



INVESTOR PRESENTATION

November 2020

FORWARD-LOOKING STATEMENTS

This presentation contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and other federal securities laws that are intended to be covered by the "safe harbor" created by those sections, including statements regarding our future performance, ability to enter into future partnerships, future portfolio and ability to obtain future regulatory approval.

All statements in this presentation that are not based on historical fact are forward-looking statements. While management has based any forward-looking statements on its current expectations, the information on which such expectations were based may change. Forward-looking statements involve inherent risks and uncertainties which could cause actual results to differ materially from those in the forward-looking statements, as a result of various factors including those risks and uncertainties described in the risk factors and in management's discussion and analysis of financial condition and results of operations sections of our most recent annual report on Form 10-K and any subsequent quarterly reports on Form 10-Q. We urge you to consider those risks and uncertainties in evaluating our forward-looking statements. We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. Except as otherwise required by the federal securities laws, we disclaim any obligation or undertaking to publicly release any updates or revisions to any forward-looking statement contained herein (or elsewhere) to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

In this document, we refer to information regarding potential markets for products and other industry data. We believe that all such information has been obtained from reliable sources that are customarily relied upon by companies in our industry. However, we have not independently verified any such information.

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INVESTMENT HIGHLIGHTS

Energous is a pioneer and leading provider of solutions enabling next generation wireless charging

- 🌀 **Full spectrum of RF-based wireless power solutions** – charging-at-a-distance and contact-based
- 🌀 Large, growing market opportunity for **Wireless Charging 2.0** across diverse applications
- 🌀 Commercially ramping – **production ready, regulatory approved, wireless power technology**
- 🌀 **Robust engagements with Tier 1 / 2 customers and partners**
- 🌀 **Best-In-Class technology and robust patent portfolio**
- 🌀 Global regulatory presence and expertise – **pioneer and leader in certification efforts** for RF-based wireless charging
- 🌀 **World-class engineering expertise** in RF, analog/mixed-signal IC, antennas, software, hardware and system design
- 🌀 **Proven, highly experienced** management team

ENERGOUS AT-A-GLANCE

Developer of WattUp®
RF-Based, Wireless Charging 2.0



Fabless semiconductor company (Nasdaq: WATT)

Developed proprietary WattUp wireless power technology consisting of semiconductor chipsets, software controls, hardware designs and antennas

Customer model - full system reference designs to CE, medical, industrial and IoT companies

Approved to ship in 112 countries including the E.U., Japan and North America

First FCC Part 18 certification for power-at-a-distance charging

227 Patents Issued (65+ patents pending)

53 Employees

Founded 2012



WIRELESS CHARGING EVOLUTION

The market is ready for the next generation of wireless charging

Current State of Wireless Charging Market

- Wireless power continues to gain consumer adoption
- Dominated by inductive charging technology - over 3,700 Qi-certified products on the market today
- NFC-based wireless charging complementary to Qi-based charging
- Smartphones continue to be the main application
- Vendors are looking beyond Qi

Wireless Charging 1.0



Hundreds of applications are underserved or not addressed at all because of the limitations of current technologies

Limitations of Wireless Charging 1.0

- ✗ Can't charge at any meaningful distance
- ✗ Need flat surface contact
- ✗ Requires strong (tight) coil alignment
- ✗ Can only charge one device per Tx
- ✗ Require matching size coils between Tx and Rx
- ✗ Challenges with smaller receiver size (Qi)
- ✗ Higher total cost of Rx implementation

OUR VISION • WIRELESS CHARGING 2.0

Enable wireless power the way Wi-Fi enables wireless data connectivity



“ I BELIEVE THAT WIRELESS POWER MAY BE VITAL FOR THE SUCCESS OF FUTURE CONNECTIVITY AND PRODUCTIVITY. . . ”

-FCC Commissioner Michael O’Rielly,
Statement to the US Senate Committee on
Commerce, Science, & Transportation, 01/15/20



ADVANTAGES OF RF-BASED, WIRELESS CHARGING 2.0

Opens the door for additional applications to benefit from wireless power

Near Field and At-A-Distance Charging

- Support from milliwatts to watts via scalable architecture

Simple Implementation

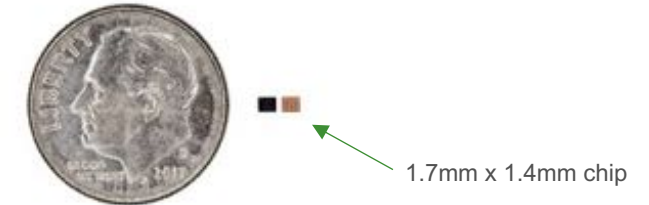
- Flexible antenna design allows for small footprint and support for curved/non-flat surfaces
- Universal transmitter supports a variety of receiver devices and supports simultaneous multiple device charging

User Friendly Experience

- Placement and orientation flexibility gives a true “drop-and-charge” experience
- Foreign object detection

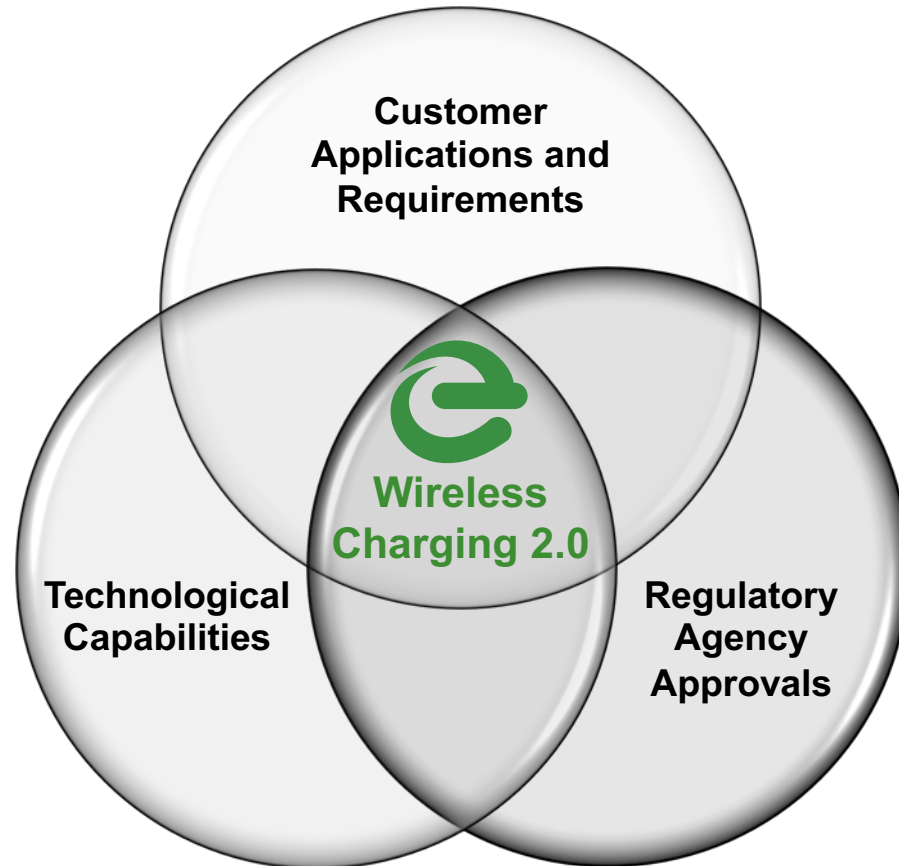
Rugged and Sterile Designs

- No more broken USB or Pogo Pin connectors
- No more alignment issues
- No connector openings or exposed metal, which results in full waterproof and dustproof designs



WIRELESS POWER VECTORS NOW CONVERGING

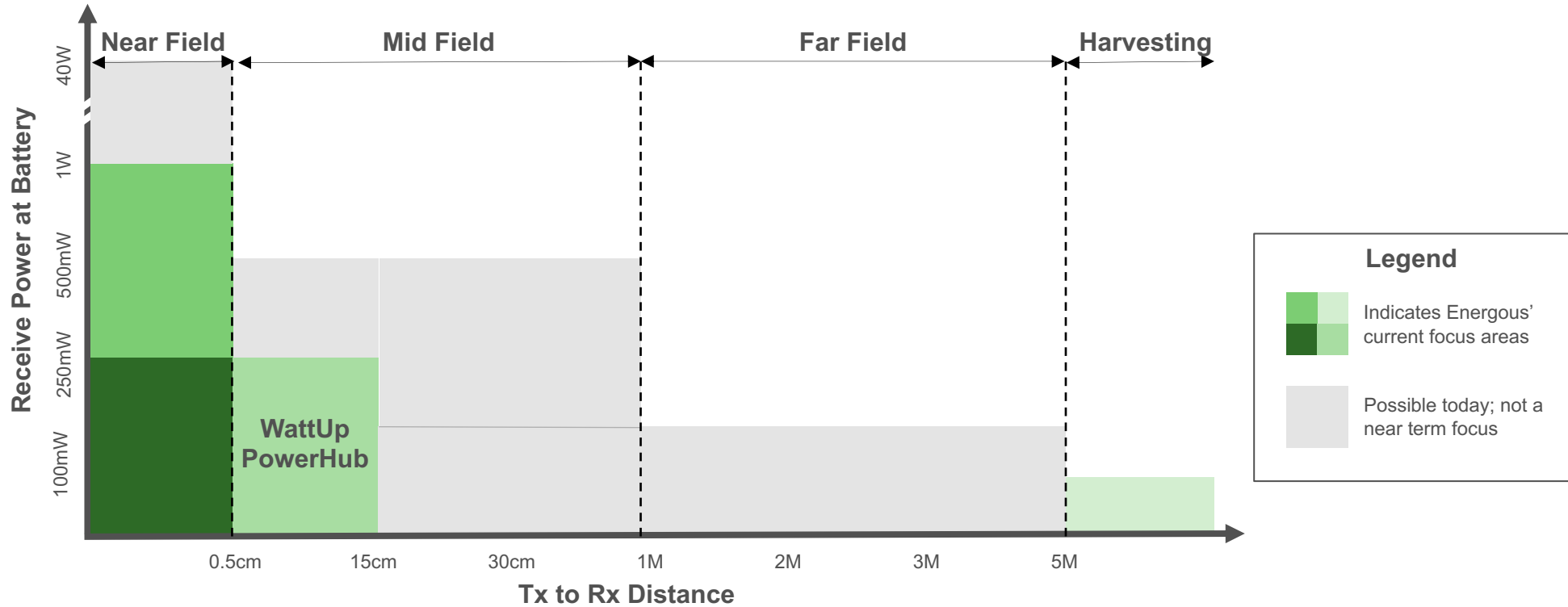
Energous is at the forefront of what is possible with wireless power



The Wireless Charging 2.0 Opportunity

- While WattUp technology supports higher power at further distances, Wireless Power Transfer (WPT) is ultimately constrained by current global regulatory rules
- Given the extensive work on the three wireless power vectors, Energous has in depth knowledge of what is possible with WPT:
 - ✓ Years of proprietary technology development and investment – understand path loss; developed technology at different frequencies
 - ✓ Extensive work with the FCC and regulatory bodies to push certifications and standards forward
 - ✓ Technology mapped against numerous customer applications and requirements
- Energous is focused on commercializing RF-based charging opportunities at the intersection of these vectors

WIRELESS CHARGING 2.0 ECOSYSTEM ROADMAP



	Near Field	Mid Field	Far Field	Harvesting
Applications	Hearables, Wearables, Medical Sensors, Smart Glasses	Home IoT, Gaming, Smart Glasses, Hearables, Wearables, Smartphones, Desktop Ecosystem, Portable Computing	Military, Public Safety, Industrial IoT, Smart Home	Industrial IoT (ambient), Smart Building Sensors, Retail
Energo Value Proposition	<i>Wirelessly charge multiple devices at-a-distance, orientation freedom, smaller form factors, foreign object detection, same receiver scales from higher power/short distance to smaller power/long distance</i>			<i>Trickle charge IoT sensors, eliminate battery replacement</i>

INTRODUCING WATTUP POWERHUB

The WattUp PowerHub is where users bring their devices to get charged up

Wireless Charging Transmitter Supporting Groundbreaking At-a-Distance Charging

- Scalable performance is currently up to 5.5W of Tx power
- Charging zone up to 15cm
- Small size with most cost optimized BOM (Bill of Material)
- Single PA, antenna (non-beamforming)
- Based on FCC certified technology
- Applications include smart speakers, gaming consoles, desktop speakers, Wi-Fi access points, computer monitors, teleconference equipment, and more

Benefits

- Flexible designs that can fit into multiple transmitter and receiver designs
- Universal transmitter supports a variety of receiver devices charging at the same time “one to many”
- True “drop-and-charge” experience
- Over-the-air distance charging interoperability
- Scalable Tx architecture to go for higher power and higher distances



LONG RANGE CHARGING OVER THE AIR VIA WATTUP HARVESTING

Significant TAM addressing opportunities in retail, smart home and industrial IoT

Opportunity

- Perpetual sensors and various IoT devices for smart home, smart building, enterprise, retail and industrial applications
 - Ambient harvesting (uW to nW)
 - Dedicated harvesting (mW)

Energous Technology

- High efficiency and very low power RF-DC conversion in 900MHz
- Simple and low-cost implementation for Tx and Rx solutions
- Ability to modulate Tx power while leveraging extended regulatory opportunities in applications like industrial and retail



Retail



Industrial



Enterprise 

MULTIPLE, ATTRACTIVE MARKET OPPORTUNITIES

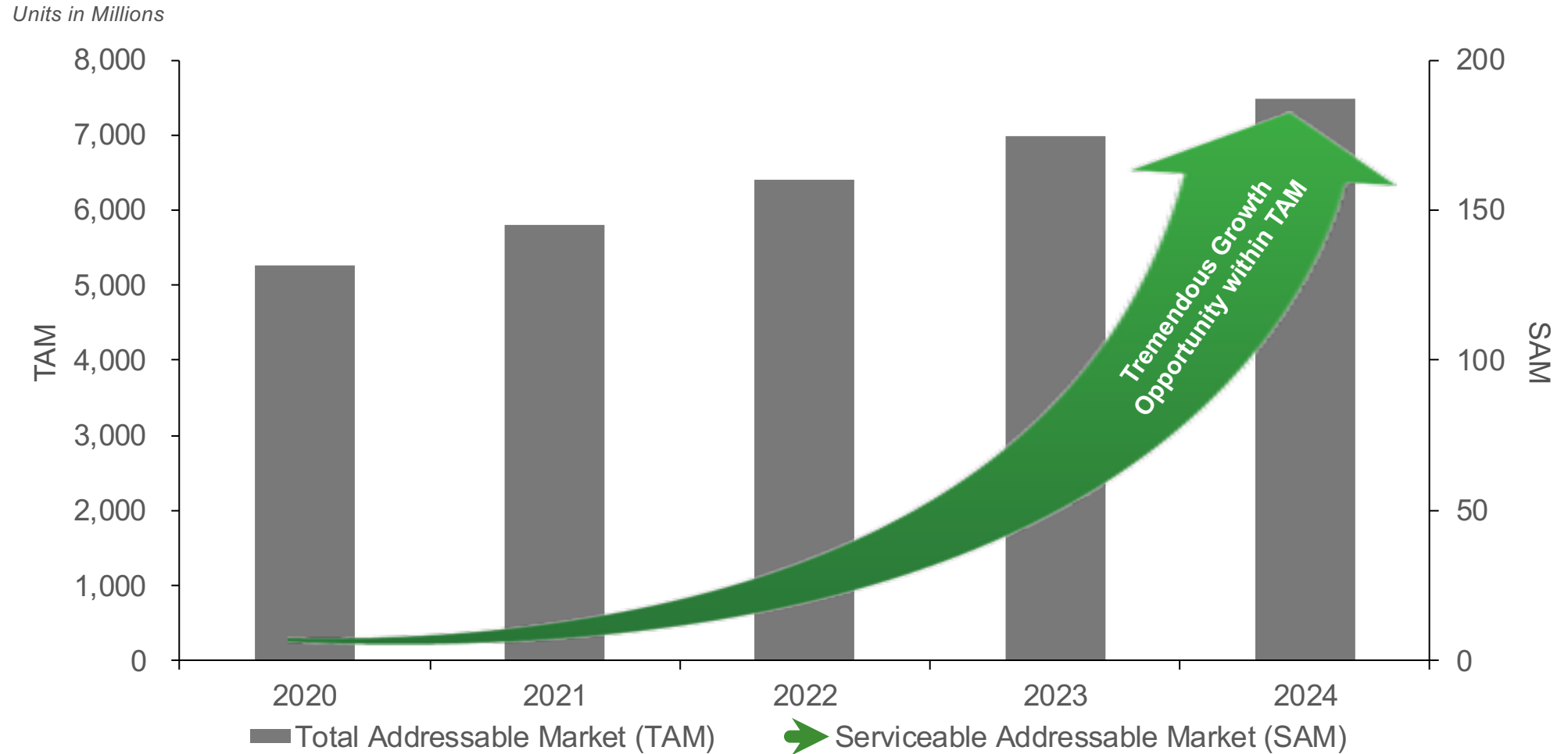
Energous' technology can address opportunities currently representing over 5 billion units



Source: RCBG, May 2020.

ADDRESSABLE MARKET GROWTH

Energous is best positioned to capitalize on the growing market opportunity for Wireless Charging 2.0



Source: RCBG, May 2020.

WATTUP NEAR FIELD REFERENCE PLATFORMS

Multiple Application Transmitter & Receiver Designs



IoT / Tracker

- Dual or Single Tx Antennas
- Multiple Rx's
- Power: up to 200mW



Hearable

- Small Tx with PCB antenna
- Two Rx's
- Power: up to 250mW



Hearing Aid

- Miniature Dipole Antenna
- Two Rx's
- Power: up to 80mW



Smart Glasses

- Single Stamped Antenna Tx System
- Two Rx's
- Power: up to 80mW each temple

BEST IN CLASS TECHNOLOGY

Full power spectrum of regulatory-approved, production ready, wireless charging 2.0 technology

Transmitter

- Highly integrated CMOS single chip
- Processing, authentication, system monitor and control

Beamforming

- Scalable 8 antenna CMOS beamformer
- Per antenna control to focus array gain

Power Amplifier - 1W to 20W

- High efficiency, cost effective and small size CMOS and GaN devices
- PA controller for tuning and protection

Receiver – 1mW to 20W

- High efficiency, cost effective and small size passive RF-DC rectifiers in CMOS and GaAS

Antenna

- High coupling near field and high gain far field antennas implemented in small sizes and low-cost material

Software and System Hardware

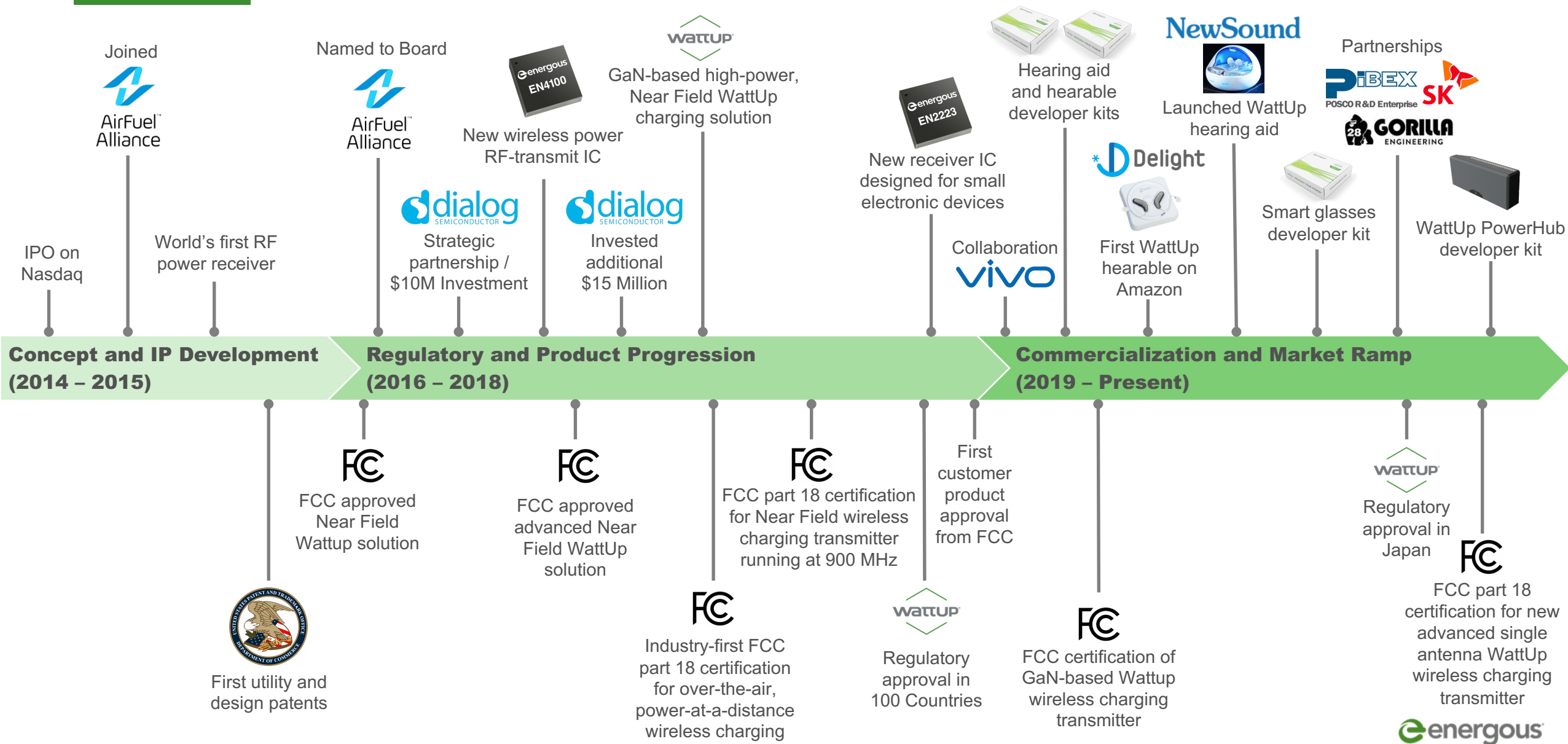
- Wireless system charging control via BLE out-of-band control, and App configuration and control
- Multiple reference designs supporting customer accessories



Differentiators:

- ✓ *Ultra-small, RF antenna-based solution*
- ✓ *Smaller antenna than coil-based designs fitting diverse form factors*
- ✓ *Secure pairing of transmitter and device under charge*
- ✓ *High efficiency PA provides optimal charging*
- ✓ *Improved spatial and orientation freedom*
- ✓ *Eliminates connectors and charging contacts*
- ✓ *Enables fully sealed waterproof design*
- ✓ *Scalable and efficient architecture*

LEADING THE PARADIGM SHIFT IN WIRELESS CHARGING



PARTNERSHIPS

SK Telesys

- Delight PSAP, Smartglasses, IoT



PiBEX (POSCO)

- Ultra Wideband Tracker for Industrial IoT



Primax

- ODM/CM partner for standard Tx



Dialog Semiconductor

- Tremendous synergy - Leadership position in BLE & PMIC in Consumer Electronics
- Leverage Dialog's world-class sales and operations organization
- Energous maintains ownership of all intellectual property
- Closely aligned targeting industrial IoT applications



PATENT STRATEGY

Significant investment in developing IP critical to commercializing this technology

Our IP Strategy is Designed to Protect The 5 Key Areas of Our Technology

- 1 Processing Algorithms
- 2 Antenna Designs
- 3 Transmitter and Receiver ASICs
- 4 Other Software Controls (e.g., Bluetooth® management)
- 5 Hardware (e.g., board layout)



We Expect That Our Patent Portfolio Will Position Us For Leadership



227 Patents Issued as of 9/15/2020

65+ Patents Pending



GLOBAL REGULATORY ADVANTAGE

Forging a Worldwide Path for Wireless Charging 2.0 Regulatory Approvals

Approvals

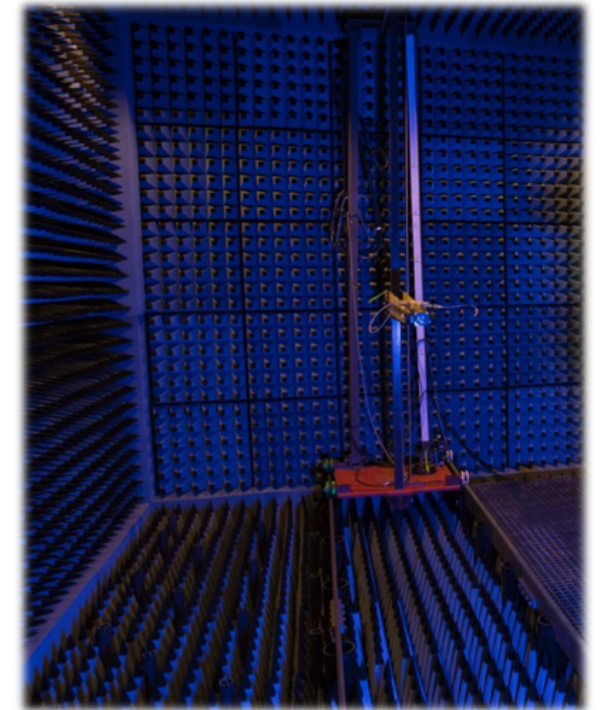
- Approved for sale in **112** countries including the United States, European Union, Japan, and Taiwan
- First company with FCC Part 18 approvals for power-at-a-distance using beamforming (December 2017) and non-beamforming (April 2020)

Strategy

- Leverage a global network of industry experts to drive international approvals of WattUp technology
- Directly support customers and partners in their own regulatory approvals
- Build regulatory landscape through key organizations: ITU, ETSI, CISPR, IEC TC-106, ANSI C63.30 and APEC Tel
- **Unique in-house test capability** including Speag DASY6 SAR robot, anechoic chamber and multiple shield rooms to optimize R&D efficiency



Speag DASY6 SAR robot



Anechoic chamber

BALANCE SHEET AT-A-GLANCE

Strong balance sheet with no debt

	09/30/20 (\$ in Millions)
Cash & Cash in Transit	\$20.5
Total Current Assets	\$21.3
Total Assets	\$23.1
Total Current Liabilities	\$3.3
Stockholders' Equity	\$19.0

MANAGEMENT TEAM & BOARD

Our foundation is a team and board of highly-experienced technology executives

Management Team

STEPHEN R. RIZZONE

President, Chief Executive Officer & Director

- › Active Storage
- › NetVantage, Inc.
- › Ortel Corporation
- › 3Com

CESAR JOHNSTON

Chief Operating Officer & Executive Vice President of Engineering

- › Marvell
- › Broadcom
- › ARC International

BRIAN SEREDA

Senior Vice President & Chief Financial Officer

- › ActiveVideo
- › Virage Logic
- › Proxim Wireless

NEERAJ SAHEJPAL

Senior Vice President of Marketing and Business Development

- › Broadcom
- › PMC-Sierra
- › NVIDIA

Independent Directors

ROBERT J. GRIFFIN

Chairman of The Board

- › Best Buy
- › Griffin International Companies

DAN FAIRFAX

Director

- › Brocade
- › Foundry Networks

RAHUL PATEL

Director

- › Qualcomm
- › Broadcom
- › Samsung

REYNETTE AU

Director

- › Intel
- › Micron
- › NVIDIA

MIKE NOONEN

Director

- › MixComm
- › NXP
- › Global Foundries

SHERYL WILKERSON

Director

- › Michelin
- › FCC
- › U.S. Senate and House Committees

SUMMARY

Energous is poised for near-term and long-term growth

- Leading scalable technology
- Established partnerships
- Regulatory expertise and approvals
- Strong competitive position
- First product launched
- Strong cash position
- Tier 1 & Tier 2 customer relationships
- Experienced team

 energous®





THANK YOU
