

Innovative Methods for Expanding the Growing Season

Presented at the USDA Local Foods Conference
The Many Faces of Know Your Farmer Know Your Food

February 3, 2012

Timothy C. Lindsey, Ph.D.

Director, Energy and Sustainable Business Programs

tlindsey@illinois.edu



DCEO Project: Develop Strategies to Expand Production and Utilization of Local Foods

- Identify Obstacles and Bottlenecks in Existing System
- Develop Strategies for overcoming them

Develop an Understanding of the Systems and Processes



Develop an Understanding of System Problems & Obstacles



Develop and Implement Solutions and Strategies



Local Food System Bottlenecks

1. Climate
2. Producer Shortage
3. Producer Market Access
4. Processing Capabilities
5. Pricing Issues
6. Existing Agriculture Industry



Local Food System Bottlenecks

1. **Climate**
2. **Producer Shortage**
3. **Producer Market Access**
4. **Processing Capabilities**
5. Pricing Issues
6. Existing Agriculture Industry



Climate Bottleneck

- Problem: Illinois has a relatively short growing season
- Solutions: Use technology to expand growing season and storage capabilities
- DCEO Projects
 - “The Plant”
 - Waste heat recovery
 - East St. Louis geothermal project

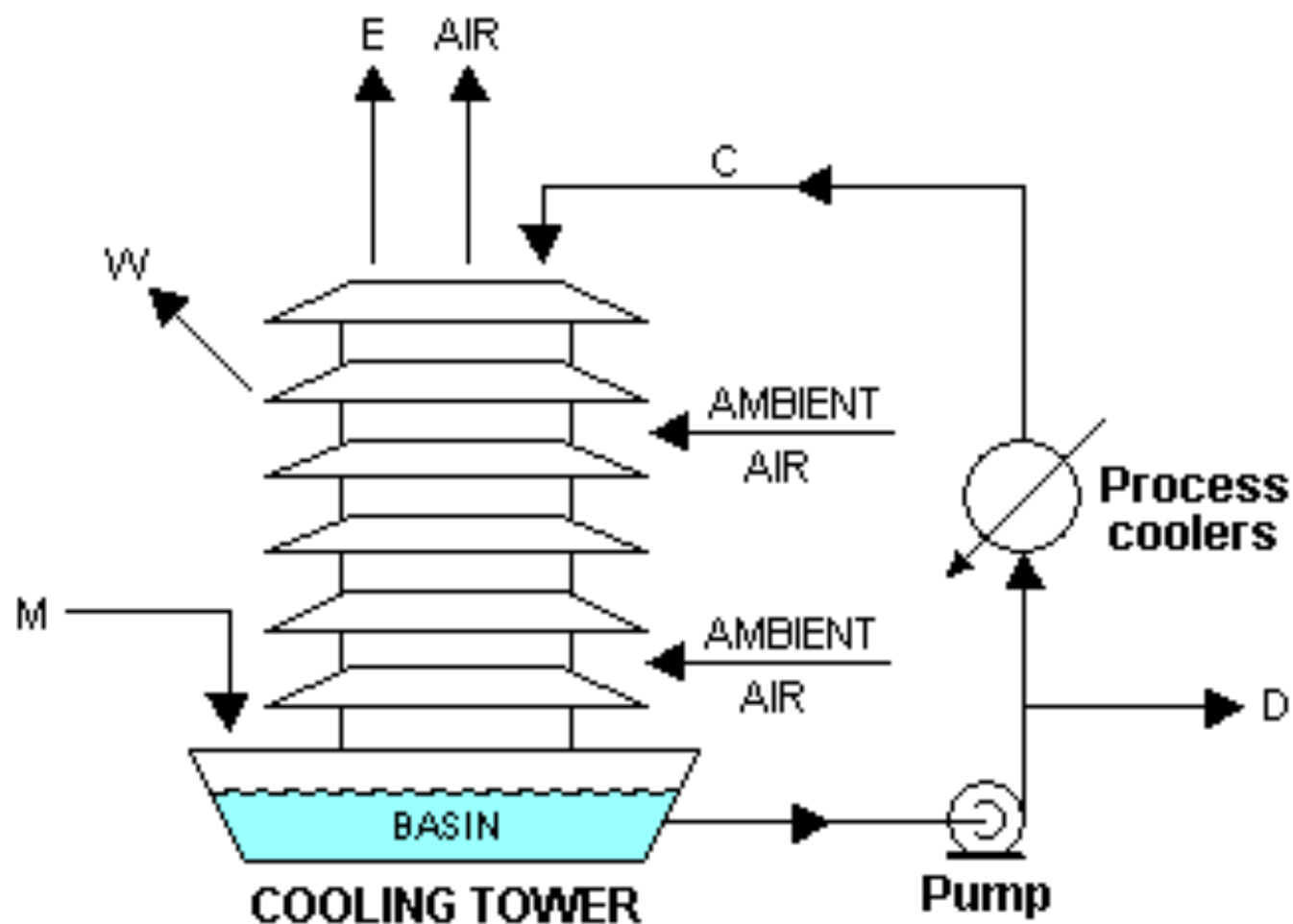




Evaporator, Distillation System and Cooling Tower of Modern Ethanol Plant



COOLING TOWER SYSTEM



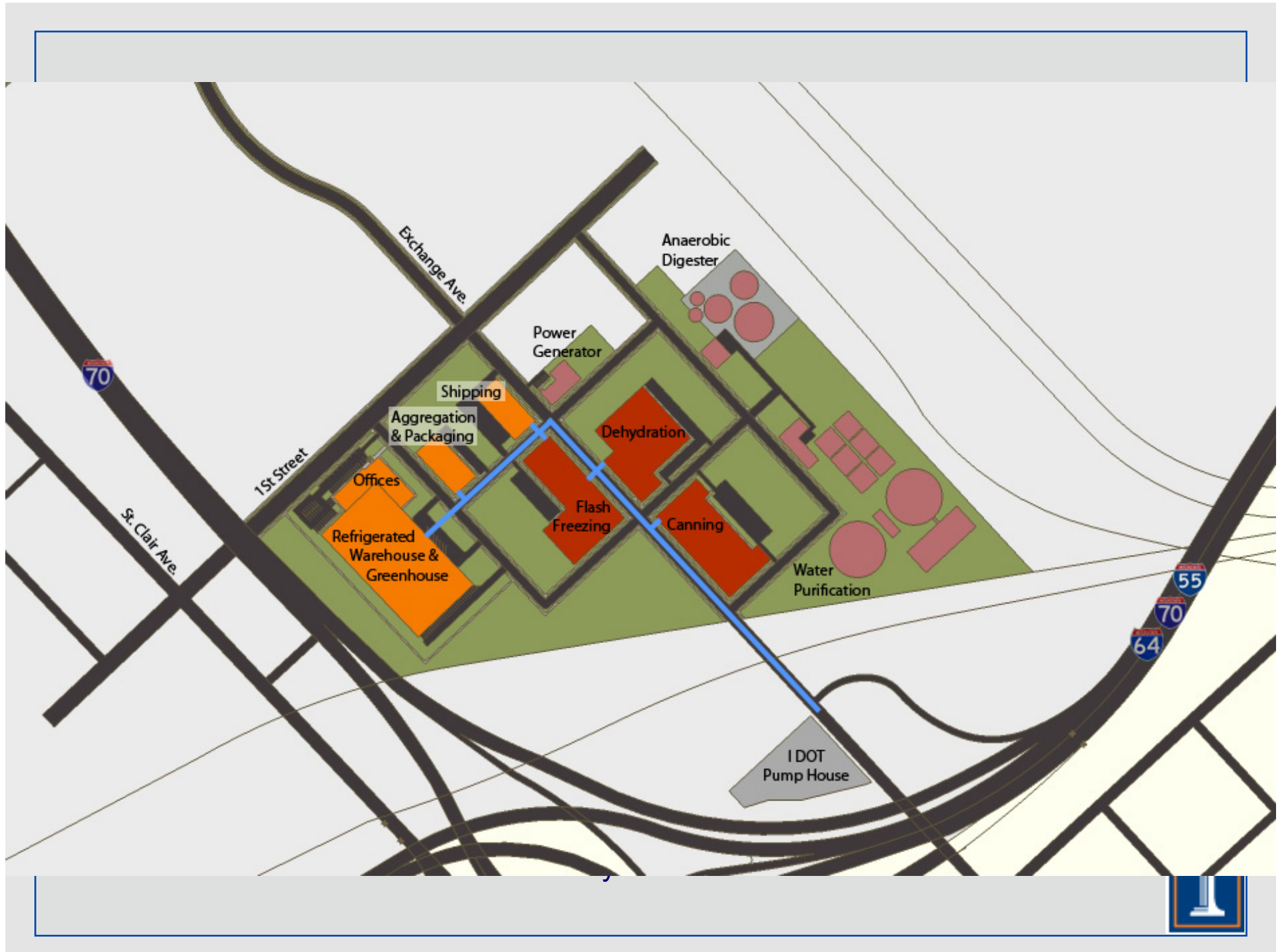
- C = CIRCULATING COOLING WATER
- E = EVAPORATED WATER
- W = WINDAGE or DRIFT LOSS
- M = MAKEUP WATER
- D = DRAW/OFF or BLOW/DOWN WATER

The World's First Industrial Park Powered Solely by Renewable Energy

- East St. Louis
- Interstate 70 Bridge Reconstruction
- 16-20 Million Gallons/Day of Groundwater
- HUGE geothermal resource

Project Concept: A food hub focused on production, aggregation, processing, packaging and distribution of locally produced food

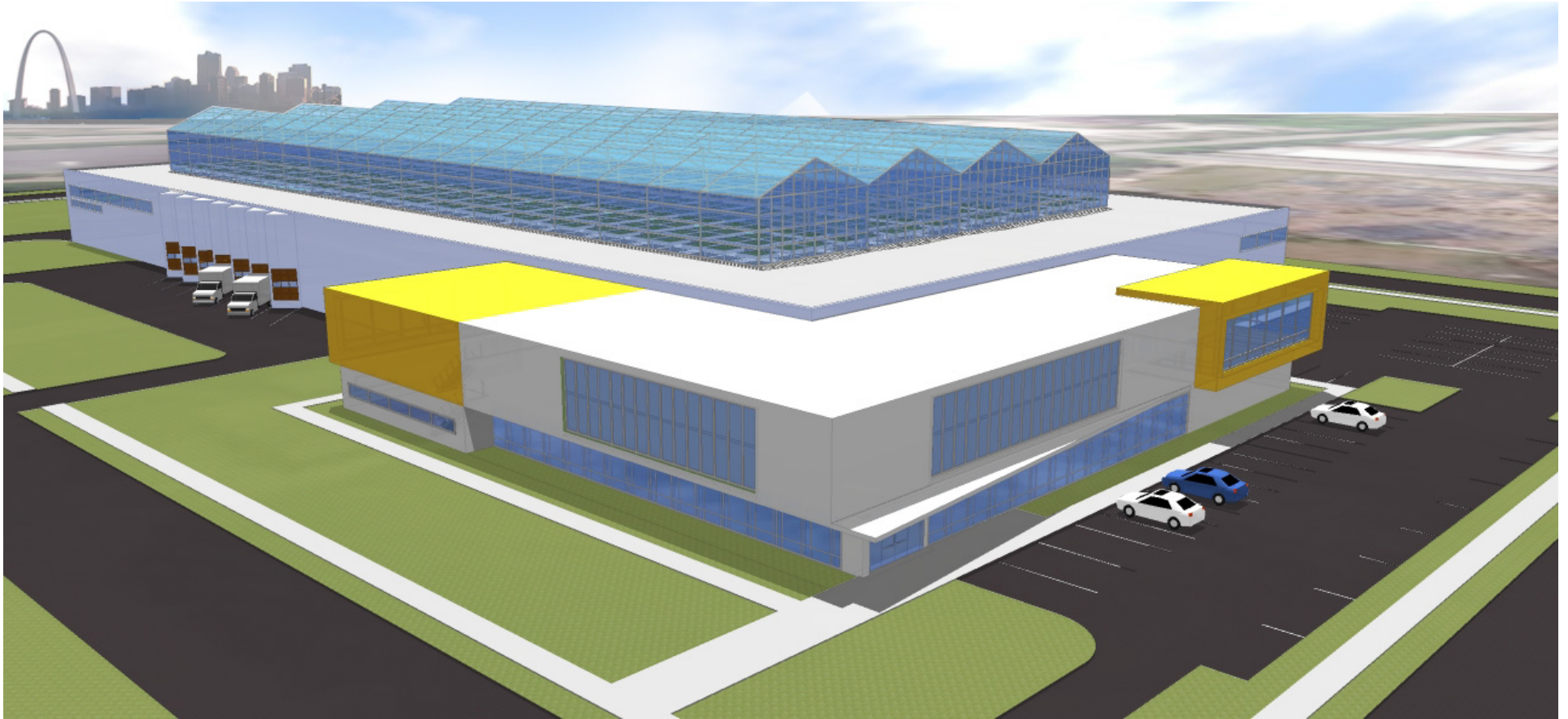








2004, Chmiel/Draplin Great River Road Tour



Questions?

University of Illinois BIS

