



## CHALLENGE SPECS

### CHALLENGE

Wireless Wakeup Call

### DISCIPLINES

Technology, Manufacturing

### CHALLENGE AWARD

\$25,000

### SOLVERS ENGAGED

522

### SOLUTIONS

30

### PROGRAM DURATION

90 days

### GLOBAL SOLVER PARTICIPATION



Precyse Technologies produces active RFID tags or “cell phones for things” and needed a way to have these tags activated as products arrived at their destinations while increasing battery life to over 5 years. Precyse needed a solution to allow a deployment with a 100 foot wireless wake-up range instead of the limiting market standard of 10 feet. They understood from the start that taking a traditional approach to R&D could cost well over \$1 million, which they preferred to invest in direct marketing and sales.

### Challenge

- Needed a way to wake up active tags as they arrived in transit or entered a customer facility.
- Technology needed to prevent battery drain from tags “listening” for these activations.
- The range of this device needed to be significantly longer than existing technology, around 100 feet versus the standard at the time of around 10 feet.
- The solution could not affect existing customer processes.

### Solutions

- More than 500 solvers from 64 countries worked on Precyse Technologies’ Challenge.
- Solution was called “passive wakeup technology”.
- Allowed “Smart Agent” tags to harvest energy from radio waves up to 100 feet away from the transponders at delivery locations.
- Technology allows Precyse to extend battery life on tags well beyond 5 years and gives them the flexibility to add new features as their technology evolves.

### Result

- Precyse now has a product that delivers a more efficient approach to energy saving while increasing the range.
- The Smart Agent tags lower the cost of tracking physical assets and improves workflow for its customers.
- The technology allows inventories on a supply chain or products on a manufacturing line to talk to one another, to people or to computers more efficiently.
- By tripling the range of passive wireless wake up, Precyse will be able to overcome the narrow-access-gate limitation, removing one of the key hurdles competitors face when trying to save on mobile-device battery life.

*“Not only was going down the conventional development path prohibitively expensive, it was simply too slow and had no guarantee of success. We wanted to be first-to-market not the last one to the table.”*

Rom Elizenberg, Co-Founder and CMO, Precyse