



## H2K PROJECT

"Kompact" and low emission mobility

**Investment Proposal  
H2 Motronics**

March, 2021

**H2 Motronics**

**texys**  
GROUP

# **DISCLAIMER AND CONTACTS**



This document is strictly confidential and is intended for the usage by the recipient. Neither the entire document nor parts of it may be used by the recipient for any purpose without the consent of the company. All statements other than statements of historical facts contained in this business plan including, without limitation, those regarding the company's financial position, business strategy, plans, and objectives of management for future operations (including development plans and objectives relating to the company's products) are forward-looking statements.

Such forward-looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance, or achievements of the company or industry results to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the company's present and future business strategies and the environment in which the company will operate in the future. The forward-looking statements contained herein speak only as of the date they are made. The company expressly disclaims any and all liability for any forward-looking statement in this business plan (including, without limitation, liability resulting from materially incorrect or inaccurate statements) and expressly disclaims any obligation or undertaking to release any updates or revisions to any forward-looking statements contained herein to reflect any change in the company's expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based.

All statements (including statements of fact) herein have been carefully researched and represent the best of the company's and its management's knowledge and/or belief. No statement, however, should be relied upon by any person or entity having access to this business plan without first conducting its own independent research. The company herewith expressly disclaims any and all liability – irrespective of the legal basis of such liability – for the contents of this business plan to the fullest extent permitted by applicable law.

## **Philippe LEUWERS**

CEO

+33 676313892

## **Emmanuel ESNAULT**

COO

+33 785794887

# EXECUTIVE SUMMARY



## WHO ARE WE?

TEXYS was founded in 2000 by Etienne Deméocq (former Head of Electronics in Formula 1), to propose his wide embedded electronics expertise and developments to racing organisations.

TEXYS moved to Varennes-Vauzelles (58, France) into a brand-new facility in 2008 (with an extension doubling the floor space in 2018). The business has constantly been developed internationally with the appointment of official distributors in UK, Japan, and Italy, and with the birth of two subsidiaries, first in the USA (Indianapolis in 2008) and later in Germany (Karlsruhe, in 2017).

The TEXYS Group has a turnover increasing by + 3.2% per year on average over the period 2017-2019 (5.8m € in 2019) with an EBITDA growing by + 6.8% per year to reach € 1.4m in 2019 (25.1% of turnover).

Thanks to this worldwide network and its 45 employees, TEXYS is now fully focussed on its development with the aim to be an international stakeholder in sensor technologies, mastering the design and manufacture of embedded, lightweight and compact sensing devices.

In 2020, TEXYS Group acquired two expert companies in optical fiber: Optel-Thevon (50 years in highspeed sensors & optical systems) now OPTEL-TEXYS; and Light Guide Solutions (15 years in the development & manufacturing of systems based on Fiber Bragg Grating) now LGS by TEXYS.

Prior to these acquisitions, at the end of 2019, TEXYS launched an external engineering office, H2 MOTRONICS, to focus on bespoke customer requests. It is the perfect platform for the innovative H2K Project.

## WHAT IS OUR PURPOSE?

The development of electro-mobility today is certain and irreversible. Its advantages are the local zero emission, driving pleasure with low noise levels, instantaneous acceleration without delay, and lower mechanical maintenance. The motorcycle market is only now starting to gear up to enter the new world of electrification. It seems impossible today to have range, high power and weight comparable to the Internal Combustion Engine numbers, benefiting from more than 100 years of technical developments.

**The main purpose of H2K is to showcase lightweight mobility with the fuel cell hydrogen technology.** The potential applications are various types of mobility facing the same lightweight and compacity requirements, with an environmental responsibility in mind, such as 2 & 4-wheeler urban vehicles, light marine applications, recreational vehicles (off-road buggies, snowmobiles) and boat tenders. The platform of a high-performance motorbikes powered by hydrogen fuel cell will encompass all requirements for an efficient mobility: compact, lightweight, efficient and environmentally friendly.

## + WHY ARE WE RELEVANT? WHY TEXYS CAN DO IT?

Motorsport has been constantly showcasing its ability to adapt quickly with technical and logistical challenges, providing contribution to day-to-day life and innovations. Motorsport remains a laboratory for a better future, in a changing world.

The experience of the Covid-19 crisis accelerates our need to change our business model. Top end Motorsport industry has been our main business for years. Seen as a non-essential activity during the Covid-19 crisis, the entire motorsport activity has been put at risk. Considering this in parallel, the automotive manufacturers are carefully evaluating more than ever, any involvement for various reasons.

With all this in mind, the TEXYS Group decided the timing was right for investigating new opportunities of business with latest technologies and projects in line with our changing world.

As an entrepreneurially and technology driven company, and thanks to 20 years of experience within the high demanding worlds of Motorsport and Transport, TEXYS Group is moving forward.

Tight deadlines, short lead times and technical complexity have been the daily business of TEXYS since its inception.

The success of H2K project will be a matter of the perfect mechanical integration of components, correctly specified and dimensioned. This exercise has been carried out successfully by TEXYS Group over the past two decades.

TEXYS Group has been demonstrating its ability to deliver compact, lightweight and accurate sensing devices for demanding customers in both aspects of a high-tech supply: high quality and short lead time.



## **+ HOW DO WE DEVELOP THIS INNOVATIVE AND SUSTAINABLE SOLUTION?**

This innovative project is led by H2 Motronics, with the TEXYS Group challenge driven mindset, and can take advantage of experts within the project management team:

### **Philippe Leuwers, TEXYS Group CEO:**

After being a motorbike test rider for Dunlop Tyre Manufacturer in 1985, Philippe started at Sodemo Moteurs in 1991 as Head of Business Development, contributed to the company's expansion (from an annual TO of 1M€ to 5M€, and from 20 to 80 staff) in 6 years.

In 1997 Philippe created his own company L&S Racing Services and, in 1999, became representative for TEXYS products. In 2004, Philippe joined TEXYS as Commercial Director and became shareholder in 2006 before becoming sole owner of TEXYS with 5M€ TO in 2019 and 35 employees' staff.

To continue with the company development, Philippe set up a new design office, H2 MOTRONICS (Oct 2019) with H2K project in mind.

### **Emmanuel Esnault, TEXYS Group COO:**

He started his professional careers with Philippe Leuwers in 1997 as a customer support engineer at L&S Racing (agent for Pi Research Ltd). Emmanuel joined Renault Sport in 2004, was appointed Customer Racing Technical Manager in 2005, and then Head of Sporting in 2009.

In 2012, Emmanuel joined Formula 1 at McLaren Racing Ltd as Support Operations Manager, prior to being appointed Head of Track Support at McLaren Applied Technologies Ltd. He left the UK at the end of 2019 and then joined Philippe at TEXYS Group as Managing Director.

### **Gilles Schaefer, H2K Technical Project Leader:**

Graduated from Ecole Nationale Supérieure de Mécanique, now Centrale Nantes, he started in 1976 at SERA-CD, working on Formula 1 development (Ligier, Alfa Romeo) and Vehicle Dynamics Simulation. With his vast knowledge, he focused in 1989 on full vehicle design from scratch with off road car prototypes.

He then designed lap time software and 3D Vehicle Dynamics Software Callas (1994) and Prosper (for military vehicles). In 2007, he founded CAR & D, to merge High Technicality, Creativity and Agility, then manages many successful innovation programs for third parties.

### **Michel Augizeau, TECMAS Founder & Chairman:**

Former professional motorcycle racing rider at international level until 1989, Michel founded TECMAS in 1990. He is one of the French stakeholders in the bike racing business. TECMAS has developed many activities such as a chassis design office, prototype manufacturing and sport management and coaching for riders. The company has been involved in different types of series from national to international championships.

### **Mohammed Maaz Delvi, H2K R&D Engineer:**

Born in Bangalore (India), and driven by the passion for automotive, Mohammed graduated with a bachelor's degree in Mechanical Engineering. He further went on to obtain his Master of Science (M.Sc.) Degree in "Automobile Engineering for Sustainable Mobility" and performed his Master's Thesis on "Modelling and simulation of hydrogen fuel cell powered racing motorbike" at H2 Motronics. After the successful completion of his master's degree, he was enrolled by H2 Motronics as R&D Engineer on the H2K Project.

The mix of expertise of the team will match the requirements of this project, thanks to the combination of racing experience required for the proof of concept with high-performance vehicle, and the global mobility approach for the innovative powertrain.



## + HOW DO WE MAKE BUSINESS AND MONEY?

The know-how of TEXYS & H2 Motronics will allow us to develop the interconnectivity and functional software & hardware for this modern, zero-tailpipe emission and compact powertrain.

TEXYS will also develop the embedded sensing technologies dedicated to typical modern powertrain applications: management, safety devices monitoring.

### **The business of H2K will be generated around the following topics:**

- Engineering consultancy on modern powertrain integration for light vehicles,
- Dedicated electronic (hardware and software) for modern powertrains.
- Dedicated sensors for monitoring and safety of embedded hydrogen and high power electronics devices.

### **5 years plan**

The targeted prospects for light mobility are diverse such as;

- Light recreational vehicles (ATVs, snowmobiles).
- 2-wheelers, and bike manufacturers.
- Unmanned aerial and marine vehicles.
- Light boat tenders.
- Ultra-light aeroplanes.
- Urban 4-wheels vehicles.
- Forklifts and light logistics vehicles,

