

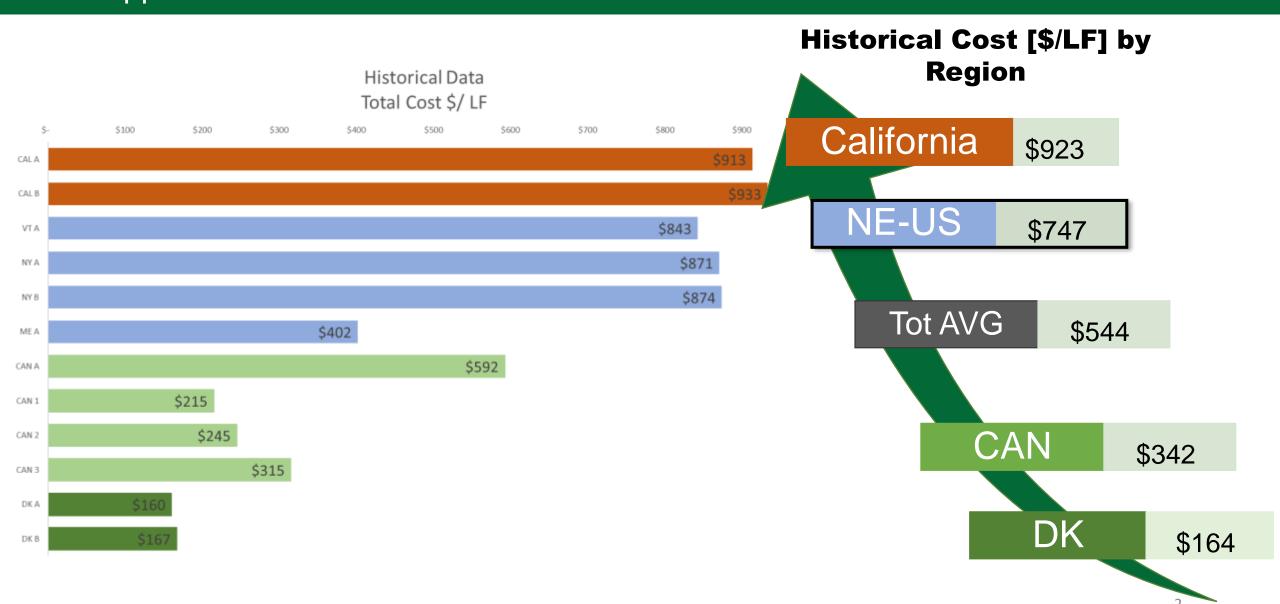
European HW Technology-Installation Cost Analysis from Real Projects in North America

Kyle Stramara and Abbe Bjorklund





Cost data was collected from 12 European thin-wall HW projects, regional trends appear.



Why are Danish and Canadian prices lower?



Danish Projects

- 30 yrs Experience (Designer, Suppliers and Contractors)
- Procurement Method
 - Unit Pricing (Reduces Cost/ Transfers Risk to Owner)
- EN 13941 Well defined design, construction, rigorous QA/QC process

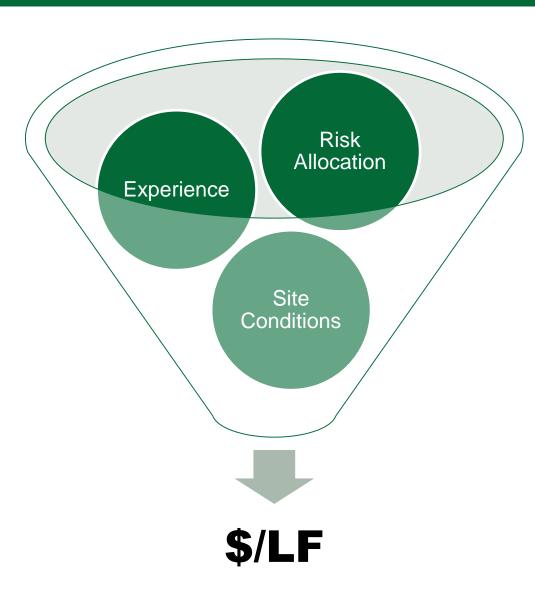


Canadian Projects

- Adopted Danish Engineer Active Management Practices
 - Procurement Method
 - QA/QC Process
 - Favorable Site Conditions



Conclusions



- In NE a budget of \$800/LF is reasonable (no soft costs)
- Costs can be lowered further via Danish Experience
 - Unit Pricing/ Active Management of Project Cost by Engineer
 - Transfer of Risk to Owner
 - Experienced Contractors



Questions?

