The global leader in 21st century science solutions and education
Presentation Outline

• Millennium Participant and Sustainable Classroom Model
• PASCO Complete Solution for a Sustainable Classroom
• Energy and STEM as Driver of Sustainable Development
“In today's world, science and technology are increasingly interwoven into our daily lives. National economies depend on it. Our planet and the world's population depend on it,” said Paul Stokstad, founder of PASCO Scientific. For nearly 50 years, PASCO has dedicated itself to helping educators provide an effective, modern science education. As a founding member of the Millennium@EDU Foundation, we will work to ignite and support truly transformational projects in education, bringing this opportunity to students around the globe. PASCO and our employees are completely dedicated to this cause.”

Mike Bridge – Corporate Vice-President
USA
Sustainable Classroom Model
PASCO Complete Solution for a Sustainable Classroom
The Complete Package

Technology

Customized Content

Professional Development and Curriculum Support
PASCO Technology
PASCO Smart Cart

Motion encoder
- no tape required
- 0.1 mm resolution

3-Axis Accelerometer (+/- 16g)
3-Axis Gyro
Force sensor (+/- 100N)

Simultaneously measure:
- Position
- Velocity
- Acceleration
- Force
- Incline angle

No track required.
All sensors. No limits.

PASCO AirLink.

Every PASCO sensor can be made wireless.

No exceptions.
One simple user experience across all technologies

Providing a future-proof investment
New wireless sensors

- Eliminate interface—reducing total cost and complexity
- Minimize clutter and clean up
- Simplified experience for better time management
- World-leading prices for improved access for all
PASCO CONTENT
SPARKvue – a full featured software

Choice of display types

Customizable layout
Data Sharing with SPARKvue

- Easiest solution available
- Any device to any other devices
- No extra equipment required

A PASCO cloud service
PASCO Sparkvue Content
Datalogging sensors

Collect data beyond Bluetooth range

Collect data without draining tablet/computer battery

Study microclimates at multiple locations overnight
A real classroom solution

No limits.
School Ecosystem

- Computers
  - Win/Mac
- Chromebook
- iOS
- Android

One software
All sensors
No exceptions
PASCO CURRICULUM DEVELOPMENT AND SUPPORT
STEM Curriculum
Motivate and Inspire students to excel in Science, Technology, Engineering, and Math (STEM) Curriculum
“Energy and STEM as driver of Sustainable Development”.
Engineering

Material Testing Machine

Digital/Analog Breadboard
Renewable Energy Bundle Kit-STEM Lesson
Renewable Energy Bundle Kit Content

The Renewable Energy Bundle Kit contains all of the equipment needed for a single lab station:

• Long turbine blades (6)
• Short turbine blades (6)
• STEM adapters for student designed blades (6)
• Towers (2)
• Weighted base
• Nacelle with generator
• 1 W Solar Cell
• LED
• Patch Cords (2)
• Wireless Voltage Sensor
• Wireless Current Sensor
• Shrouded Alligator Test Leads
• Sparklabs
Renewable Energy Sparklabs

• **Design an Efficient Turbine STEM challenge**: Design the most efficient wind turbine for a given wind speed

• **Energy Transformations**: Learn how one type of energy can be converted into another. Observe energy transformations that produce electricity.

• **What is Electricity?** Determine the relationship between voltage and current while studying electricity in a solar-powered circuit.

• **Solar Panel Performance** Investigate how panel angle, cloud cover, and dust affect solar panel output.

• **Wind Power I: Distance and Speed** Understand the relationship between wind speed and turbine output.
STEM CURRICULUM AND CASE STUDIES

• STEM TECHNOLOGY AND CURRICULUM DEPLOYMENTS
  - UAE MOE
  - EGYPT MOE
  - USA Public Schools
  - QATAR MOE

• STEM CASE STUDIES
  - Windham Public Schools Connecticut, USA
  - Public School in Hillsborough County, Florida, USA
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