



RESEARCH TRIANGLE
CLEANTECH CLUSTER™

» Transformation Through Collaboration

Job Opportunities in the Cleantech Industry

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Our Mission

The Research Triangle Cleantech Cluster (RTCC) is an initiative of business, government, academic and nonprofit leaders focused on accelerating the growth of the Research Triangle Region's cleantech economy.



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Why Cleantech?

**WATER IS
A HUMAN
RIGHT**

NOT A PRIVILEGE

PEACE
TEAM

The Internet of Things

IoT The Internet of Things revolves around increased machine-to-machine communication; it's built on cloud computing and networks of data-gathering sensors; it's mobile, virtual, and instantaneous connection; and they say it's going to make everything in our lives from streetlights to seaports "smart."

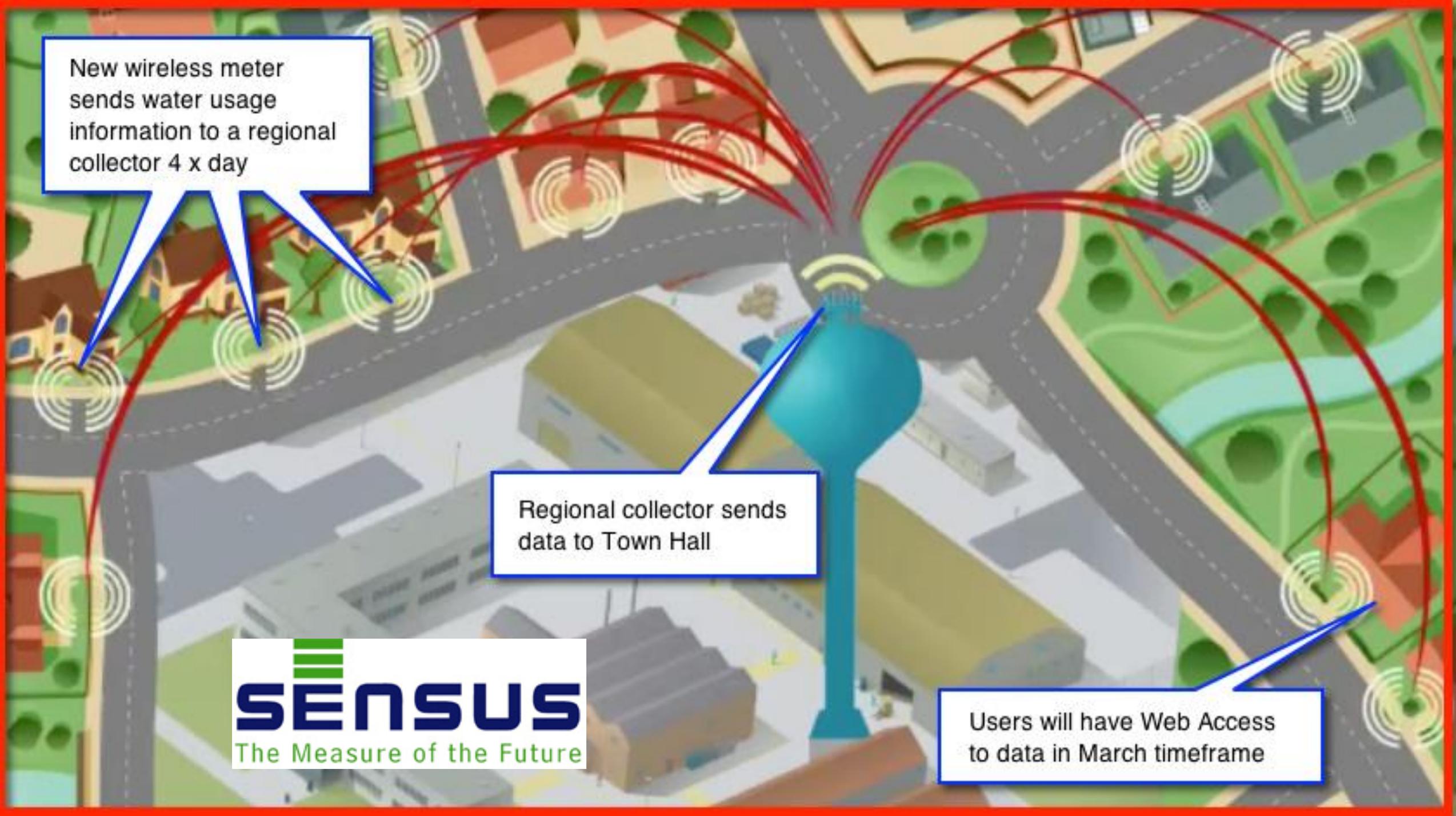
- Daniel Burrus, November 2014

WIRED

What is cleantech?

**Products, services, technologies that
improve energy efficiency
(collecting, computing, analyzing data)**



An aerial illustration of a town with a central water tower. The water tower is blue and has a yellow wireless signal icon on top. Red curved lines represent data transmission paths from various residential areas to the water tower. White concentric circles represent wireless signals from individual houses. A blue callout box points to one of these houses.

New wireless meter
sends water usage
information to a regional
collector 4 x day

Regional collector sends
data to Town Hall

The logo for SENSUS, featuring three horizontal green bars above the word "SENSUS" in a bold, blue, sans-serif font. Below "SENSUS" is the tagline "The Measure of the Future" in a smaller, green, sans-serif font.

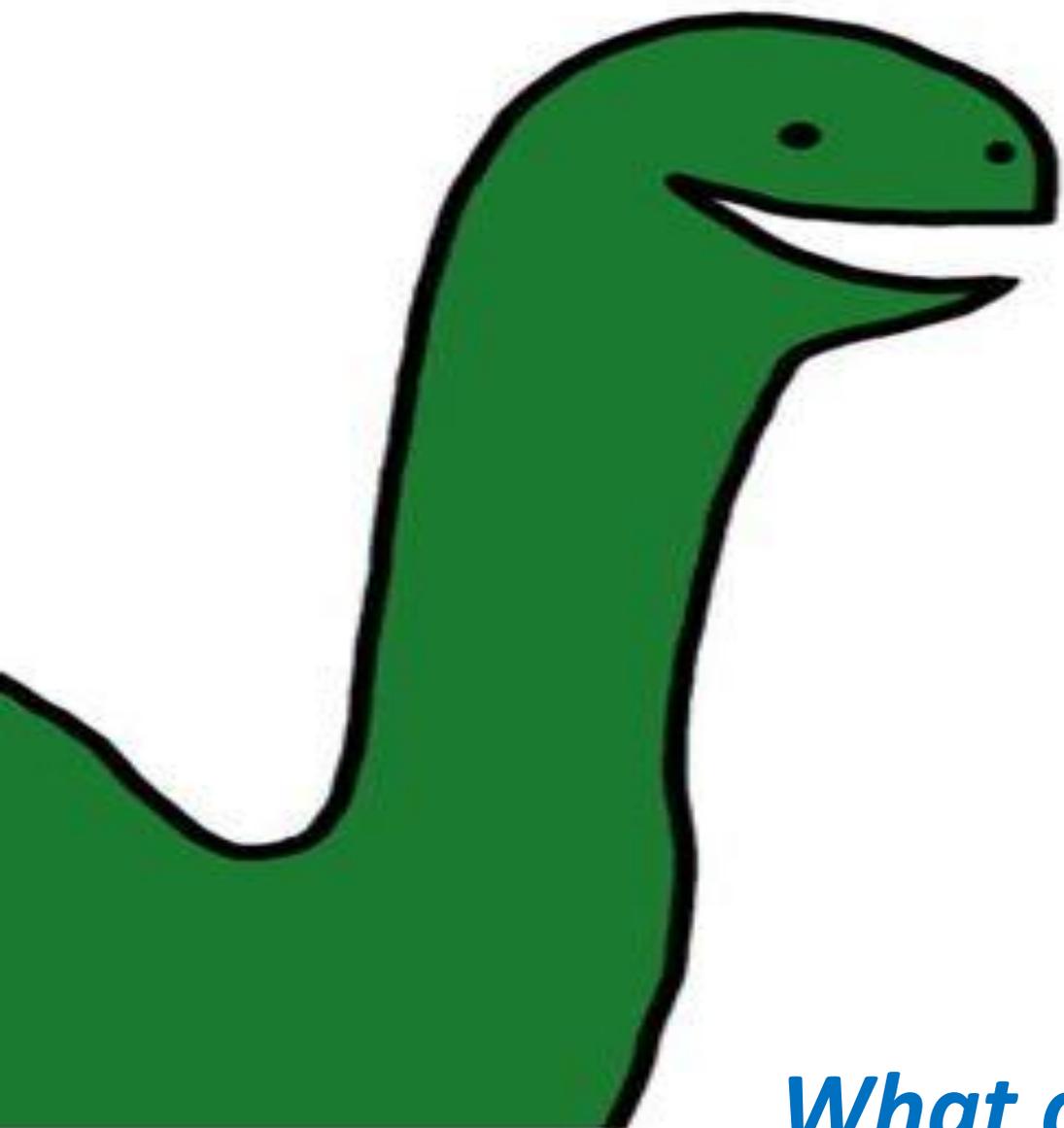
SENSUS
The Measure of the Future

Users will have Web Access
to data in March timeframe

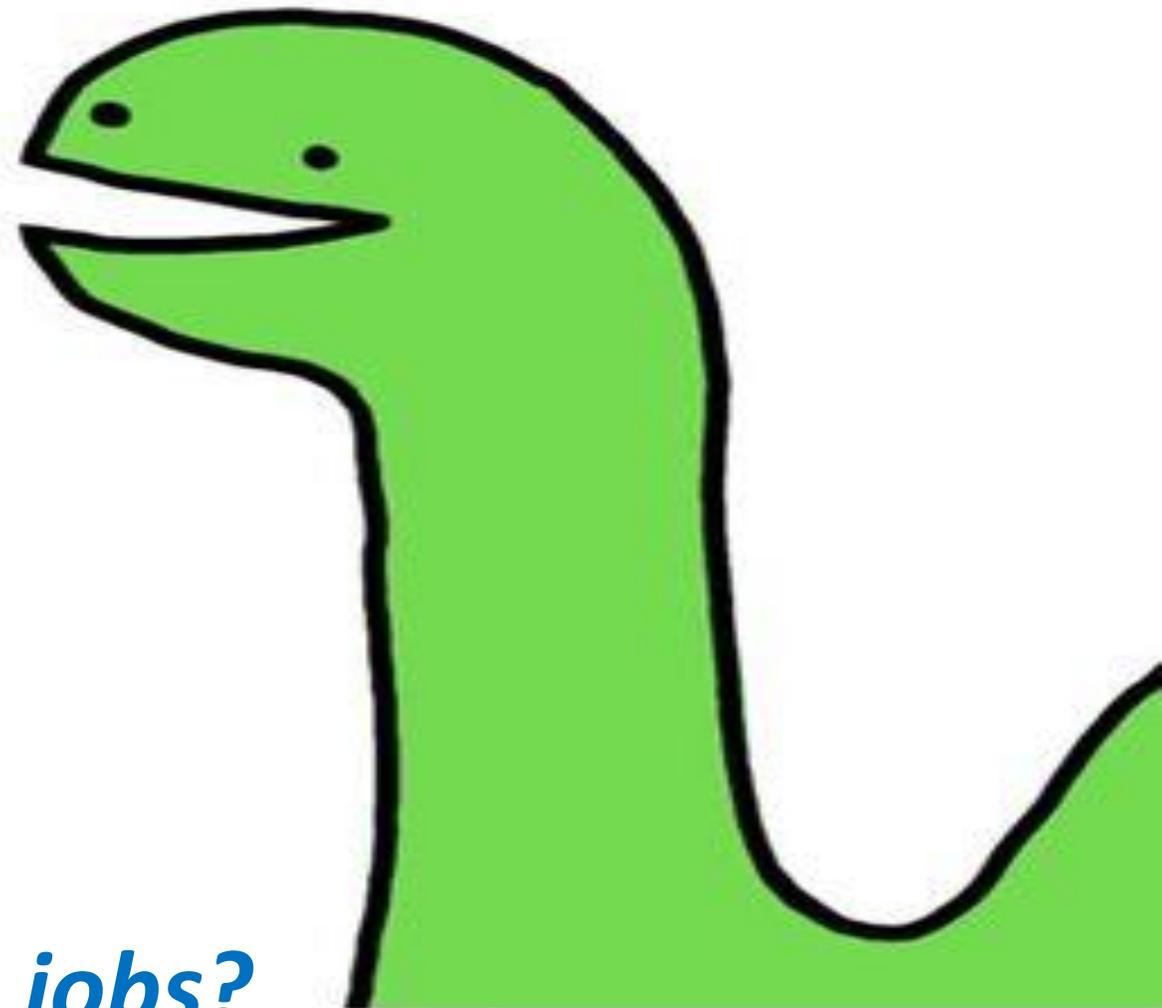


Where are the jobs?

What do you want
to be when you grow up?



A non-renewable
resource!



What are the jobs?



Talent Needs for the Energy and Technology Industry

Final Summary Report

Prepared for the Research Triangle Cleantech Cluster, August 2015

Prepared by Sara Lawrence and Michael Hogan

3,300 New Hires



Software & Programming



Data Analytics



Consulting



Energy Services

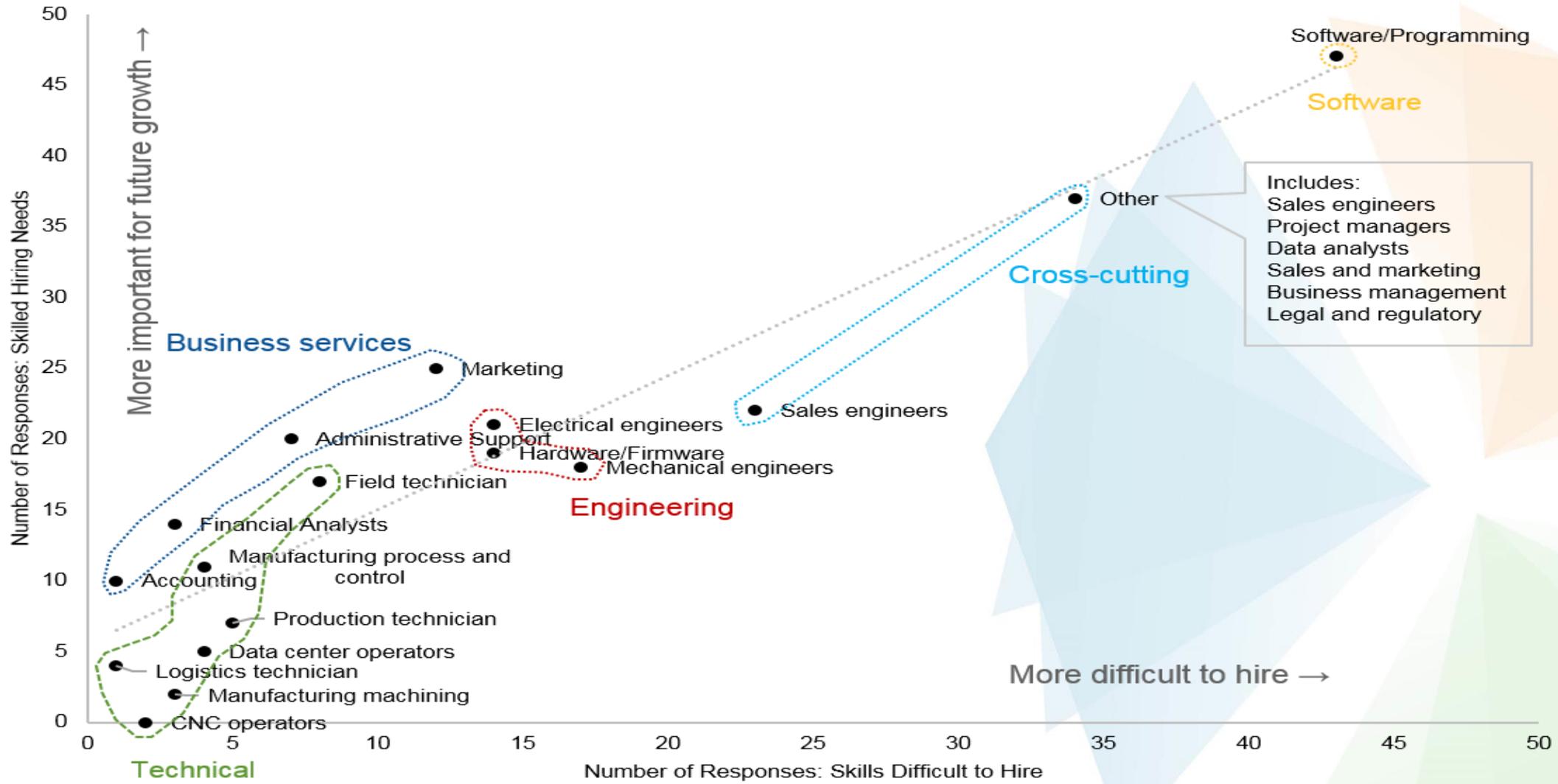


Information Technology



Renewable Energy

Most needed + Most difficult to hire



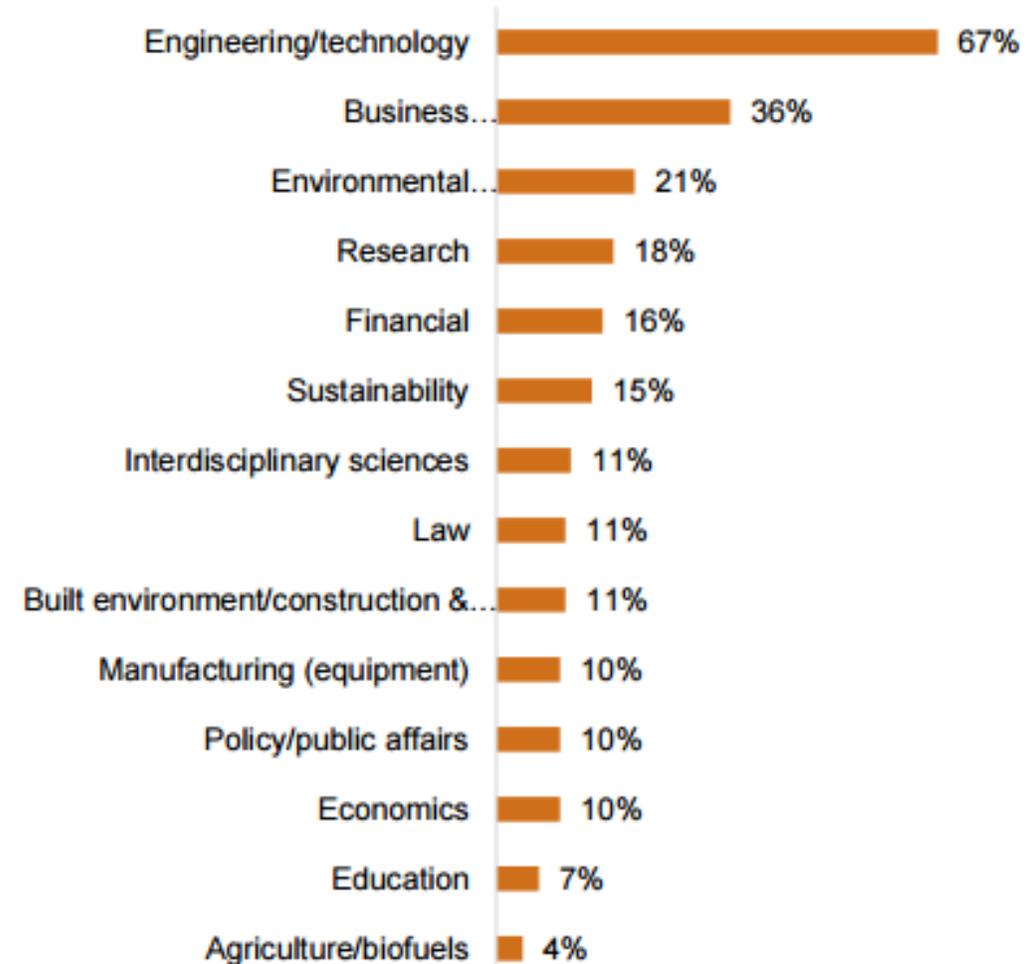
Current Talent Needs: Degrees or Certifications

Overall, companies most frequently prefer workers with engineering and technology degrees (67% of respondents). Business and management degrees come in second at 36%.

Observations:

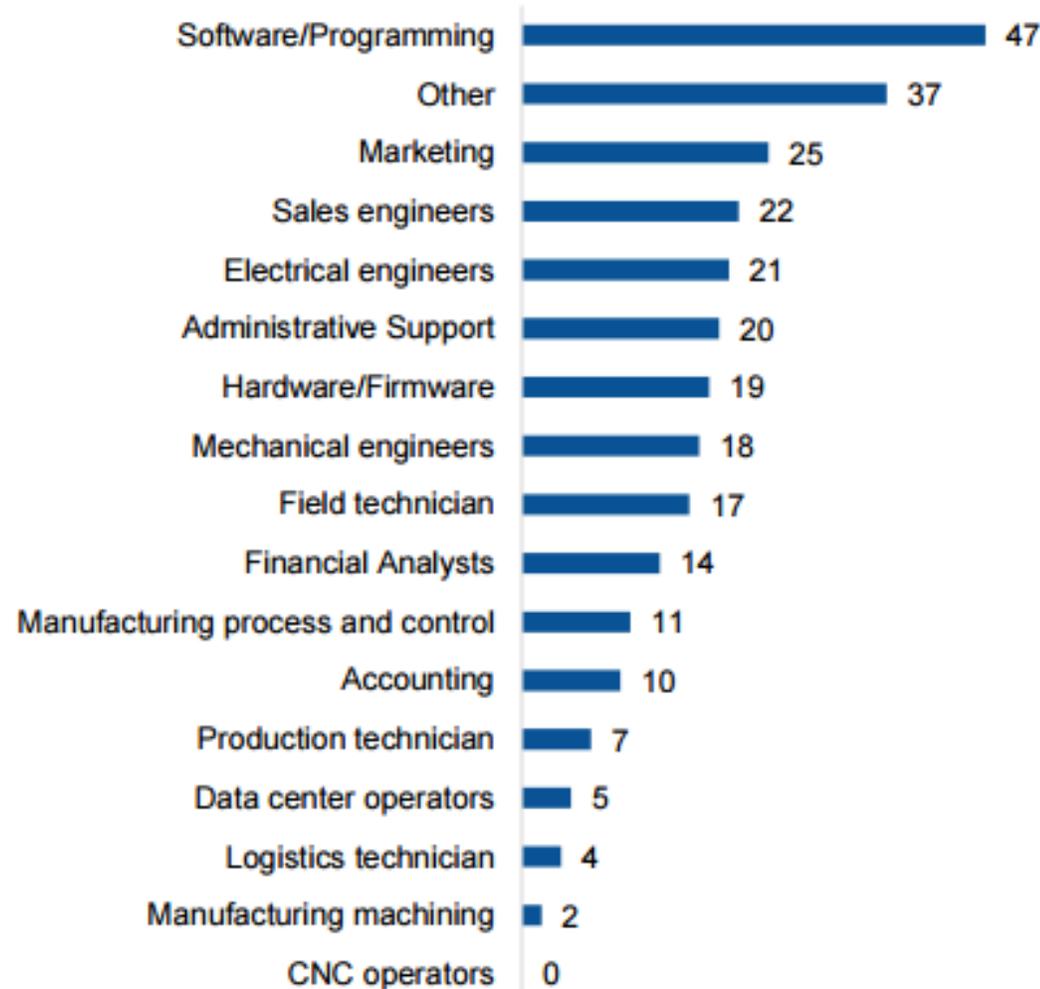
- 25% of survey respondents included BOTH engineering/technology and business/management as preferred or required degrees.
- Among IT/software/analytics companies, 76% preferred engineering and technology degrees.
- Among renewables/energy services/power engineering/utilities companies, 75% preferred engineering/technology degrees. Environmental studies came in second at 34%.

Degrees, majors, and/or certifications that are generally preferred or required as a qualification of hiring:



Skilled Hiring Needs

In what skilled areas do you expect the most hiring needs?



Source: RTI Survey Q7c

Software/programming was the most common skilled hiring need for companies in the energy and technology sectors. It aligns closely with companies' projected growth in IT, software, and analytics.

Common "other" responses include:

- Regulatory and legal experts (7)
- Project managers, construction managers, business managers (6)
- Civil engineers and construction professionals (4)

These responses underscore the need for "sales engineers": workers with a mix of technical, sales, and management skills who are prepared to work in dynamic, multidimensional jobs.

Needs in marketing, sales, and administrative support are closely related with needs for business development.

Companies also express a particular need for experts in the regulatory and legal area concerning energy and utilities.

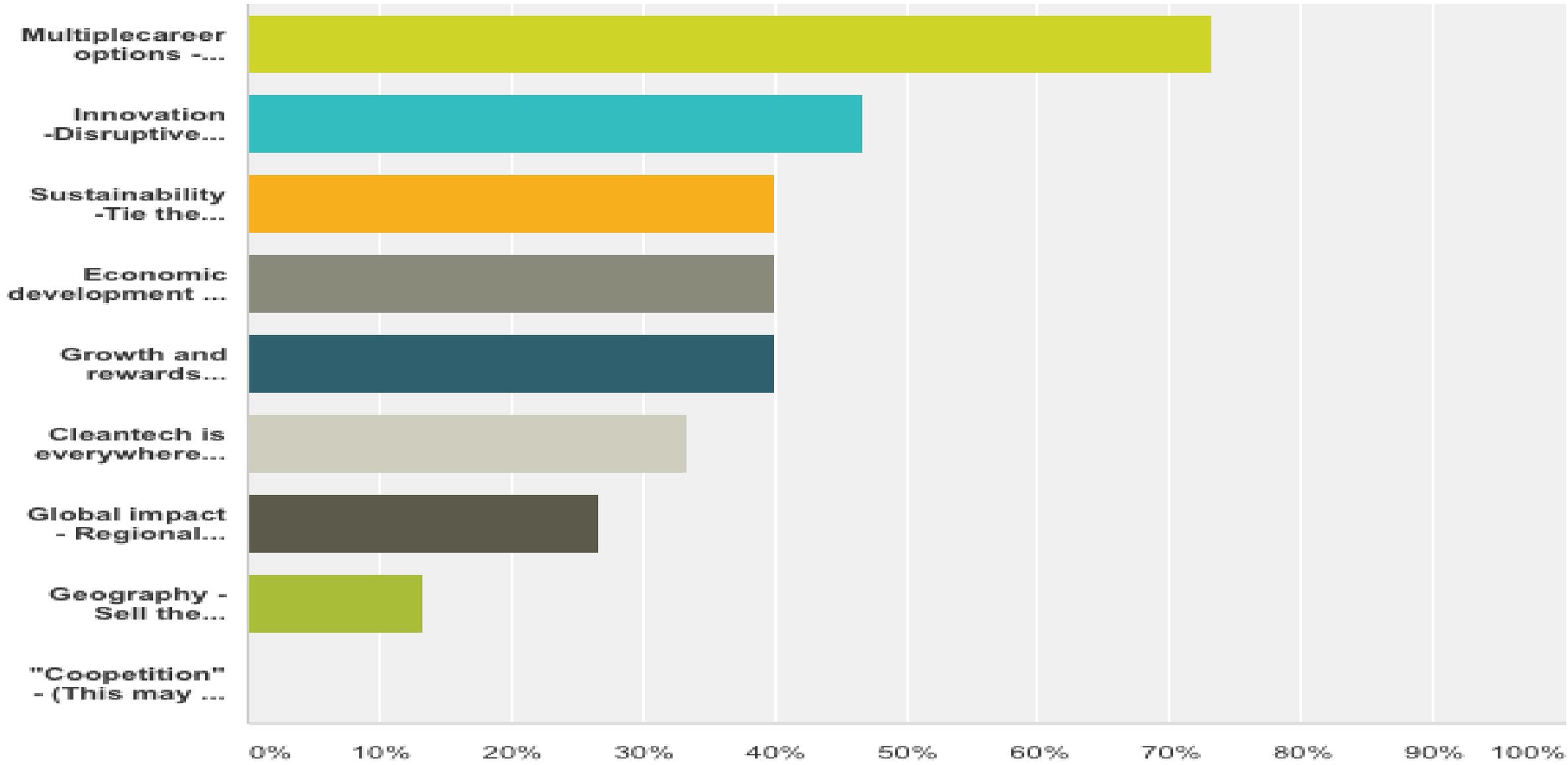
Developing a Curriculum

If you could include or strengthen the kindergarten to higher education curriculum to create stronger paths for students to successfully enter into careers at your company, what would you do?

- **STEM**
 - Strengthen STEM across the board, vocational training that emphasizes technical skill acquisition, make the STEM program more fun, educate children on what the future career market will look like
- **Communication**
 - Reading writing, speaking presentation skills, relationship skills
- **Real World Applications**
 - Practical learnings, simulations, case studies, deemphasize regurgitation, business and or technical skill building classes and scenarios
- **Programming**
 - Computer, software development; data and data structures; data coding
- **Entrepreneurship and Innovation Basics**
 - Expose students to entrepreneurship, its potential and pitfalls; importance of innovative “out of the box” thinking and approaches
- **Teamwork**
 - Project work to get kids to work together to identify a problem, develop a solution, and implement the solution making adjustments on the way
- **Integrated/Interdisciplinary**
 - Multiculturalism, focus on energy (technology, production, and use) combined with analysis and computer control concepts, ability to innovate and collaborate across diverse skillsets, greater emphasis on interdisciplinary writing and engineering
- **Business and Finance**
 - Fundamentals, adopting business perspective, customer empathy

What are the key messages we want to communicate? Please select three (3).

Answered: 15 Skipped: 2





- RESOURCES
- PRESENTATIONS
- VIDEOS & PODCASTS
- JOB SEARCH

Connect with Facebook
Connect with Twitter

Job Search

Talent recruitment is important to our cluster and the Research Triangle Region. Below you will find links to career opportunities from RTCC members and regional partners.

Bold text denotes RTCC Board of Director member.

- ABB**
- [Bright Wolf](#)
- [Burkhead Brand Group](#)
- [Chatham Park](#)
- Cisco**
- [DNA Group](#)
- Duke Energy**
- [Electricities](#)
- Field2Base**
- [FREEDM Systems Center](#)

Stay up-to-date on the Research Triangle Cleantech Cluster's latest news and opportunities.

Name: *

Email: *

Submit

Where can I learn more?



Cleantech Connect Career Fair – April 21

- First Cleantech Industry Career Fair in Region
- Partnership with State Energy Conference
- 16 Employers
- 300+ Job Seekers & Students Attended
- At Least 6 Interns + 9 Full-Time Hires Made





THANK YOU

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