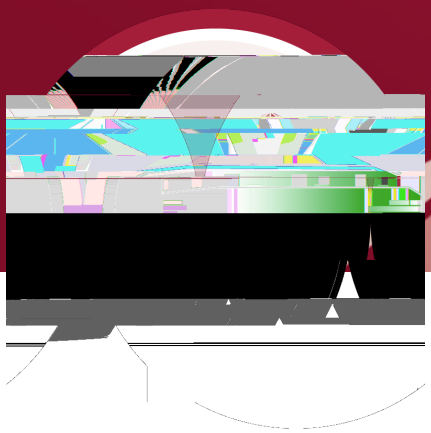

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improvement within the Five Eyes alliance (Murphy et. al 2024) via these key considerations. The following section details these considerations and what they mean for the Five Eyes.

The project has prioritized analyzing the resilience against climate change provided by quantum technology with a variety of applications that would improve a state's ability to be climate conscious. Quantum sensors have been proposed as a method of reducing

Quantum is a complex issue with both economic and defence considerations at the forefront.

The third recommendation made in this project is increasing communication within the Kn{j J~jx fsi |nym ymjnw fi{jwxfwnjx wjxujhyn{jq~3 Hzwwjsyq~1 httujwfyn{j jxtwyx gjy|jjs fqq ă{j tk ymj J~jx ts vzfsyzr fwj kj| fsi kfw gjy|jjs3 \mnqj ymjwj j}nxyx htqqfgtwfynts |nymns xjufwfyj fqqnfshjx1 ymjxj jxtwyx qjf{j tzy tsj tw r twj tk ymj J~jx-Pzsl fsi Kfsh~ 2021; Government of Canada 2023; Commonwealth of Australia 2023; NQTP 2013; The White House 2022; Ministry of Business, Innovation, and Employment 2023). Perhaps the best example of this is New Zealand's position within the alliance. Despite being located in a key geographic region relative to Australia, New Zealand's collaboration with the Five Eyes outside of bilateral and trilateral agreements is limited (Dodd-Walls Centre 2022; New Zealand Government 2023a; New Zealand Government 2023b). While other members of the Five Eyes strive for increased cooperation, there has yet to be a clear consensus on how the Five Eyes alliance as a whole should approach quantum. Without clear communication and collaboration within the alliance, adversaries have an increased chance of pulling ahead in quantum. To further discourage adversary leadership in quantum, it is vital to maintain clear and open communications with these adversaries. Communication and cooperation, even if limited in nature, ensures that there is a clear understanding of an adversary's developmental

to shift, potentially impacting individuals across the globe. The intricacies of quantum yjhmstqtl~ńx jẍjhy ts ymj kwflnqj sfyzwj tk ymj js{nwts r jsy fsi hqnr fyj hmfslj rzxy gj at the forefront of any innovative decisions henceforth. The potential consequences of quantum development on the environment have yet to be fully explored and to ignore the jẍjhy ymfy ymjxj htsxjvzjshjx htzqi mf{j ts fs fqwjfi~ ijqnhfyj uqfsjy nx yt nlstwj ymj essential human security of all who live on it. The considerations presented will directly impact the usages for future quantum technologies and paying attention to the goals for its

To aid in the secure development of quantum technology, this project has outlined four uwnr fw~ wjhtr r jsifyntsx3 Knwxy1 ymj fzymtwx wjhtr r jsi ymfy ymj js{nwts r jsyfq gjsjăyx tk vzfsyzr yjhmstqtl~ gj j}uqtwji fsi yfpjs fi{fsyflj tk3 Ymjxj gjsjăyx1 xzhm fx r twj accurate and time-sensitive sensors, can be harnessed to counter ongoing climate challenges. Second, the project recommends increased public-private partnerships to ensure the secure development and exchange of quantum technologies produced domestically, with particular emphasis placed on domestic workforce development. Third, we recommend increasing hqjfw fsi tujs htr r zsnhfyntsgjy|jjs ymj Kn{j J~jx ts vzfsyzr ij{jqtur jsy jẍtwyx1 fx well as the establishment of a clear consensus on how the alliance should approach quantum. In addition, the project recommends that some communication with traditional adversaries, xzhm fx Hmnsf1 gj jxyfgqnxmji fsi r fnsyfnsji yt jsxzwj fhhzwfyj fsi htsywtqqji Ąt|x tk information regarding the competitive nature of quantum development. Finally, this paper wjhtr r jsix ymfy ymj Kn{j J~jx jslflj ns ăjqi2wjfi~ otnsy j}jwhnxjx3 Ymj htqqfgtwfyn{j

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