

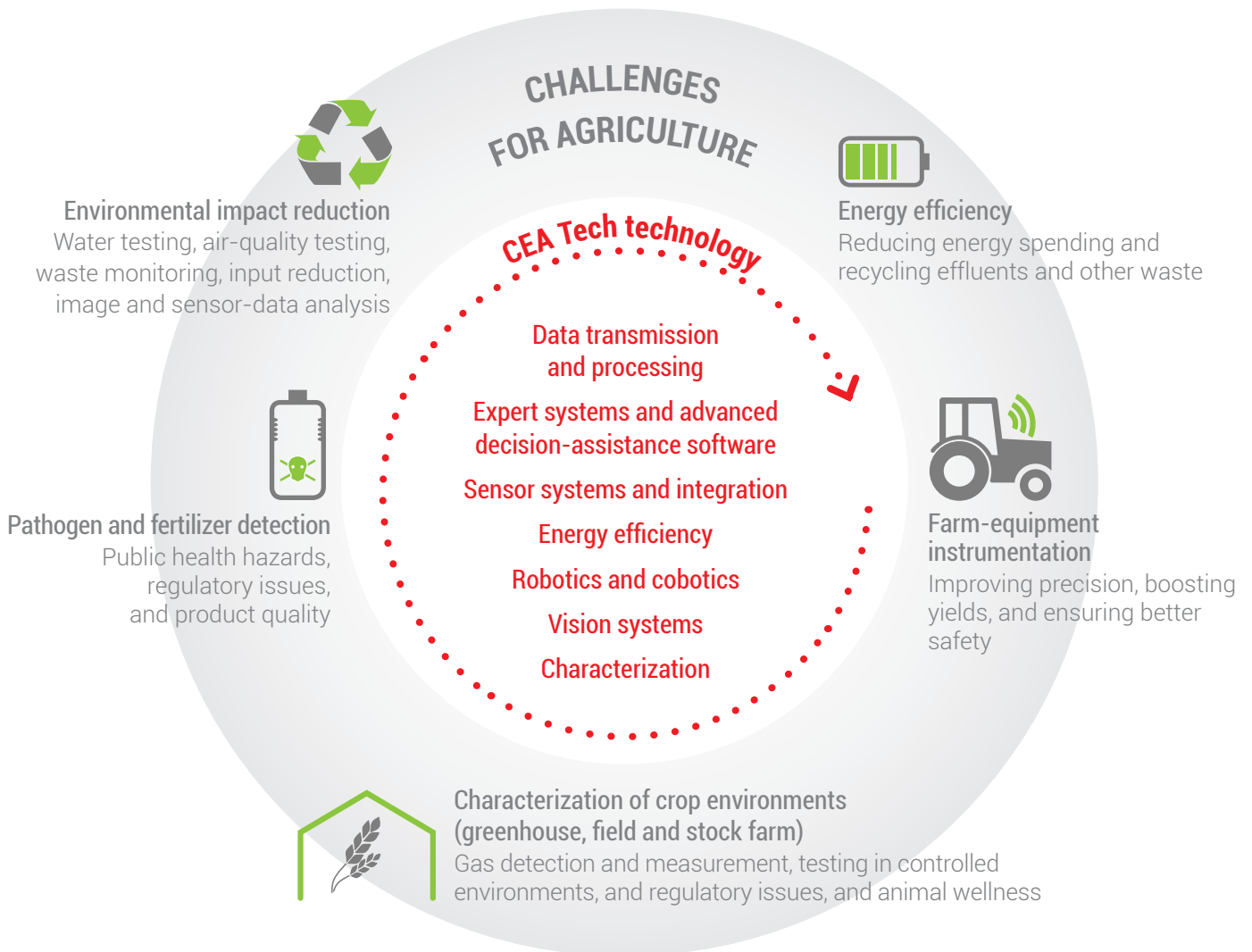
FROM RESEARCH TO INDUSTRY

cea tech



CEA TECH SERVICES FOR THE AGRICULTURE INDUSTRY

Technology for tomorrow's agricultural challenges



CEA Tech can help the following businesses:

- Agricultural equipment manufacturers: greenhouses and other agricultural buildings; agricultural vehicles and other equipment
- Seed manufacturers: assistance selecting varieties; monitoring of greenhouse and crop field testing; seed manufacturing and distribution
- Farming cooperatives

Here are some of the ways CEA Tech can support your development:



Terahertz imaging

Measure plant water content to locate and identify biochemical components

Sensors for air-quality monitoring

Test air quality in greenhouses; detect the presence of pathogens in crop fields

Airborne-particle collectors

Monitor fruit and vegetable maturity; detect the presence of pathogens

Sensors for water-quality monitoring

Detect substances like proteins, toxins, hormones, pesticides, drugs, and ions in water

Sensor integration

Instrumented textiles and containers to measure key indicators directly at the plant

Heterogeneous sensor management

Use remote command-control systems to automatically trigger watering depending on the data gathered

Smart buildings

Integrate photovoltaics into farm buildings; model building system operation; design optimal ventilation systems; cameras

Heat production and storage

Recover heat and use thermal solar energy

Batteries and associated storage systems

Provide efficient energy for agricultural vehicles and equipment

Smart data transmission systems

Retrieve data from extreme or difficult-to-access environments (underground, wet)

Expert systems and advanced decision-assistance software

Generate seed recommendations; analyze and leverage past test results

Robotics and cobotics

Design specific robots and cobots to perform or assist with farming tasks

Characterization

Characterize seeds at the nanometric scale

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