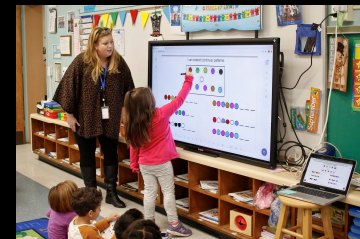


NANOGA⁺

“ WE BUILD HIGH-PERFORMANCE LARGE INTERACTIVE VIDEO
DISPLAYS FOR CLASSROOMS – AFFORDABLY
& ENVIRONMENTAL FRIENDLY ”

Dr. Nasser HEFIANA
CEO | Founder



THE TEAM



“60y of Experience in the Display & Photonic Industry”



- Office & Lab. in Lausanne (CH)
- EUR +1 mio Equity (Seeds)
- **EUR 1.76 mio Grant (Horizon 2020)**
- Strong IP Portfolio (3 Patents)
- 4 people (+10 people by 2025)

Operation



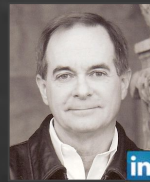
Nasser HEFIANA

Founder & CEO | NANOGA SA
Co-inventor of DNAwatch
Technology



Fabio BETTINELLI

Global Brand Director,
British American Tobacco
(2009-2013)
Investor & Board Member



Mark WILLNER

Display Industry Executive
Serial DeepTech Entrepreneur (H2020 coach)



Ronald COK

IP Director at X-Celeprint
USPTO Top 70 Inventor



David SLOBODIN

GM at Microsoft Surface Hub (2012-17)
Led the development of Microsoft Surface-Hub

Advisory

PROBLEM



Current Offers for Interactive Digital Whiteboards are Prohibitively Expensive for Large Sizes (>80")

Existing Touch-Screen Technologies are Slow in their Response Times for Large Sizes (>80")

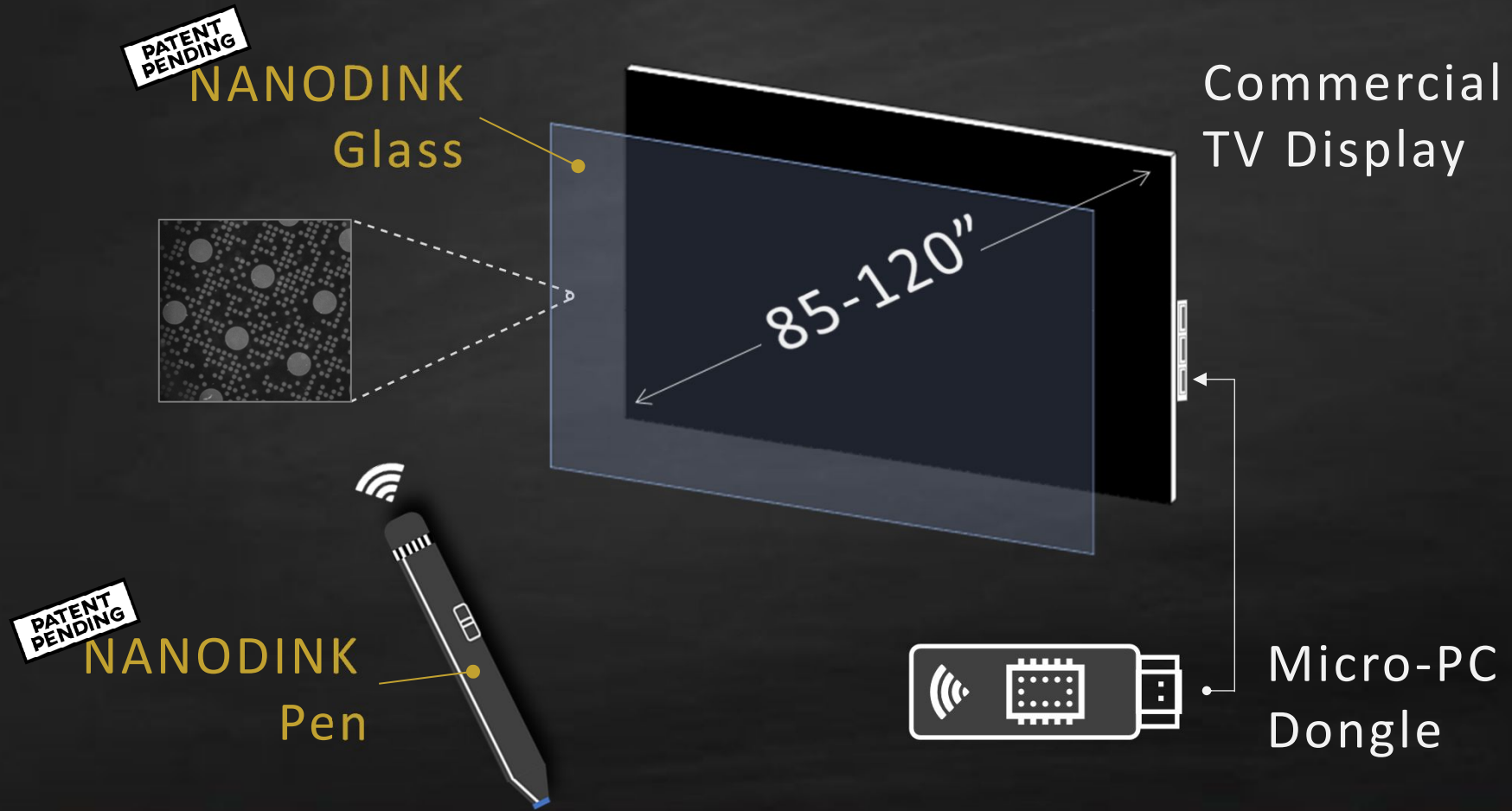
No Adequate solution for Schools with their Limited Budgets

Low Penetration in K-18 Schools due to High Entry barrier Driven by Prohibitive Cost

THE SOLUTION → NANODINK

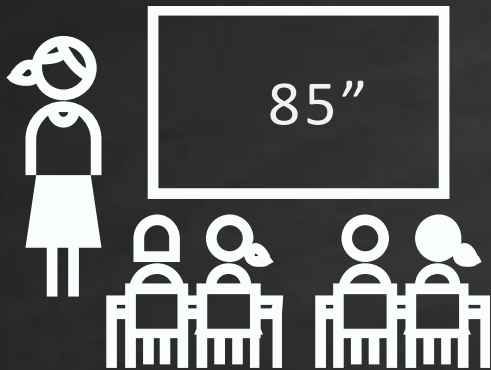


“We Turn Commercial TVs into High-Performance Interactive Displays at **50%** of Market Price”



SCHOOLS

+25 mio Classrooms
€120 bn TAM*

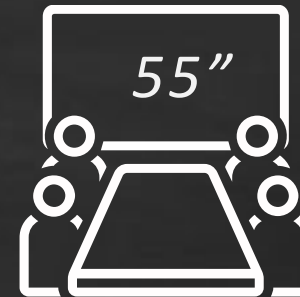


EU Market (2019):

- +1.5 mio classrooms
- +€7 bn

CORPORATES

+50 mio Conf-rooms
€125 bn TAM*



US Market (2019):

- +10 mio conf-rooms
- +€20 bn

*Total Addressable Market based on a unit price of €5k & 25 mio non-equipped classrooms

*Total Addressable Market based on a unit price of €2.5k & 50 mio non-equipped conference-rooms

COMPETITIVE FEATURES



SCALABLE TO ANY SIZE



WRITING AT NATURAL HAND-SPEED



Hello

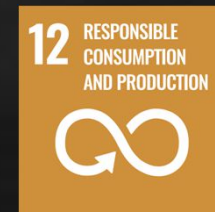


Response time < 10 ms

INDIUM-FREE & RECYCLE-EASY



UNITED NATION SDG's



“Strong Patent Portfolio”

⇒ Patent #1 → **Granted in the US, Japan, China & Taiwan** (Europe, South-Korea & Hong-Kong shall follow soon)

⇒ Patent #2 → **Granted in Taiwan** and still pending in countries of interest (US, EP, JP, SK, CN, HK)

⇒ Patent #3 → Currently under filling in countries of interest (US, EP, JP, SK, TW, CN, HK)

⇒ Patent #4 → In preparation

COMPETITION (85" Size)



HIGH-PRICE

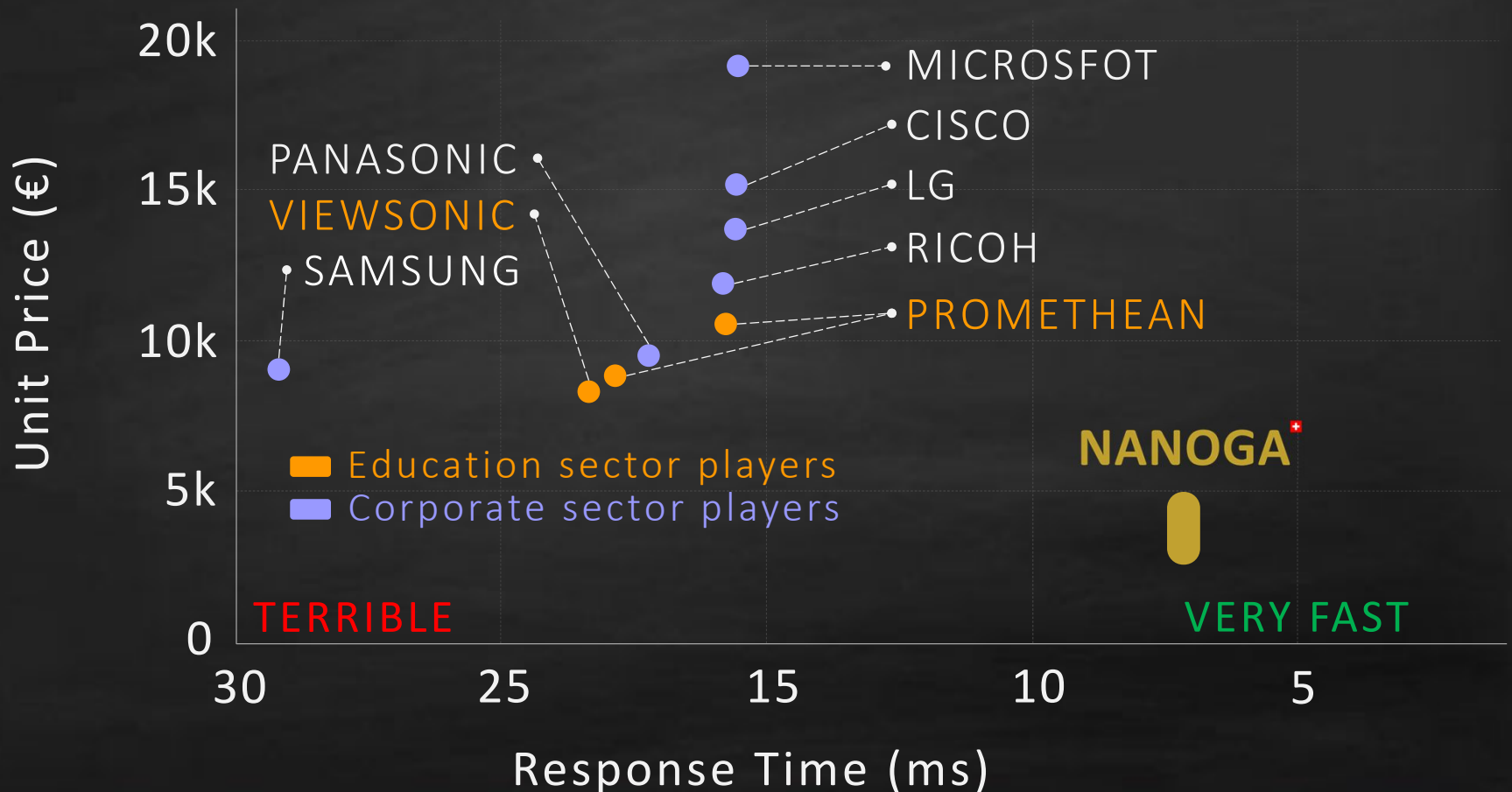
(€) ~12 000
on average

SLOW-RESPONSE



Response
time $\geq 15ms$

NON-RECYCLABLE



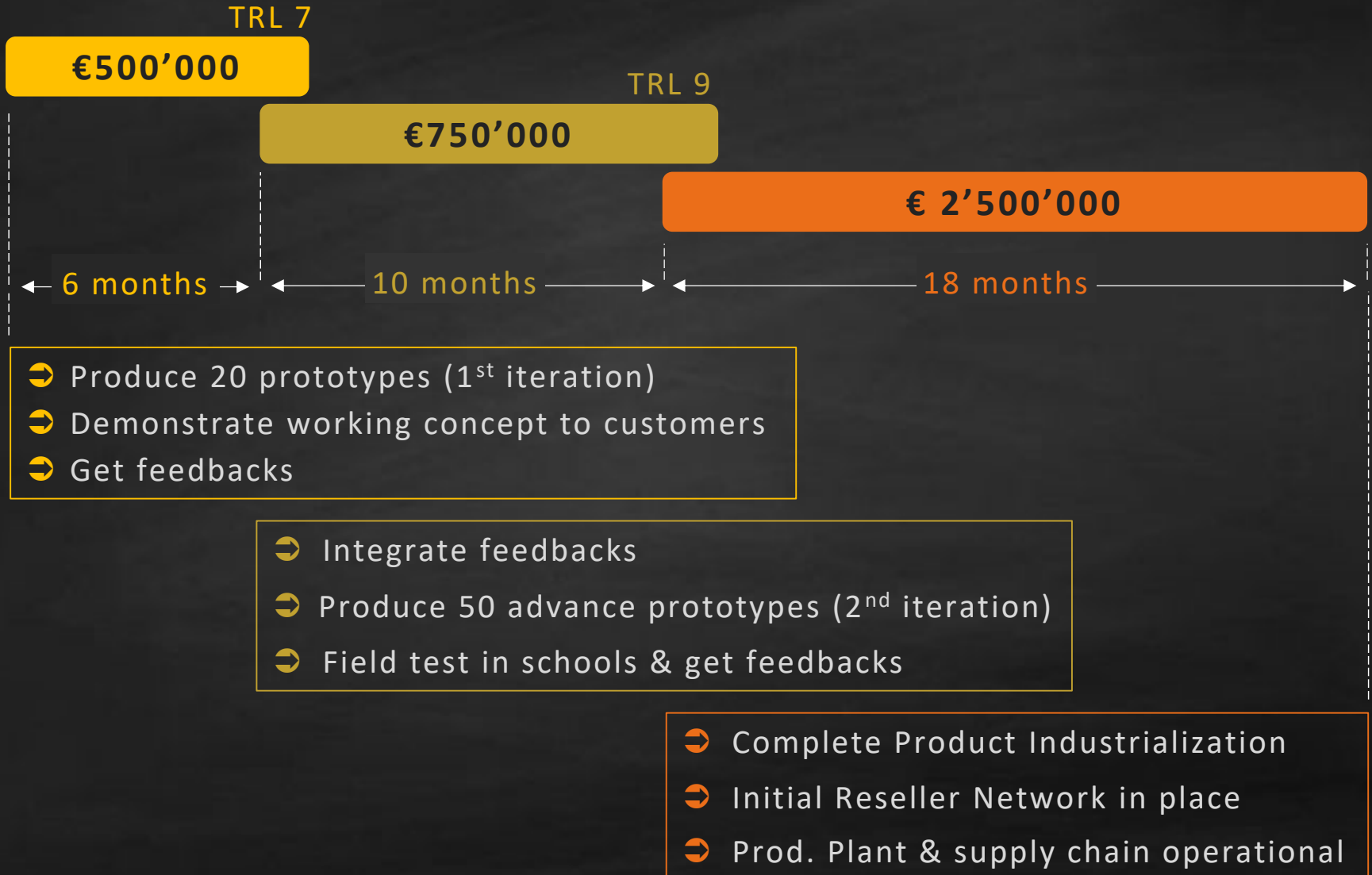
ACHIEVEMENTS



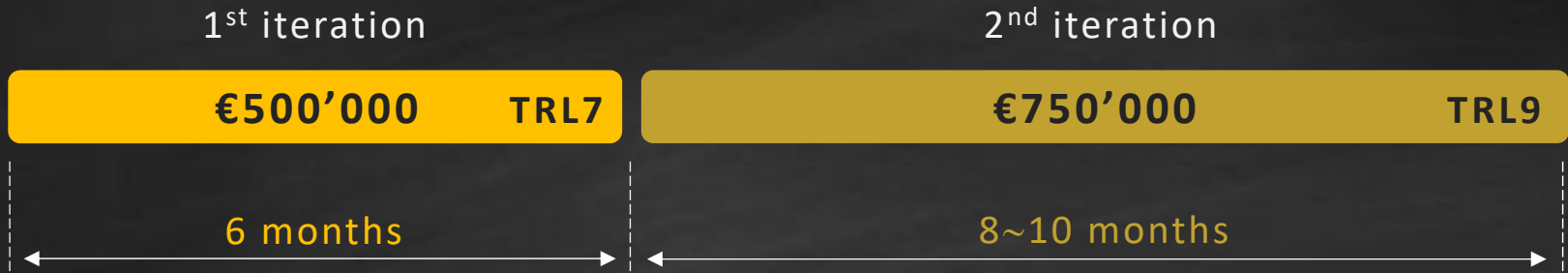
(Up To Date)

- ➔ Received funding of € 1.7M from EU's Horizon 2020 Research & Innovation program
- ➔ Assembled a highly skilled advisory board with +60 year of combined expertise in the display and photonics industries
- ➔ 1st patent granted in the US, Japan, China and Taiwan | 2nd & 3rd patents pending | 4th patent in preparation
- ➔ Ongoing industrialization in close collaboration with industrial leaders as Corning (US), Von Ardenne (D), Rena (D), GfE (D), Schott (D), Mikrop (CH)
- ➔ Smart pen prototype ready for assembly and test (1st iteration)
- ➔ Ongoing discussions with potential resellers and system integrators

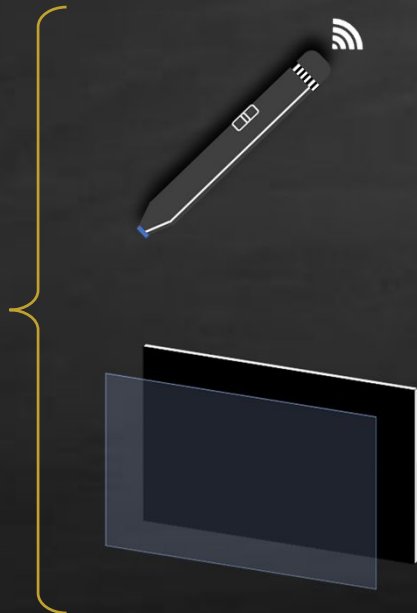
INVESTMENT PLAN



MVP DEVELOPMENT PLAN



Established Industrial Partnerships



Integrator ➔ ABC Microtechnique (CH)
Optical Module ➔ MIKROP (CH)
UV-LED Chips ➔ NICHIA EUROPE (D)

Display Glass ➔ CORNING (US)
Row Materials ➔ GFE (D)
Glass Coating ➔ VON ARDENNE (D)
Glass Patterning ➔ RENA (D)
Optical Bonding ➔ DISTEC (D)

“Assumptions”

- ➔ Distribution across Europe through network of resellers
(*System Integrators & Value-Added Resellers*)
- ➔ Licensing business model adapted to school budgets
(*NANOGA own hardware & schools pay annual fees*)
- ➔ Reseller margin at **25%** of annual fees
- ➔ Pilot production plant settled in **EUROPE**
- ➔ Gradual production ramp-up of retrofitted commercial TVs
(*2024 : 2025 : 2026 : 2027 ⇒ 1200 : 2600 : 5500 : 7300 units*)
- ➔ Mix funding Schema
(*Equity ⇒ OPEX & Dept ⇒ CAPEX*)



“Very-Profitable / High-Impact Opportunity”

➔ €245 bn Total Addressable Market:

- €120 bn ⇒ Education market (*EU market +€7 bn*)
- €125 bn ⇒ Corporate market (*US market +€20 bn*)

➔ Unique Competitive Advantage:

- Enable Natural Hand-Speed Writing
- Much Cheaper to Produce
- Scalable to any Size

➔ Sustainable Impacts:

- United Nation SDG's – **4** **12** **15**
- Environment Friendly – Indium & Heavy-Metals Free

CONTACT



This project has received funding from the European Union's Horizon 2020 Research & Innovation Program under grant agreement N° 881297



This project complies to the following United Nations SDG



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