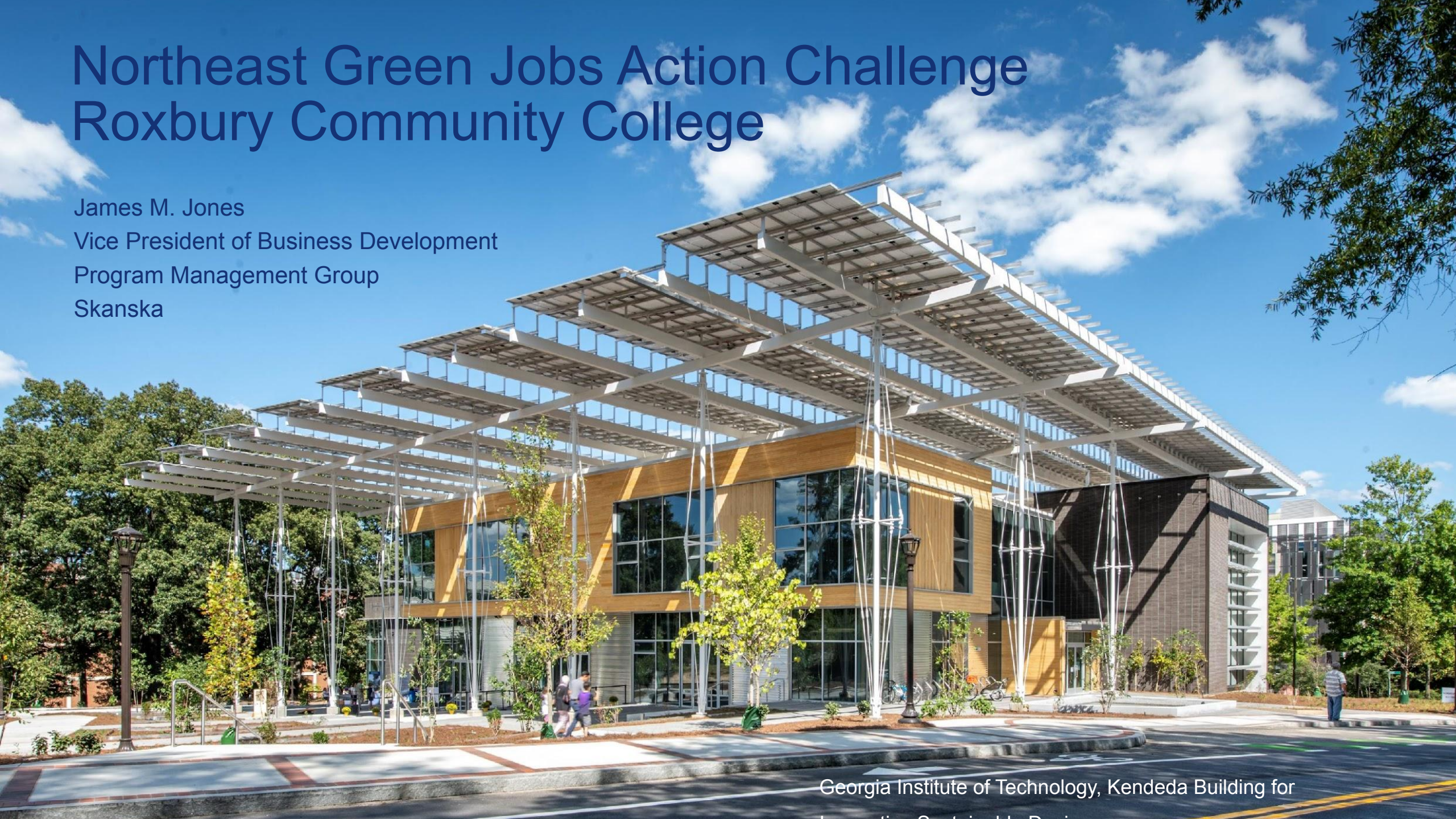


# Northeast Green Jobs Action Challenge Roxbury Community College

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Skanska



Georgia Institute of Technology, Kendeda Building for  
Advanced Computing Design



# Introduction

## Skanska

Headquartered in Sweden

29 U.S. Offices

\$6 billion U.S. Revenues

6,500+ U.S. Employees

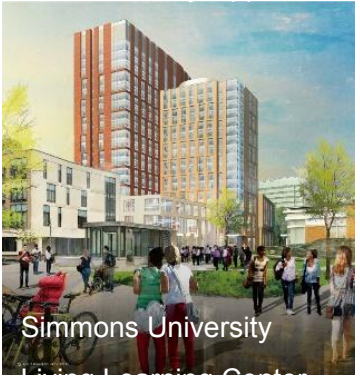
Construction Management

Commercial Development

Program/Project Management

Sustainability Consulting

Deep Green Credentials



# Lead up to the “general, root problem”

- 20 years in Business Development for Skanska
- Mid/Late 2000s:
  - Began hearing about issues with “controls systems”
  - Proliferation of green buildings
- Early 2010s: Started hearing about owners who were very surprised by high energy bills in “green buildings” – isolated cases
- By 2015: Commonplace to hear this from hospitals, universities, school districts, building managers, etc.
- 2016:
  - Conversation with a major medical center – Increasing the number of skilled, well-trained Building Automation Systems (BAS) technicians is a key component of running “high performance buildings” and of meeting overall energy performance and emissions reduction goals
  - Initiated conversation with RCC about BAS training program
  - Helped to build the initial industry consortium that advocated for the creation of what is now the Center for Smart Building Technology

# What is the general, root problem?

There is a convergence of root problems

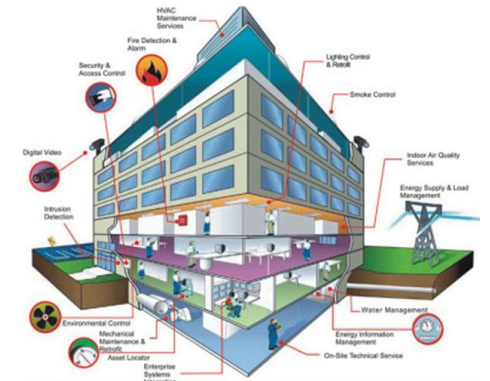
## 1. “High Performance Buildings” not as energy efficient as expected

- Buildings running at 150+% of energy model
- 20+ years of high-performance buildings – mixed results

## 2. The design of high performance buildings plays a role

## 3. The Building Automation System (the Controls System) plays a role

## 4. The shortage of skilled BAS technicians also plays a role, which is odd because there shouldn't be a shortage...



The average building automation technician salary in Massachusetts is **\$93,113 per year** or **\$44.77 per hour**. Entry level positions start at \$92,500 per year while most experienced workers make up to \$97,500 per year.

Talent.com  
<https://www.talent.com/salary/job=building+automati...>  
 Building Automation Technician Salary in Massachusetts

Comparably  
<https://www.comparably.com/salaries/salaries-for-b...>

### Building Automation & Control Engineer

The salaries of Building Automation & Control Engineers in Massachusetts range from **\$116,400**, with a median salary of **\$97,000**. The middle 50% of salaries range from \$92,000 to \$104,000.

How much does a HVAC controls technician earn in Massachusetts?

What is the highest salary for a technician?

What is a Professional Technician's Salary?

Percentile	Annual Salary	Monthly Salary
90th Percentile	\$104,000	\$8,667
75th Percentile	\$92,000	\$7,667
Average	\$81,726	\$6,811
25th Percentile	\$71,000	\$5,917

Salary.com  
<https://www.salary.com/.../Massachusetts>

### Building Automation Technician Salaries in Boston, MA

The average salary for Building Automation Technician is **\$76,376 per year** in Boston, MA. Related Job Titles to Building Automation Technician.

Average: \$76,376

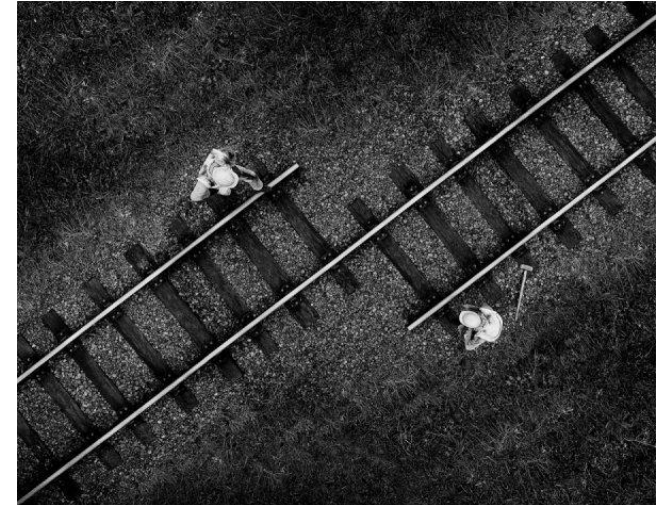




# What is the key obstacle to overcome in solving this problem?

If we want to create a pipeline of skilled, highly-motivated controls technicians, the key obstacles are:

1. The misalignment of perspectives, needs, and expectations
2. Trying to do everything



# What role would your organization play in collaboration with others to overcome this obstacle

**Focus Exclusively on the Center for Smart Building Technology:**

## **Assist with Employer Engagement**

Identify the right set of employers

Small, manageable number

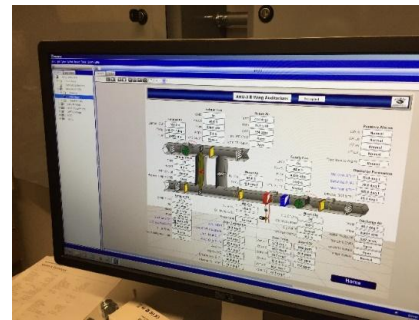
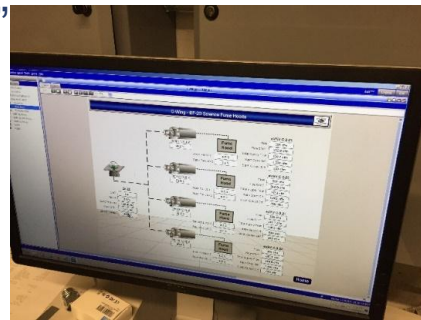
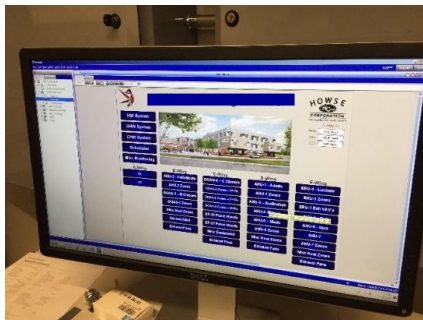
Balance of Healthcare/Higher Ed/

Management Companies/Controls Companies

Understand that time is at a premium

## **Focus on their needs and perspectives**

Design program to their requirements



# What are the benefits / consequences of addressing or not addressing this obstacle?

Benefits of Addressing Obstacle	Consequences of Not Addressing Obstacle
Something gets done	Nothing gets done
Long-term, mutually-beneficial relationship between RCC & employers	Employers become frustrated and back away
Career paths for students	Lost opportunity to help people and enhance environmental outcomes
Stable pipeline of skilled and motivated employees for employers	
Enhanced energy efficiency / reduced emissions	
Creation of family-sustaining jobs that cannot be outsourced	
The pride and self-esteem that comes with that	

# Final Statement

**To achieve the Northeast's demand for workers in Greentech industries, a critical obstacle to collectively overcome in 12 months is \_\_\_\_\_.**

**The misalignment of perspectives, needs, and expectations.**