support priority areas and the objectives of the NRF?*

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<sup>3</sup> According to AustCyber 2022 Sector Competitiveness Plan (SCP), <https://www.austcyber.com/resources/sector-competitiveness-plan>.

- *How could the NRF work alongside other complementary reforms to best deliver on the Government's policy priorities?*
- *To what extent are other levers required to support the objectives of the NRF (for example, skills, trade, supply chains)?*
- *How does the NRF, with other private and Government settings, drive the right ecosystems for sustainable industry growth?*

While we do not suggest delay in implementing the NRF, it would be a useful exercise for the Government to identify policy priorities around innovation and how the NRF can contribute to a wider and more ambitious innovation agenda.

For example, the Government could conduct a more holistic review of our innovation ecosystem where the NRF could be a solution, as an investment function to address identified barriers to our innovation performance. This could form part of the development of a national innovation strategy, bringing together various initiatives and working in close collaboration with key stakeholders across government agencies, Australian jurisdictions and innovation ecosystem builders. Not limited to coordination or integration of initiatives, the strategy should also properly define the problem statement and objectives, develop programs that address the problems and objectives, develop proper measures of success, and properly identify stakeholders that will be required to implement government programs and properly fund these stakeholders.

We suggest key foundational areas that should be explored include access to talent through migration, education, skills and training; cyber security through more cyber secure and resilient businesses; industry development through procurement and trade; innovation through incentives and infrastructure; and areas of shared value such as environmental sustainability, and diversity and inclusion.

Specific areas that could be more immediately addressed include developing a more sophisticated investor definition and providing tax incentives for early-stage investors. It would also be practically useful if the Government could map how the NRF sits alongside other funding pools and mechanisms that support industry growth.

We are happy to work through with the Government on more specific solutions that can address pain points that impact our innovation community.

## 5. Investment barriers

The Consultation Paper raises the following questions regarding investment barriers that we have considered together:

- *What are the gaps in or barriers to private sector investment in each of the priority areas?*
- *What are the mechanisms and types of finance which will best attract co-investment from the private sector? How can the NRF best crowd-in investment?*

In our experience with startups and scaleups in the emerging tech industry in Australia:

- Risk capital: This plays an important role in supporting critical emerging technology areas. Currently, emerging tech industries do not have sufficient early stage risk capital (e.g., Space industry), with risk capital concentrated in areas such as fintech.
- Market conditions: There has been a significant pull back in angel investor and early stage investment.
- Equity of access: 2% of capital are raised by female founders, and most angel investment is concentrated in metropolitan cities.<sup>4</sup>
- Capital terms: Exit periods and other conditions can kill later stage companies.
- Time to obtain capital can kill companies. It would therefore be valuable to introduce a streamlined investment process.
- Many teams in enabling capabilities clusters will be pre-revenue or below \$5m in revenue. Consideration needs to be given in how this would work with other funding models.

Addressing the above areas through the NRF could greatly contribute to improving Australia's current innovation performance related to investment. According to the latest Global Innovation Index 2022, Australia is currently ranked 28th on finance for startups and scaleups, and 31st on venture capital received (value, % GDP). There is much room for improvement on Australia's innovation performance to be competitive amongst its international peers.<sup>5</sup>

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<sup>4</sup> Cut Through Ventures, "Australian Startup Funding: 1H2022 Check-in" (July 2022); "The State of Australian Startup Funding 2021" (March 2022), <https://cutthroughventure.com/>.

<sup>5</sup> [https://www.wipo.int/pressroom/en/articles/2022/article\\_0011.html](https://www.wipo.int/pressroom/en/articles/2022/article_0011.html).





As this consultation progresses on the NRF, we would welcome the opportunity to work closely with the Australian Government.

Should you have any questions, please contact our Head of Government Relations & Policy Advocacy, Charles Hoang at [charles.hoang@stoneandchalk.com.au](mailto:charles.hoang@stoneandchalk.com.au).

Yours sincerely

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