EQTEC™

World-Leading Technology Innovator for Distributed, Decarbonised Waste-to-Value

Overview

EQTEC PROPRIETARY

PHOTO: EQTEC commercial-scale Market Development Centre in Belišće, Croatia


Waste is a ubiquitous and limitless resource.
Our mission is to cleanly and sustainably transform it into **energy** and **biofuels** that replace the world's fossil fuel legacy with a **circular, renewable** future.

EQTEC AT A GLANCE

Business Overview

- EQTEC is a leading expert in clean conversion of a wide range of waste materials, including plastics and non-recyclable industrial and municipal waste
- EQTEC's process technology produces synthesis gas ('syngas'), an intermediate fuel of consistently high quality and therefore ideal for a range of advanced applications, including hydrogen, RNG and biofuels
- EQTEC's proven and patented technology addresses two, major global challenges:
  - Dramatically increasing waste volumes; and
  - Increasing demand for clean energy
- EQTEC has successfully completed 11+ years of continuous commercial operations of syngas production at its longest-running plant
- EQTEC has commissioned four commercial-scale plants and two R&D facilities
- Strong and growing demand: as of mid-2024:
  - two plants operational
  - two at or near commissioning
  - others under construction or development
  - hundreds of managed opportunities in database
- Highly scalable platform for growth across seven geographies, with delivery partners adding to the opportunity pipeline
- Partnerships with leading universities and private-sector innovators, for research, development and testing facilities aimed at maintaining technology leadership
- Technical team of 15, with four PhDs and three patent families

Industry-Leading Partners

wood. · idex · TRESCA ENGINEERING SOLUTIONS · CompactGTL · JENBACHER · MONTE CRISTO ENGINEERING & DEVELOPMENT · TOYOTA · Seps · SIEMENS · UNIVERSITÉ DE LORRAINE · TÜVRheinland Genau. Richtig. · Petrofac

EQTEC in Numbers

2010 | Technology first commercially deployed

~60 | Different, proven, compatible organic and inorganic feedstocks

90% | Independently audited operational availability / plant uptime

c.€840bn | Total market opportunity(1)

120,000+ | Hours of operational runtime

89% | Less GHG emissions than landfill

1.4MW | Conversion efficiency per tonne of feedstock

70%+ | More efficient than incineration

14%+ | Illustrative unlevered project IRR for end-customers

5–7 years | Average plant payback period

SOURCE: Company information. (1) Includes waste management and syngas energy application market opportunity.
PHOTO: EQTEC commercial-scale plant in Karlovo, Bulgaria

EXPERT, EXPERIENCED MANAGEMENT TEAM

David Palumbo

CEO

- 20+ years of experience in private equity, infrastructure, venture capital, with focus on renewable energy, digital and cleantech
- BSc and MSc in Electrical Engineering
- Previously worked in LatAm, UK, Europe, CIS[(1)]
- EQTEC since 2018

ORIGEN CAPITAL

Dr. Yoel Alemán

CTO

- 20+ years of experience in gasification of biomass and MSW/RDF
- Designed, built and operated gasification facilities on pilot plant and commercial scale
- PhD in Chemical Engineering (focus on gasification), author of three patents and counting
- EQTEC since 2010

HELLENIC REPUBLIC
National and Kapodistrian University of Athens

Universidad Zaragoza

Murli Bhamidipati

Operations Director

- 30 years of experience in engineering operations, growth strategy, turnarounds and investment
- MSc Sloan Fellowship, London Business School, lecturer at Deusto University (Spain)
- Previously worked across UK and Europe, USA, Asia
- EQTEC since 2024

BOLUETA ENGINEERING

CLOCKWORK Business Solutions

GE Capital

Goldman Sachs

SOURCE: Company information. (1) Commonwealth of Independent States.

WORLD-LEADING, NEW ENERGY INFRASTRUCTURE

EQTEC™

- **Circular:** efficient, clean thermochemical conversion of ~60 waste types for local-to-local, distributed energy solutions
- **Waste as fuel:** solving for forecast rise in waste types that reuse and recycling technologies cannot address
- **Decarbonised:** highest efficiency syngas, tuned for carbon-neutral or carbon-negative applications
- **Local:** smaller-scale capabilities minimise waste transport and return value to local communities
- **Energy security:** modular technology supports grid resilience and energy independence
- **Proven:** four commercial-scale plants commissioned, one with 11+ years' operations at 90%+ uptime
- **Scalable:** transition to licensing model enabling rapid scale, recurring revenues and high valuation
- **Expertise and experience:** four expert PhDs lead 15-person innovation & engineering team; management team adds expertise in investment, finance, business strategy, technology operations and large-scale project management

EQTEC SOLUTIONS ARE ABLE TO CAPTURE MARKET OPPORTUNITIES FROM BOTH WASTE MANAGEMENT AND CLEAN ENERGY DEMAND

The versatility of EQTEC's end-to-end process and technology design capabilities make possible the conversion of **dozens of different waste types** and produces a uniquely adjustable, high-quality **synthesis gas** for conversion into **renewable natural gas**, **hydrogen**, **liquid biofuels** or other energy applications

c.€400bn

Total Market Opportunity(1)

EQTEC's waste-to-value technology is at the core of mission-critical solutions in the world's transition from outdated waste management and energy generation infrastructure to a clean, circular future

c.€440bn

Total Market Opportunity

SOURCE: Company information. (1) Includes waste management from collection to disposal.

GLOBAL WASTE VOLUMES ARE GROWING RAPIDLY, BUT CLEAN, VALUE-ADDING DISPOSAL OPTIONS ARE LIMITED

Waste Volumes Continue to Rise…

2bn
Tons of municipal waste generated every year

70%
Increase in MSW[1] by 2050

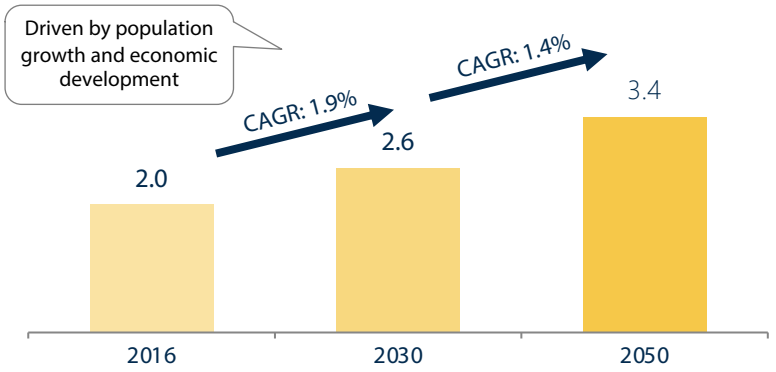
2x
Growth in EU waste incineration 1995 – 2019

13.5%
Proportion of global waste recycled

c.50%
The maximum proportion of waste recyclable in high income countries

6.4%
Expected gate fee CAGR in Europe 2021 – 2030

Projected Solid Waste Generation[2] (bns of tonnes/ year)



…Against a Backdrop of Increasingly Restrictive Legislation and Regulations Concerning Disposal

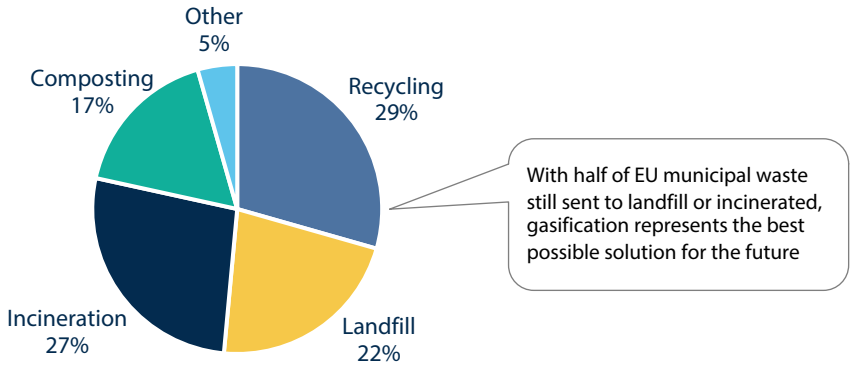
EU Waste Framework Directive
Defines annual targets for the increase in MSW recycling for next 15 years; argues that landfill is last resort for non-recyclable waste

EU Circular Economy Package
Sets new targets for recycling, including the proportion of waste that can go to landfill to 10% by 2035

EU Waste Incineration Standards
Defines most effective techniques to reduce pollutants of WTE[3] incineration, applies to 492 WTE plants in Europe

Global Net Zero Targets
The EU, the UK, and the USA all have specific policies to achieve net zero ambitions by 2050[4]

EU Municipal Waste Treatment[5] by solution, 2020

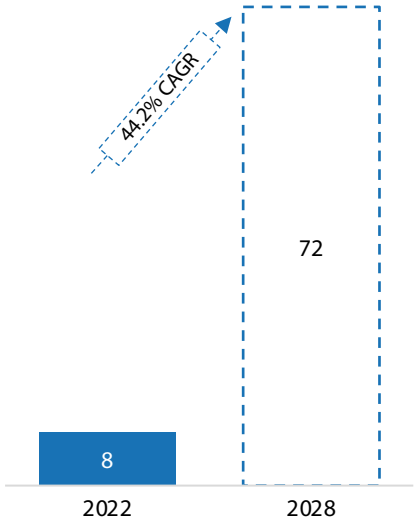


SOURCES: Company information, Canaccord Genuity, World Bank, Yale School of the Environment, European Climate Foundation. (1) MSW = Municipal Solid Waste. (2) Source: World Bank. (3) WTE = Waste-to-Energy. (4) The EU has set aside c.€270bn to be spent on climate action. (5) Source: Eurostat.

TECHNOLOGY VERSATILITY ENABLES ACCESS TO FOUR LARGE AND FAST-GROWING ADDRESSABLE MARKETS

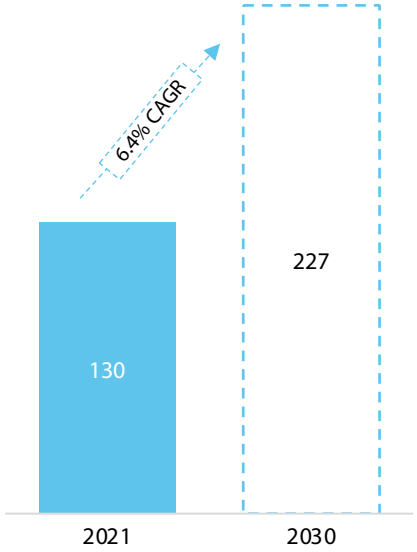
EQTEC Addressable Markets (€bn)

- As a pipeline-quality gas, **renewable natural gas (RNG)** is fully interchangeable with traditional natural gas, but without the significant costs of exploration, drilling or transport
- It is well-positioned as the go-to transition fuel, so that its growth is expected to outpace hydrogen's in the near term



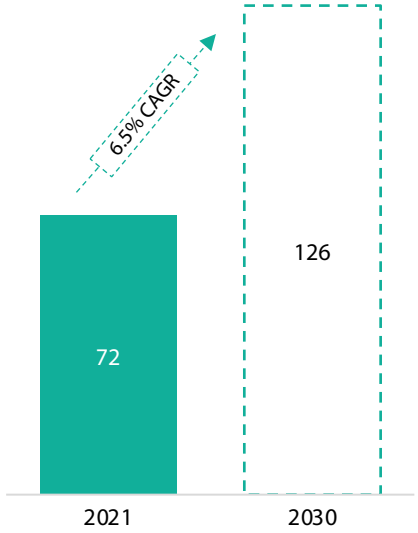
Renewable Natural Gas (RNG)

- **Clean hydrogen** represents the most efficient, clean molecule for a range of new energy applications
- Although its current demand is almost entirely focused on specific industrial sectors, demand is expected to grow significantly in the mid- to long-term



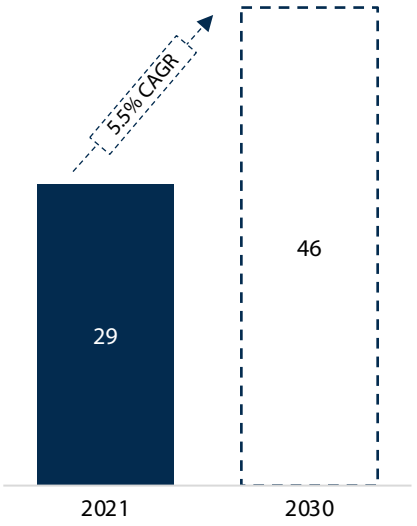
Hydrogen

- As a substitute for all kinds of internal combustion engine fuels, **liquid biofuels** such as sustainable aviation fuel (SAF) will become alternatives to diesel, gasoline and kerosene for land, air and sea transportation



Liquid biofuels

- **Combined heat and power** plants include legacy infrastructure such as coal-fired power stations or incineration
- Powered by EQTEC technology, smaller, local plants will provide decarbonised, distributed alternatives for baseload (always-on) supply



Combined Heat and Power (CHP)

SOURCES: Combined Heat and Power: Precedence Research; Renewable Natural Gas: Business Insights Research; Hydrogen: Grand View Research; Liquid Biofuels: Precedence Research.

EQTEC SOLUTIONS REPRESENT SOME OF THE CLEANEST AND MOST EFFICIENT ALTERNATIVES FOR BASELOAD WASTE TO ENERGY

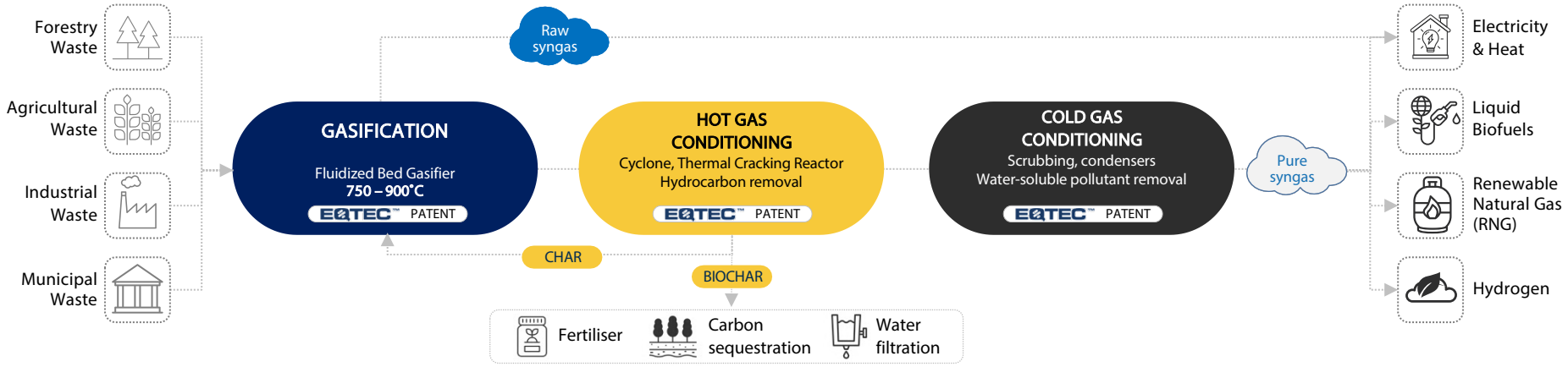
EQTEC Capabilities versus Alternatives

		EQTEC™	Gasification	Landfill	Incineration	Pyrolysis	Anaerobic Digestion
	Energy Output per tonne of Feedstock	●	◕	○	●	◔	●
Versatility	Breadth of Feedstock Types	60+ organic and inorganic feedstocks across agricultural waste, forestry waste, industrial waste and municipal waste	Select waste verticals only	All waste verticals	All waste verticals except for standalone plastics (due to presence of PVC)	Plastic waste (polymers)	Organic waste
Versatility	Location Flexibility	✓ High	~ Medium	✗✗✗ Very Low	✗✗✗ Very Low	~ Medium	~ Medium
Versatility	Scalability	✓ High	✓ High	~ Medium	~ Medium	~ Medium	~ Medium
End Applications	Combined Heat and Power (CHP)	✓	✓	✗	✓	✓	✗
End Applications	Hydrogen	✓	✗	✗	✗	✗	✗
End Applications	Renewable Natural Gas (RNG)	✓	✗	✗	✗	✓	✓
End Applications	Liquid Biofuels (e.g., SAF)	✓	✓	✗	✗	✓	✓
End Applications	BioChar	✓	✓	✗	✓	✓	✓
Emissions	Low GHG Emissions	◕	◑	◔	◑	◑	●
Emissions	Waste Conversion Capability	●	◑	○	●	◔	◔

SOURCE: Company information.

PROPRIETARY PROCESS DESIGN TECHNOLOGY WITH SUPERIOR PERFORMANCE AND BENEFITS

EQTEC Proprietary, End-to-End Process Design, Integration and Management



EQTEC™ Proprietary
Kinetic simulation for plant design

EQTEC™ PATENT
Gasification of organic solids
Inventor: Dr Yoel Alemán
Date granted: 11-Oct-2017

EQTEC™ PATENT
Thermal Cracking Reactor
Inventor: Dr Yoel Alemán
Date granted: 27-Dec-2017

EQTEC™ PATENT
Cogeneration plant configuration
Inventor: Dr Yoel Alemán
Date granted: 04-Nov-2016

EQTEC™ Proprietary
Control systems for process control and remote management

Key Highlights and Benefits

- Feedstock electricity conversion ratio of 1:1.4 (Ton/MWe), 70%+ more efficient than incineration
- Technology proven by over 125,000 independently audited operating hours
- Over 60 types of organic and inorganic feedstocks trialed — ability to mix
- Autothermic process so plants produce own heat and power for operations
- Modular componentry makes technology scalable for local or centralised build
- Proprietary modelling enables precision design before manufacture
- Modular approach enables localised procurement and construction
- In-house control systems programming assures efficient operation
- Proprietary simulation software enables tailored design
- New energy infrastructure optimal at 1–30 MWe plant size

SOURCE: Company information

WORLD-LEADING TECHNOLOGY IS APPLIED TO A RANGE OF FEEDSTOCK TYPES FOR A RANGE OF SYNGAS APPLICATIONS

EQTEC Feedstock Versatility and Case Studies

Agricultural waste

- By-products of production processes from farming and food production
- Examples include: olive pomace, almond and coconut shells, sugar cane bagasse, grape marc, straw
- 1.2bn tonnes of food waste generated globally per year, directly by farms

EQTEC activity:
Currently in use, testing or in development

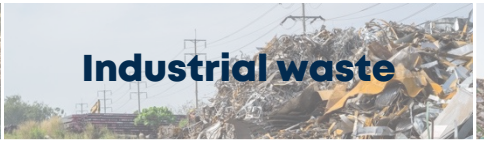
EQTEC activity:

Forestry waste

- Brush and other products manufactured from wood
- Examples include: wood chips, wood pellets, demolition wood, waste from furniture industry
- c.1bn tonnes of forestry waste generated globally per year, directly by forestry operations

EQTEC activity:
Currently in use, testing or in development

EQTEC activity:



Industrial waste

- Refuse from industrial processes, such as from factories or mining
- Examples include: tyres, plastics, contaminated plastics, treatment plant sludge – individually and in combination
- 7.6bn tonnes generated globally per year

EQTEC activity:
Currently in use, testing or in development

EQTEC activity:

Municipal waste

- Everyday waste discarded by the public
- Examples include: plastics 'bullets', RDF bales, RDF fluff, RDF pellets
- 2bn tonnes generated globally per year, at least 33% managed in an environmentally unsafe manner

EQTEC activity:
Currently in use, testing or in development

EQTEC activity:

EQTEC™ advantage:

Clean, efficient, thermochemical conversion from ~60 types of waste to:

Heat | Electricity | RNG | Hydrogen | Liquid Biofuels | Biochar

SOURCES: World Bank, WWF, npj Climate and Atmospheric Science.

DESIGN FOR SYNGAS PURITY SUPPORTS A WIDE RANGE OF ADVANCED APPLICATIONS FOR ENERGY, FUEL AND CARBON SEQUESTRATION

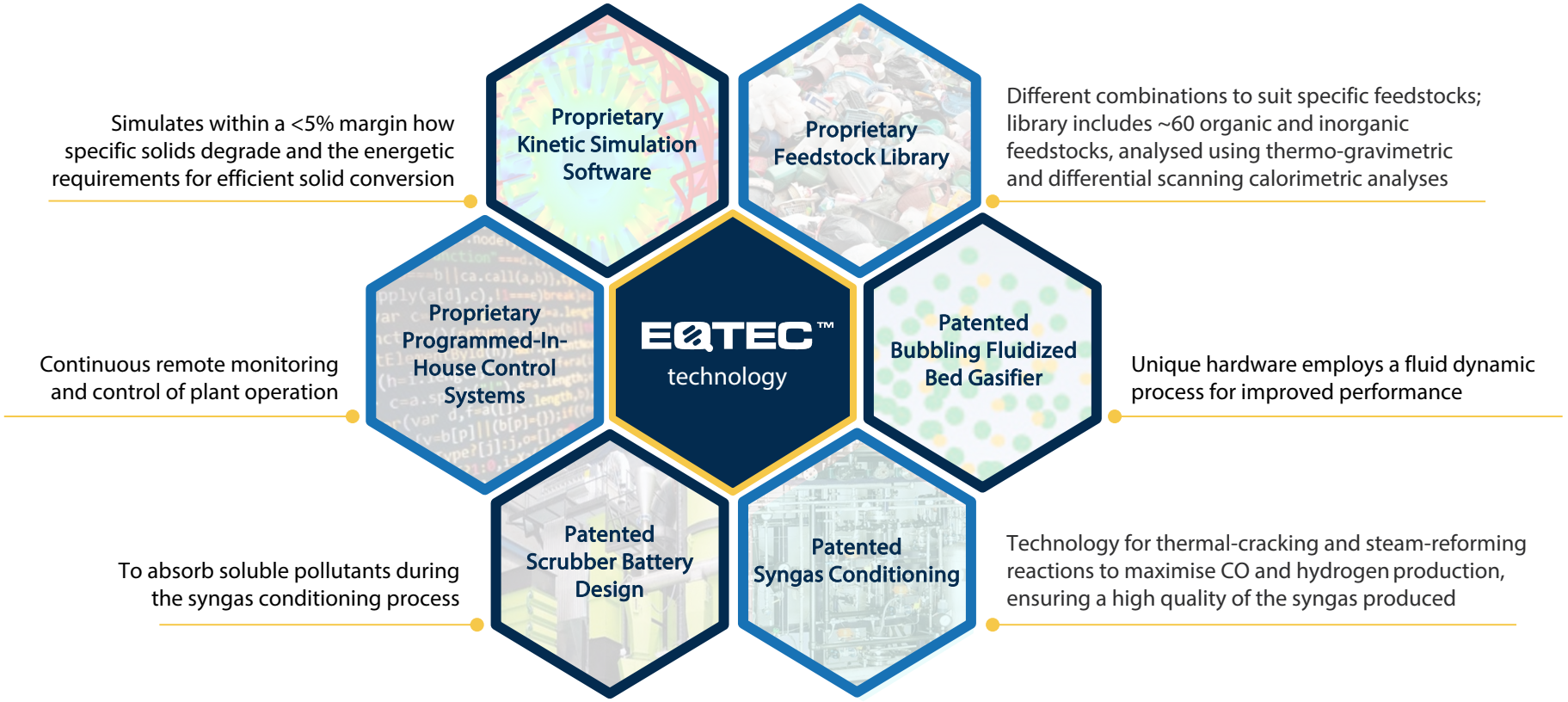
EQTEC Technology Versatility and Offtake Applications

	Combined Heat and Power (CHP)	Renewable Natural Gas (RNG)	Hydrogen	Liquid Biofuels	Biochar
Description	Uses the raw syngas product of gasification to create heat and electricity together	Natural gas substitute intended to be as close as possible in composition and properties to fossil-derived natural gas	Hydrogen gas generated by renewable energy or low-carbon power	Liquid fuels derived from biomass rather than from fossils; includes synthetic aviation fuels (SAF) and vehicular fuels	Lightweight charcoal-like residue made of carbon and ashes
Process	A high-efficiency process which captures and utilises the by-product heat of the electricity generation process Heat and electricity can also be individually generated, directly by gasification or using a gas engine respectively	Created by passing raw syngas through methanation process	Produced by conditioning the gasifier's raw syngas output in the thermal cracking reactor; conditions carefully tuned maximise production of hydrogen	Created using Fischer-Tropsch gas-to-liquids process on pure syngas after refining stages of both hot and cold gas conditioning	Product of the gasification process, produced at 5–10% of the feedstock dry weight as a result of heating biomass in the absence of oxygen
Applications	Thermal energy for industrial processing or district heating Electricity for on-premise usage in industry Electricity exported to private or national grid network	Distribution with natural gas in the gas grid Sustainable alternative to methane Liquified RNG can be used in everyday and industrial transport vehicles	Fuel-replacement in fuel cell electric vehicles Manufacture of ammonia and fertilisers Rebalance renewable intermittent electricity production	Combined with liquid fossil fuels Standalone substitute input for internal combustion engines	Improve water quality Reduce nutrient leaching, soil acidity and irrigation requirements and fertiliser requirements
Market Size	**Global CHP Market** ($bn) 5.5% CAGR 29 (2021) 46 (2030)	**Global RNG Market** ($bn) 44% CAGR 8 (2022) 72 (2028)	**Global Hydrogen Market** ($bn) 6.4% CAGR 130 (2021) 227 (2030)	**Global Liquid Biofuels Market** ($bn) 6.5% CAGR 72 (2021) 126 (2030)	**Global Biochar Market** ($m) 13.2% CAGR 171 (2020) 588 (2030)

SOURCES: (Addressable market size): Combined Heat and Power: Precedence Research; Renewable Natural Gas: Business Insights Research; Hydrogen: Grand View Research; Liquid Biofuels: Precedence Research; Biochar: Allied Market Research.

DIGITAL CAPABILITIES AUGMENT PROPRIETARY HARDWARE AND SOFTWARE TECHNOLOGIES FOR TRUE, END-TO-END SOLUTIONS

EQTEC Patented and Proprietary Technologies



The combination of process technologies and software controls allows versatility, tailoring and analytics for owner-operators

SOURCE: Company information

EQTEC'S ACTIVE INNOVATION AND TESTING CAPABILITIES APPLY A UNIQUE MINI-PLANT WITH CAPABILITIES FOR ADVANCED APPLICATIONS

END-TO-END SYSTEM

The EQTEC facility hosted at the Université de Lorraine in France is a complete, EQTEC plant in microcosm, able to process tonnes of waste samples with precise measurement of process performance

BIOMASS & RDF

The facility has been running (with regular upgrades) since 2015, testing dozens of biomass feedstocks, as well as SRF and RDF from municipal and industrial waste, building our library of data

CONTAMINATED PLASTICS

In 2021, EQTEC and the university (UL) completed successful trials with plastic waste contaminated with hydrocarbons and hazardous chemicals, opening a new business pipeline in France

STEAM-OXYGEN

In 2022, EQTEC added steam-oxygen gasification capabilities, making possible the regular testing of advanced biofuels applications including RNG, hydrogen and liquid fuels

COMMERCIAL CLIENT APPLICATIONS

Over the years, EQTEC and UL have received delivery of real samples of feedstock from a range of prospective clients, to refine its plant designs; the commercial testing pipeline for 2023 was full and 2024 is filling fast

EQTEC also has an R&D facility at Universidad de Extremadura in Spain, and technology partnerships with Wood (for RNG, H2), CompactGTL (for gas-to-liquids) and others for chemicals such as ethanol, methanol

PHOTO: EQTEC full scope, end to end R&D facility at Université de Lorraine (France)

EQTEC'S UNMATCHED RECORD OF COMMERCIAL OPERATION IS BUILT ON COLLABORATION WITH LEADING R&D PARTNERS

Case Study: 'Movialsa' Plant (Ciudad Real, Spain)

Commissioned in and operational since 2011

- The waste-to-energy facility represents a fully operational and established business case
- Provides a solution to waste from olive oil production in the Ciudad Real region
- Long surpassing the initial theoretical limit, the plant has since achieved >40% electrical efficiency compared to a maximum of 23% for combustion-based processing

Solution for Mediterranean problem of olive pomace waste

- All electricity and energy produced from difficult-to-process olive pomace waste, which if unprocessed poses several environmental concerns
- The first fully operational business case for this feedstock

5.9 MWe	Electricity output per annum
6.6 MWth	Steam output per annum
64%	Total plant efficiency
20,000 tonnes	Feedstock throughput per annum
120,000+	Independently audited operating hours

Université de Lorraine

- Collaboration established in 2012 and pilot plant facility built in 2015 using EQTEC's proprietary gasifier technology
- The independent verification of RDF gasification at the university will prepare the technology for translation to a commercial scale
- In 2019, the test facility was upgraded and is now used to independently perform RDF testing, including by blue chip companies such as EDF

Universidad de Extremadura

- In 2020, EQTEC was awarded a contract upgrade for the syngas R&D facility
- Funding from the European Development Fund will enable testing of the production of liquid biofuels from syngas using Fischer-Tropsch technology
- The partnership epitomizes EQTEC's desire to develop proprietary knowledge and remain the most technologically advanced company in the industry

Seps

- Partnership to conduct tests at the University of Lorraine as part of Seps' technology innovation programme to develop low-carbon fossil fuel replacements
- Successfully verified using feedstock prepared for the test by Seps that EQTEC's waste-to-syngas technology works cleanly, stably and efficiently
- Following the successful test, Seps intend to collaborate on the development of waste treatment plants, of which the first is in Haute-Garonne, France

Wood

- Strategic collaboration agreement for the pursuit of market opportunities in developing and deploying clean waste-to-RNG and waste-to-hydrogen solutions
- Agreement aims to expand availability and application of EQTEC's syngas technology by combining with Wood's established VESTA methanation technology, engineering capabilities and capacity for scale
- Methanation technology enables producers of clean syngas to connect to existing natural gas networks

SOURCE: Company information

EQTEC FOCUSES ON ITS STRENGTHS IN THE VALUE CHAIN, ADDING WORLD-CLASS PARTNERS WITH COMPLEMENTARY CAPABILITIES

EQTEC Value Chain

Capability via Qualified Partners

PROJECT SOURCING AND DEVELOPMENT

- Waste management companies, EPC contractors and companies with waste management issues require waste-to-energy technology solutions
- Developers brigade and manage a wide range of stakeholders including permitting agencies, local authorities, insurance underwriters, technology suppliers, waste feedstock suppliers, offtake buyers, EPC contractors and others
- Significant budget is required to get project to FID(1)

EQTEC™ Business Model Focus

PROCESS ENGINEERING AND SOLUTION DESIGN

- Proprietary feedstock-to-syngas composition analysis capabilities and proprietary simulation software enables EQTEC to model and design the core technology or even entire plants
- Front-end engineering design, sometimes with collaboration with EPC contractors and other technology companies
- EQTEC's capabilities with design factor heavily into financial models essential to finalizing project development and achieving FID(1)

Capability via Qualified Partners

ASSET FINANCING

- Capex allocation by owner-operators and/or other project funders is essential for FID and construction start
- Advisors and consultants support optimal capital structures and introduction of to project finance
- At FID, both construction finance and O&M contracts must be confirmed in order to mitigate risks for the remainder of the project
- Project development costs are recovered as a part of contracting at FID

Capability via Qualified Partners

CONSTRUCTION AND INTEGRATION

- EQTEC equipment is manufactured by partners, to the design specification provided by EQTEC
- The EPC contractor manages construction and delivery of project outcomes on time, to budget, against an integrated schedule agreed with the commercial owner of the prospective plant
- EQTEC engineers advise and work as subcontractors to the EPC contractor to integrate core technology with rest of the installation

EQTEC™ Business Model Focus

COMMISSIONING, OPERATIONS & MAINTENANCE

- Commissioning of EQTEC technology is led by EQTEC, often in collaboration with the EPC contractor and suppliers providing other technology
- Following Commerical Operation Day (COD) of the plant, EQTEC provides a minimum of two years' performance guarantees on its technology, with accompanying maintenance
- Digital monitoring capabilities provide value-add real-time analysis for project owner-operators

SOURCE: Company information. (1) Financial investment decision.

EQTEC'S VALUE CHAIN ECOSYSTEM IS ESTABLISHED AND GROWING

EQTEC Value Chain Partners

Developers

TRESCA ENGINEERING SOLUTIONS
SENSE ESCO
bérim Société d'ingénierie
MONTE CRISTO ENGINEERING & DEVELOPMENT
PHOENIX ENERGY

- Collaboration with leading project development partners up to FID/financial close
- Planning, permitting, negotiation of feedstock and offtake terms and onboarding of a lead contractor/EPC
- Coordination of funding efforts to sell SPV to investor or owner-operator

Funders and Owner-Operators(1)

Caisse des Dépôts
Fucino Green
idex
Ariel Green
Crédit Mutuel
KYOTHERM
GazelEnergie

- Facilitate project financing and plants developments by EQTEC
- De-risking of plant construction and support EQTEC's longer-term development as a global licensor and innovator

Delivery Experts and EPCs

acciona
IPM INC
cobra
TOTAL WESTERN
px
Petrofac
TECNICAS REUNIDAS
VERSA ENGINEERING & TECHNOLOGY

- Integrated plant design, procurement, construction mobilisation, plant build and full commissioning
- De-risking and acceleration of plant build with engagement as pure technology provider and engineering expert

Technology Partners

JENBACHER INNIO
Compact GTL
LanzaTech
mott
Seps
wood.
TÜVRheinland Genau. Richtig.
UNIVERSITÉ DE LORRAINE
SIEMENS
UEX

- Facilitate the validation, development and commercialisation of EQTEC technology
- Build out additional technological capabilities through innovation

SOURCE: Company information. (1) Partners provide financing for the construction and development of plants.

EQTEC ENABLES TAILORED, 'LOCAL-FOR-LOCAL' WASTE SOLUTIONS THAT DELIVER CLEAN ENERGY FOR SECURITY AND INDEPENDENCE

Waste: Leave it where it is…

Forestry Waste	Natural parks Forest fire-prone woodlands Forestry industry
Agricultural Waste	Commercial farming Local, private farms Agro-industry & cooperatives
Industrial Waste	Factories Manufacturing sites Industrial waste sites
Municipal Waste	Municipal dumps Waste aggregation centres Waste processing facilities

Challenges/Opportunities:

- Significant costs for disposal of waste, with third-party waste management handlers required
- Significant economic and carbon costs to transport of waste to large, central treatment sites
- Third parties increasingly restricted in the waste disposal methods permitted by law; specifically:
  - Incineration and landfill limited by regulation and/or prohibitively high costs
  - Additional dis-incentivisation through carbon penalties for excessive emissions

EQTEC™

- ✓ Wide range of organic and inorganic feedstocks
- ✓ Scalability and flexibility through modelling and modular construction
- ✓ Proven and validated technology mitigates risks
- ✓ Wide range of green or clean offtake applications
- ✓ Baseload solution for renewable energy

Local waste to local value

by clean, baseload energy generation from the widest variety of waste types

…to get maximum value from it

Electricity & Heat	Utility companies Industrial processes District heating and power
Liquid Biofuels	Ground transport fuels Sustainable aviation fuel Ethanol, methanol, chemicals
Renewable Natural Gas (RNG)	Natural gas replacement Transition fuel pre-hydrogen Ready for existing networks
Hydrogen	Clean or green hydrogen Key input for industrial uses Future for consumer uses

Challenges/Opportunities:

- Undersupply of clean energy, with an estimated 65% of the world's energy supply needing to come from renewable sources to meet 2050 net zero ambitions
- Push to decarbonise operations by investors and other stakeholders encouraging ESG focus
- Intermittency of other renewables (e.g., solar and wind power) require specific conditions
- Energy security increasingly important in light of geopolitical tensions and 'levelling-up' intentions

SOURCE: Company information, IRENA.

EQTEC TECHNOLOGY PROVIDES ATTRACTIVE FINANCIAL RETURNS FOR INFRASTRUCTURE INVESTORS AND OWNER-OPERATORS

Financial Model Fundamentals

Waste Economics

Waste at Cost:

- Feedstock purchased at negotiated rates based on volumes, quality and market rates
- Feedstock delivered and/or stored on site, with feedstock provider contracted for continuity and reliability of supply

Revenue from Waste:

- For complex, toxic and wastes that are difficult to dispose of (e.g., municipal waste, contaminated waste, toxic waste)
- Gate fee/ tipping fee received upon delivery to site, based on volumes, complexity and market rates

Hybrid:

- EQTEC technology versatility accommodates the mixing of certain waste types, allowing a blend of paid feedstock and gate fee feedstock

Project Delivery and Plant Operations Economics

Capex:

- Project development costs (incl. permitting, planning, contracts, etc.)
- Engineering, design, development and specification
- Plant equipment, installation, QA and commissioning
- Equipment replacement

EQTEC™-Enabled Projects & Plants

Opex:

- Plant operations and maintenance costs (incl. staff and outsourced services)

Offtake Economics

Electricity and Heat:

- Sale to grid (often at preferential tariff)
- Private wire (usually at higher rate than tariff)

RNG:

- Natural gas replacement, straight to grid
- Tanking and trucking where preferred

Hydrogen:

- Where possible, export straight to grid
- Market rates for industry; consumer in future

Liquid Biofuels:

- Mixed fuel requirements drive ethanol need
- Very high tariffs now for SAF

Biochar:

- Private sale (e.g., farms, highways agencies)
- Market rate + ESG value-add, carbon credits

Attractive economics over legacy alternatives and other, more mature renewables (e.g., wind, solar)

SOURCE: Company information

EQTEC™

PHOTO: EQTEC-specified equipment after fabrication at contract manufacturing partner site