

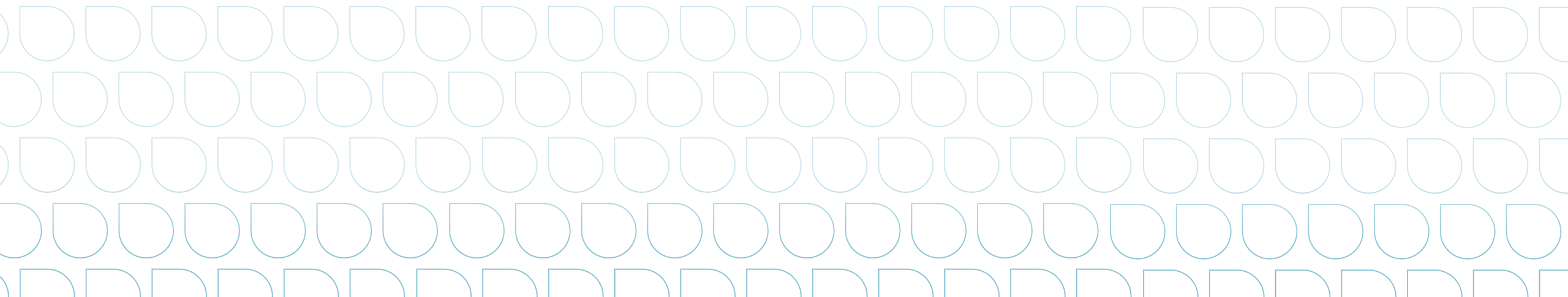


LITTLE RED SCHOOLHOUSE TRAINING FOR DECARBONIZATION

MIKE LICASTRO

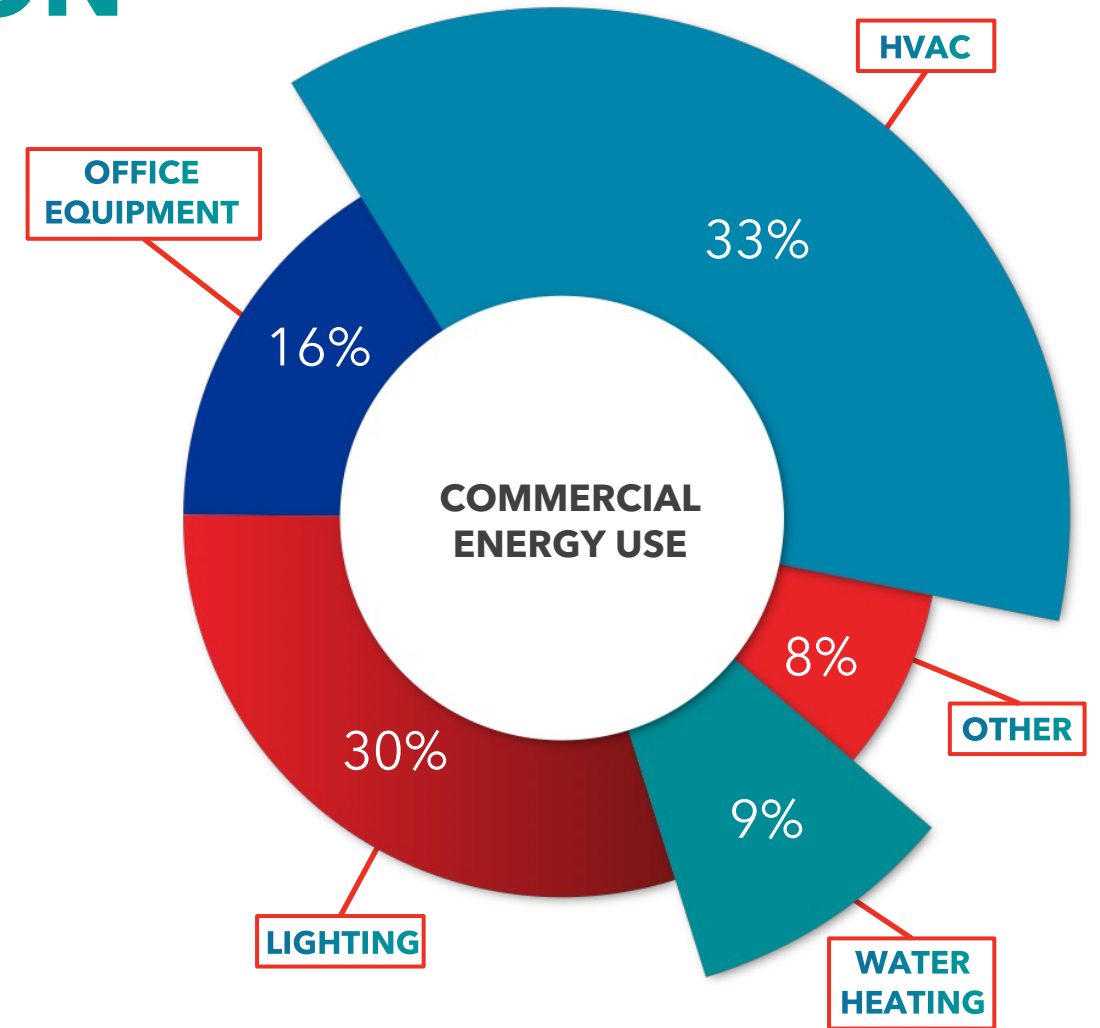
MANAGER, TRAINING AND EDUCATION

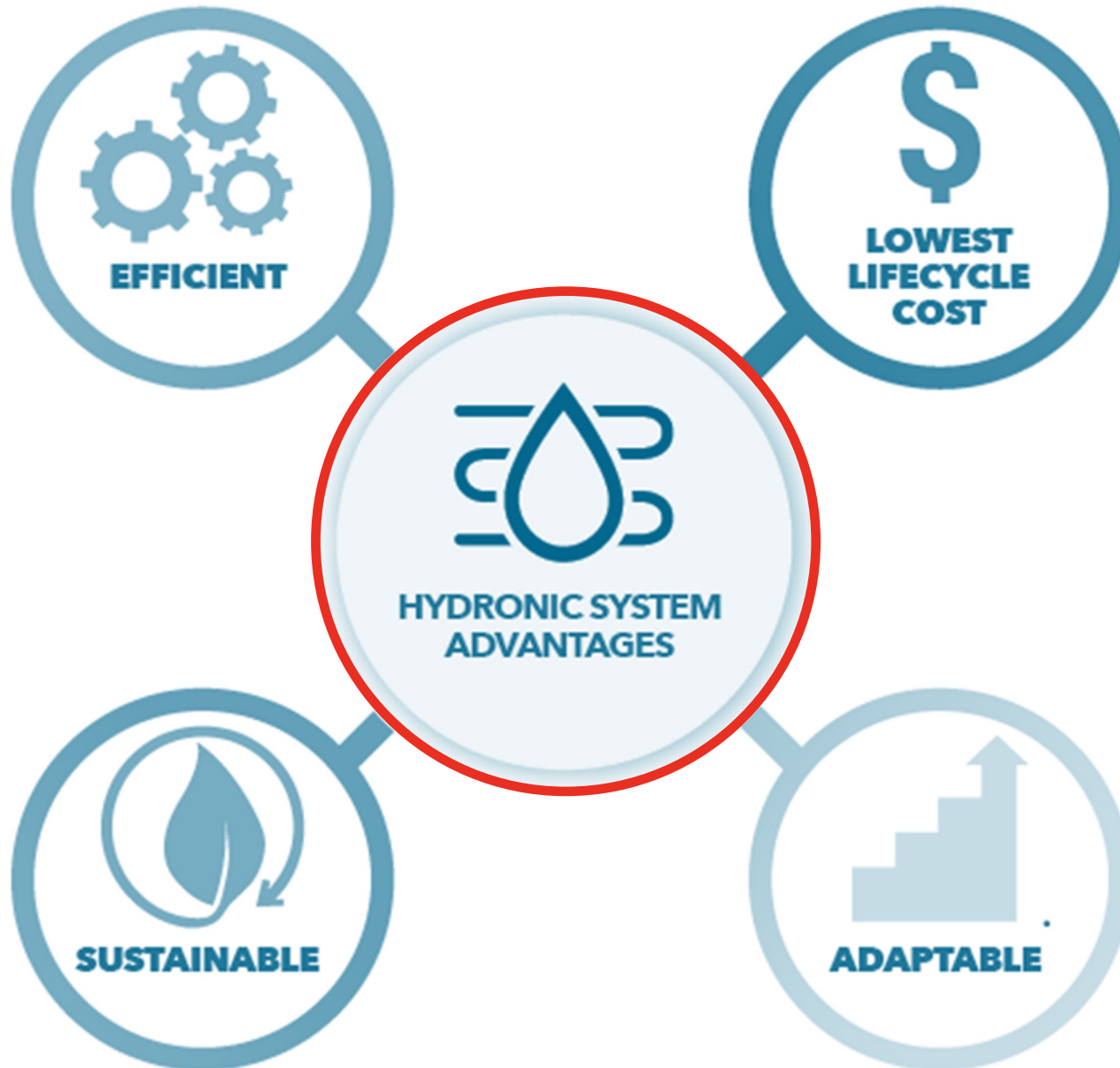
Commercial Building Systems/HVAC
at Bell & Gossett, a Xylem company



THE DECARBONIZATION CHALLENGE

- Commercial buildings emit **16%** of CO₂ in the U.S.
- To effectively address the challenge of decarbonization, we need to holistically address the built environment
- Roughly **80%** of buildings targeted for decarbonization already exist, many good candidates for adaptive reuse of their hydronic systems
- New building designs will look to hydronic solutions such as water-source heat pumps, thermal storage and other renewable, non-combustion energy sources to meet the net-zero building challenge





HYDRONIC OPPORTUNITIES

- Solutions using water with a global warming potential (GWP) of **zero**
- Water offers superior thermal conductivity compared to air
- Hydronic systems integrate with **all** non-combustion renewable heating and cooling sources
- Numerous distribution piping strategies available to simplify equipment sizing and selection, reduce operational energy consumption and encourage good routine maintenance

LITTLE RED SCHOOLHOUSE

AN INDUSTRY ICON SINCE 1954

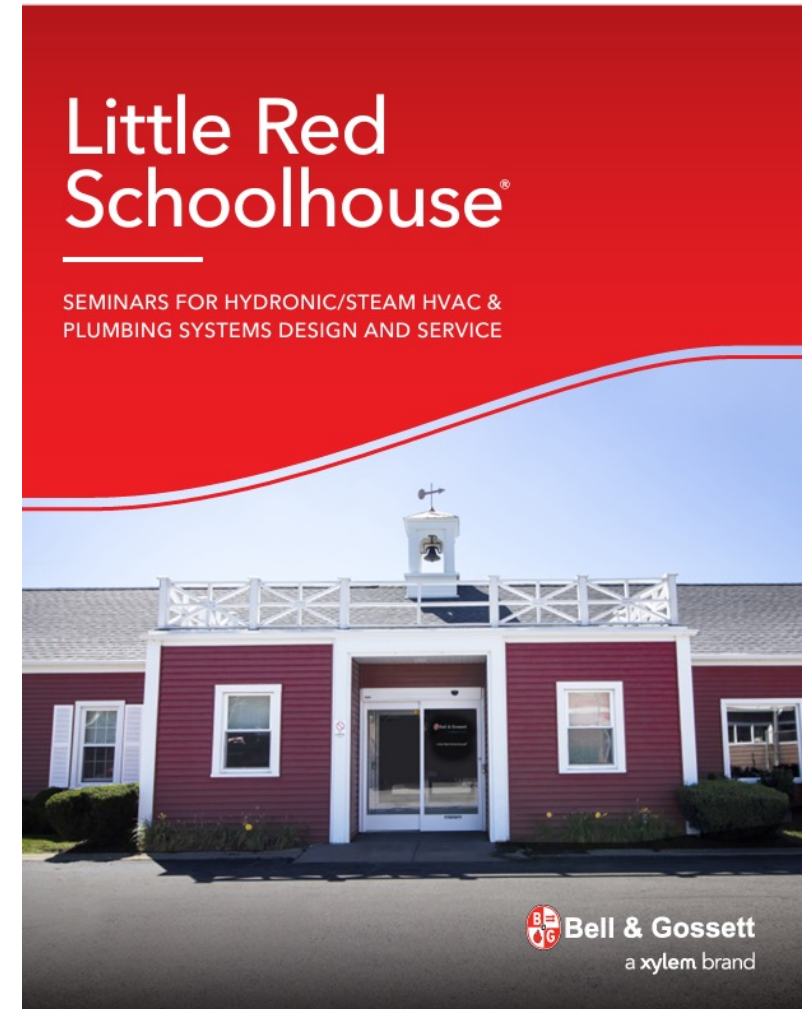
- Over 70,000 students have attended
- Systems-based concept of teaching
- IACET accredited
- Experienced, dedicated full-time instructors
- Assortment of 3-day seminars to choose from



TRAINING & EDUCATION OPPORTUNITIES FOR DECARBONIZATION

CATALOGED SEMINARS

- Modern Hydronic Heating Systems (Basic)
- Design & Application of Water-Based HVAC Systems
- Large Chilled Water Systems
- Plumbing Systems Design
- Service & Maintenance of Water-Based HVAC Systems
- Steam Systems Design and Application
- New Courses Coming Soon!





IN-PERSON TRAINING AT THE SCHOOLHOUSE



SEMINAR DETAILS AND LOGISTICS

- Seating capacity - 48 (Normal class size 40-42)
- Courses 3 days in duration (Tuesday-Thursday)
- Online self-registration, including lodging needs
- 1.7 CEUs (17 hours) awarded with full 3-day attendance
- PowerPoint lectures, work problems, live demonstrations
- Bell & Gossett plant tour in Morton Grove, Illinois

HANDS-ON OPERATING DEMONSTRATIONS

- **The Hydronic Wall**
- **Steam System Components**
- Variable Speed Pump Control
- Hydronic Balance Valve Options
- Variable Speed Pressure Boosting
- Potable Hot Water Recirculation
- Service & Maintenance
- Newly Renovated Mechanical Room





TRAVELING LITTLE RED SCHOOLHOUSE

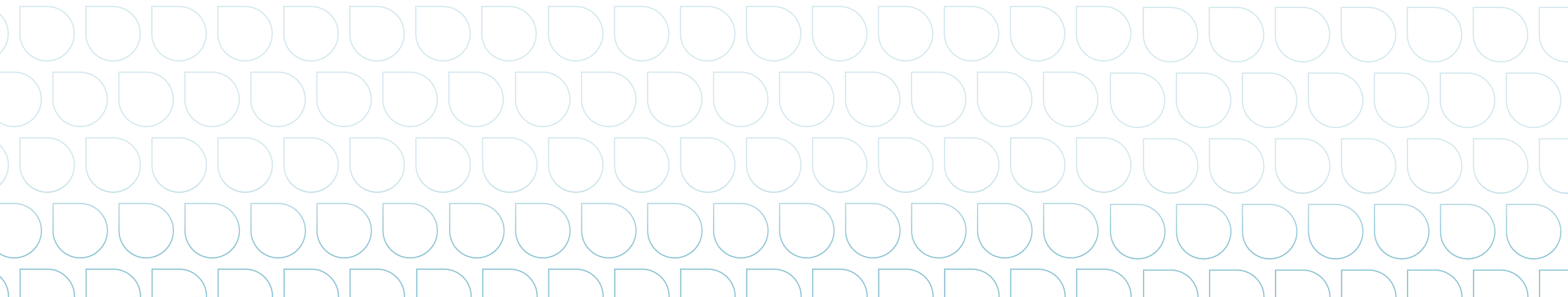
SEMINAR DETAILS AND LOGISTICS

- Multiple days of training throughout local rep territories
- 6 hours (0.6 CEUs) of training per day
- Hydronic & steam sessions available
- PDFs of all presentations provided



HYDRONIC SYSTEMS

Countless ways to solve the
decarbonization challenge!



THANK YOU

Explore our
educational
resources ►

