# InvestEU Scoreboard (to be published after the signature of the operation)<sup>1</sup>

### Presentation of the financing or investment operation:

Implementing Partner: Invest-NL

Name of the Operation: QuiX Quantum B.V.

Type of approval:

V Individual financing or investment operation or

□ Framework Operation

Name of the final recipient (for direct operations): QuiX Quantum B.V.

Name of the financial intermediary (for intermediated operations): NA

For Framework Operations: Type of Final recipients/Financial Intermediaries NA

Country(-ies) of implementation: The Netherlands (80%) and Germany (20%)

### Short description of the financing or investment operation:

Quix Quantum is a Dutch start-up that develops photonic quantum computers, that have the potential to perform calculations significantly faster than classical computers. This could accelerate research and progress in various domains like drug discovery, material science, finance and cybersecurity. The Quix photonic quantum computer uses photons as information carriers (qubits). It manipulates quantum properties of these qubits to encode computational tasks for end users. Using photonics offers several benefits, including the ability to operate at room-temperature, scalability, a high level of technological maturity in the supply chain and expertise in the Dutch ecosystem.

The company is currently fundraising to advance the development of their full stack quantum computer. This funding will support key milestones in the development of this computer.

Quix's existing shareholders have committed up to €5 million in the Series A round. To further strengthen this round, EIC and Invest-NL invest both €5mln to support the company with its further development.

#### **Public Statement**

Narrative justifying the assessment of Pillars 1-5. The narrative should not contain commercially sensitive or confidential information.

#### The company

Quix Quantum is a Dutch start-up that develops photonic quantum computers, that have the potential to perform calculations significantly faster than classical computers. This could accelerate research and progress in various domains like drug discovery, material science, finance and cybersecurity. The Quix photonic quantum computer uses photons as information carriers (qubits). It manipulates quantum properties of these qubits to encode computational tasks for end users. Using photonics offers several benefits, including the ability to operate at room-temperature, scalability, a high level of technological maturity in the supply chain and expertise in the Dutch ecosystem.

### **Funding strategy**

<sup>&</sup>lt;sup>1</sup> The Investment Committee Secretariat shall liaise with each Implementing Partner in order to identify the financing or investment operations or sub-projects, which have been signed and for which the relevant Scoreboard shall be published in line with Article 24(5) of the Regulation.

The upcoming funding round will be EUR 15mln, of which Invest-NL is financing €5mln. This will support the company to develop the first photonic-based quantum computer in the world. Most of the funding will be spend on R&D purposes. Besides the funding round, the company receives income from customer projects, for instance, from DLR (German research institute).

## **Pillar 3 -** Market failure or sub-optimal investment situation addressed by the financing or investment operation (**Score**)

**Score: 4 (Excellent):** The financing operation effectively addresses key market failures, including high risks, funding gaps, and significant societal benefits, while also aligning with strategic EU policy objectives. Its strong potential and strategic relevance justify the highest rating.

- Economic growth: By advancing quantum computing technology, Quix supports economic growth through innovation and technology leadership. This aligns with broader EU and national strategies for economic development and technological advancement.
- Climate: While QuiX Quantum BV's proposal is not directly targeting climate or environmental
  policies, its potential applications in optimizing energy systems and advancing climate
  modeling could contribute positively to EU environmental goals. At this stage, the expected
  impact is likely to be positive, supporting sustainable innovations and efficient resource use.
- Environmental: Quantum computing, while resource-intensive initially, aims to improve efficiency in various sectors. This aligns with sustainability goals by potentially reducing waste and optimizing resource use over time. The development process should incorporate sustainable practices to minimize environmental impact, such as using energy-efficient data centers and managing electronic waste responsibly. The proposal for QuiX Quantum BV is likely to have a significant positive impact on the environment, particularly through advancements in energy efficiency and climate modeling. Any potential negative impacts related to resource use and energy consumption are expected to be manageable and mitigated as the technology evolves.
- Social: Quix is likely to create high-skilled jobs and contribute to the development of advanced technology sectors. This supports social sustainability by fostering economic opportunities and advancing skills in cutting-edge fields.

## **Pillar 4** - Financial and technical contribution by the Implementing Partner (**Total score – very good 3**) Score calculator, direct finance

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1. \times 0,125 + 2. \times 0,25 + 3. \times 0,125 + 4. \times 0,25 + 5. \times 0,125 + 6. \times 0,125 = Total score 4 \times 0,125 + 4 \times 0,25 + 2 \times 0,125 + 4 \times 0,25 + 3 \times 0,125 + 3 \times 0,125 = 3.5
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#### Score per indicator, direct finance:

- 1. Financial benefits generated by the intervention of the implementing partner: 4
- 2. Longer maturity: 4
- 3. Other benefit generated for final recipients: 2
- 4. Crowding-in and signaling effect: 4
- 5. Financial advice and structuring expertise: 3
- 6. Technical advice and contribution: 3

### **Pillar 5 -** Impact of the financing or investment operation (**Total score 4 - excellent**) **Score calculator, direct finance:**

 $1. \times 0.4 + 2. \times 0.15 + 3.a. \times 0.15 + 3.b. \times 0.15 + 3.c. \times 0.15$  (+ Bonus, if applicable:  $\times 0.225$ ) = Total score

 $4. \times 0.4 + 4. \times 0.15 + 3. \times 0.15 + 3. \times 0.15 + 2 \times 0.15 + 2 \times 0.255 = 3.85$ 

Score per indicator, direct finance:

- 1. Economic and growth impact: 4
- 2. Employment impact: 4
- 3. Sustainability proofing aspects:
  - a. Climate: 4
  - b. Environment: 3
  - c. Social dimension: 2

### **Pillar 7 - Complementary indicators**

NA

Please provide relevant indicators from Appendix 6 of the InvestEU Scoreboard.