**Wrave Pte Ltd**
Email: hello@wrave.io

# Investment Highlight

1. **Elevator Pitch**

   Businesses today face high bandwidth costs, slow loading times, and large file sizes that limit the scalability of 3D rendering, video streaming, and immersive content. Wrave's breakthrough technologies address this by improving compression, rendering, and streaming efficiency, resulting in >80% faster load times, >60% smaller files, and >50% cost savings. Our vision goes beyond this: we aim to build an **AI-powered 3D & Video Digital Asset Management (DAM) Platform**, enhancing asset monitoring and delivering advanced AI analytics through the proprietary data gathered on our platform—unlocking new possibilities in 3D rendering, video surveillance, AR/VR, and beyond.

2. **Market Opportunity**

   Wrave is well-positioned to reduce costs and enhance scalability in 3D and video domains for enterprises.
   - **Global Video Streaming Software (TAM)** is projected to reach USD 416.84 billion by 2030, in which the **Video Surveillance** segment is projected to reach USD 83.3 billion.
   - **Global 3D Compression & Rendering Software (TAM)** is projected to reach USD 17.38 billion by 2030.
   - **AR/VR (TAM)** is projected to reach USD 77.5 billion by 2028.

3. **Competitive Advantages**

   Wrave uniquely integrates advanced compression and rendering technologies, excelling in both 3D and video domains. Competitors typically focus on either 3D or video, specializing in just one aspect—compression or rendering—whereas Wrave advances both, delivering superior performance with low-latency streaming across multi-platforms. This comprehensive capability provides us with a distinct competitive advantage in both the 3D and video compression and streaming markets.

   Our CTO possesses extensive expertise in MPEG standards for video and 3D mesh technology, significantly contributing to these areas with 20 patents filed over the past 3 years. This deep industry knowledge and continuous innovation give Wrave a formidable technical edge over our competitors.

4. **Traction and Achievements**
   - **Key Project: The National Heritage Board (Singapore)**
     Successfully compressed and rendered large 3D artifacts, achieving over 60% file size reduction without quality loss and doubling rendering speed. It validated our technology and generated $100K in revenue.
   - **Revenue Milestone:** We expect to reach $300K in total revenue by year-end.

5. **Financial Projections**
   - **Target Annual Recurring Revenue (ARR)**: $1–1.5M in the first phase of the SaaS model.
   - **Expected ARR Growth Target:** $4.5M in the next 3 years through market expansion and operations scaling.

6. **Use of Funds**

   We are seeking $1.5M in investment to: (1) establish our core team, (2) continue product development, (3) secure intellectual property, (4) launch our SaaS model.

7. **Business Model**

   Wrave's hybrid model combines on-premise and API solutions with SaaS, enabling rapid scalability and catering to diverse customer needs in digital asset management and streaming.

8. **Go-to-Market Strategy**

   We will partner with 3D editing platforms and integrate our API to tap into their large user base, supported by standard sales practices and marketing initiatives.

9. **Team**

   With over 15 years of combined expertise in R&D, business development, and strategic implementation, each member brings complementary skills, ensuring a collaborative and innovative approach to problem-solving.

10. **Risk and Mitigation**

    We mitigate risks from competitors and market entry barriers through ongoing innovation, IP protection, and adaptive strategies.

**Wrave Pte Ltd**
Email: hello@wrave.io

# CO2 Emissions

**Wrave Compression Algorithm provides a 60% compression on average** compared to other popular codecs:

1. **Storage Savings**
   - **Other popular codecs**: 1 hour of 1080p video = 2.25 GB
   - **Wrave Compression Algorithm** (60% reduction): 1 hour of 1080p video = **0.9 GB**

2. **Bandwidth & Transmission Savings**
   Assuming a data center consumes **0.15 kWh per GB** of transmitted video:
   - **Other popular codecs**: 1 hour of 1080p video requires 2.25 GB → **0.3375 kWh**
   - **Wrave Compression Algorithm**: 1 hour of 1080p video requires 0.9 GB → **0.135 kWh** (~60% savings)

3. **Carbon Savings**
   The average carbon emission per kWh in the U.S. is about 0.42 kg of CO2.
   Let's calculate the carbon emissions for 1 hour of video streaming:
   - **Other popular codecs**: 0.3375 kWh → **0.14175 kg** of CO2
   - **Wrave Compression Algorithm**: 0.135 kWh → **0.0567 kg** of CO2

4. **Impact at Scale**
   For a service streaming **1 billion hours** of 1080p video per year:
   - **Other popular codecs** would generate approximately **141.75 million kg** of CO2
   - **Wrave Compression Algorithm** would generate **56.7 million kg** of CO2
   - **Total CO2 savings**:
     - **Daily: 85.05 million kg** of CO2
     - **Annually**: 85.05 million kg x 365 days = **31,025 million kg** of CO2

5. **Cost Savings**
   The **Wrave Compression Algorithm** not only reduces carbon emissions but also offers significant cost savings due to its superior compression efficiency. With a 60% reduction in data size, companies can lower both storage and transmission costs:
   - **Storage Costs**: By compressing video files to 40% of their original size, companies can reduce their storage requirements by 60%, directly cutting data storage expenses.
   - **Bandwidth Costs:** Since streaming data is reduced by 60%, the corresponding bandwidth costs for transmitting video content also decrease substantially. For example, if a data center typically charges $0.01 per GB of transmitted data, the cost to stream 1 billion hours of video would drop from **$22.5 million (Other popular codecs)** to **$9 million (Wrave Compression Algorithm)**—a savings of **$13.5 million daily**—a total savings of **$4,927 million annually**.

## Conclusion

Wrave's innovative **compression algorithms** and **proprietary communication protocol** are engineered to optimize multimedia operations by seamlessly managing bandwidth fluctuations, significantly reducing file sizes, and minimizing energy consumption. Businesses can achieve **more than 60% savings in data storage and transmission**, resulting in **millions in annual cost reductions** for large-scale streaming while also **cutting 31,025 million kilograms of CO2 emissions** for every 365 billion hours of 1080p video, delivering both financial and environmental benefits.