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A New Era In Technology Collaboration: Joining Forces For Faster Innovation

#AGCTECH24

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Introduction

Tommy Linstroth
Green Badger Founder & CEO
LEED Fellow

Green Badger

Siavash Mohseni
Hensel Phelps
Senior Innovation Manager

HENSEL PHELPS
Plan. Build. Manage.

Today's Discussion

- How ConTech innovation is changing
- How Hensel Phelps/DIVERGE has adapted to leverage new opportunities
- What does collaboration with GCs/tech suppliers look like now
- Discuss the growth of CVC in the industry

Strategic Innovation Planning

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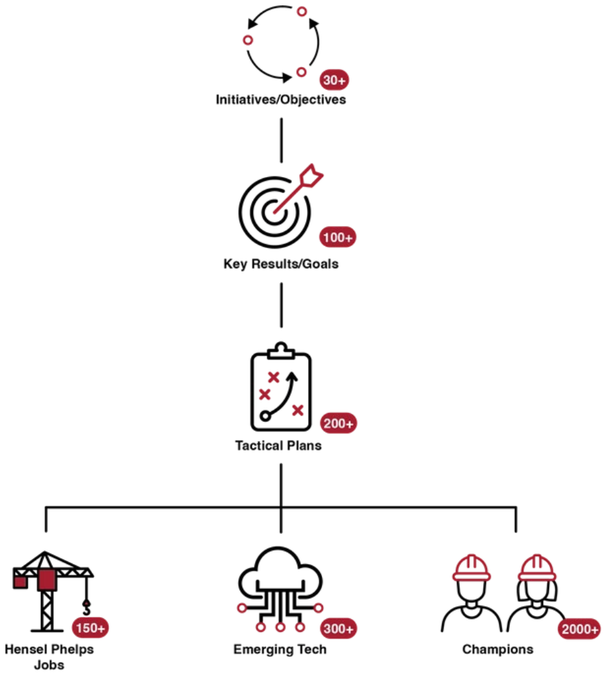
Strategic Innovation Planning

Major Components



How

- Diverge Initiatives
- Internal Partnership
- External Partnership

Strategic Planning

My Strategy

Plan Type: Objective | Group By: None

	Tactical Plan NC	Name	DIVERGE Lead	Prioritization S...	Priority
	100	DIVERGE Initiative Additive Manufacturing	Lopez, Richard E	0	(2) Medium
	200	DIVERGE Initiative AI (14)	Mohseni, Siavas	54	(2) Medium
	300	DIVERGE Initiative Airport of the Future	Mohseni, Siavas	49	(2) Medium
	400	DIVERGE Initiative Block Chain	Lopez, Richard E	0	(2) Medium
	500	DIVERGE Initiative DCOF (18)	Lopez, Richard E	69	(2) Medium
	600	DIVERGE Initiative ESG (4)	Nguyen, Thai Q	0	(2) Medium
	700	DIVERGE Initiative Hospital of the Future	Mohseni, Siavas	49	(2) Medium
	800	DIVERGE Initiative Incubator Program	Nguyen, Thai Q	0	(2) Medium
	900	DIVERGE Initiative Innovation Center	Lopez, Richard E	0	(2) Medium
	1000	DIVERGE Initiative IOT (5)	Mohseni, Siavas	41	(2) Medium
	1100	DIVERGE Initiative Modular / Pre-Fab (3)	Lopez, Richard E	0	(2) Medium
	1200	DIVERGE Initiative Planning and Scheduling (6)	Mohseni, Siavas	60	(2) Medium
	1300	DIVERGE Initiative Robotics (14)	Somalwar, Mihir	61	(1) High
	1400	DIVERGE Initiative Supply Chain (14)	Mohseni, Siavas	95	(1) High
	1500	Events 2023 (6)	Nguyen, Thai Q	0	(2) Medium
	1600	External Advisory Board	Mohseni, Siavas	49	(1) High
	1700	External Partnership AE	Mohseni, Siavas	49	(2) Medium
	1800	External Partnership General Contractors	Nguyen, Thai Q	0	(2) Medium
	1900	External Partnership Shadow Venture (6)	Nguyen, Thai Q	0	(1) High
	2000	External Partnership Sub-Contractors	Mohseni, Siavas	54	(2) Medium
	2100	External Partnership Tech Companies (5)	Mohseni, Siavas	56	(2) Medium
	2200	External Partnership Universities (5)	Nguyen, Thai Q	0	(2) Medium
	2300	External Partnership Venture Capital (11)	Mohseni, Siavas	56	(2) Medium
	2400	Internal Advisory Board	Mohseni, Siavas	45	(2) Medium
	2500	Internal Partnership CIT (3)	Nguyen, Thai Q	0	(2) Medium
	2600	Internal Partnership Organizational Development	Nguyen, Thai Q	0	(2) Medium
	2700	Internal Partnership Production Engineering (1)	Mohseni, Siavas	44	(2) Medium
	2800	Internal Partnership QA/QC (3)	Mohseni, Siavas	61	(2) Medium
	2900	Internal Partnership Reality Capture (3)	Mohseni, Siavas	24	(2) Medium
	3000	Internal Partnership Talent Acquisition (4)	Nguyen, Thai Q	0	(2) Medium
	3100	Internal Partnership VDC (1)	Lopez, Richard E	0	(2) Medium

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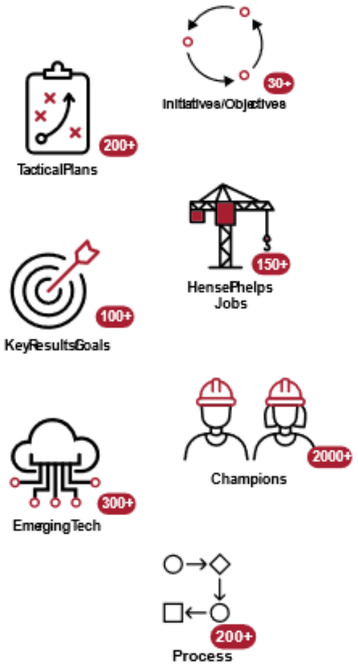
Components of Strategies

- Top Priorities
- Metrics and Reports
- Assess the Current State
- Progress Tracking
- Reflect and Iterate
- Cost
- Risk Management
- Inspire
- Change Management
- Utilization and Allocation
- Collaboration and Partnerships
- Measurement and Continuous Improvement
- Define Objectives and Goals
- Resource Allocation
- Communication and Marketing
- Understand Market Trends
- Training and Development
- Innovation Culture and Leadership
- Sustainability
- Correlation
- Investment Opportunity



Prioritizations and Values

Risk Reduction	Safety, Quality Control, Project delays
Productivity Increase	Labor Shortage, do more with less
Cost Savings	Increase margin, reduce cost for our partners
Investment Opportunity	Direct investment or through our LP
Improve Employee Retention	Be part of Hensel Phelps's innovation culture
Strategic Alignment	Alignment with APG and direction of company's innovation

Readiness technologies to be use in an initiative

Availability of Technology	**State of solution** Off the shelf Customized solution Developed by technology partner Developed by a start up in Diverge ecosystem
Ease of Implementation	**Experience** Previously implemented Some experience Brand new process implementation
People	**Knowledge** Previously involved Some knowledge Brand new to the initiative and innovation

Innovation Identity

	Visionary	Leading Innovator	Fast Follower	Late Adopter
Description	Significant R&D investment to invent new technologies and demonstrate possibilities	Advances newly developed technology before commercial success is found through pilots	Quick to adopt once a technology is proven to be a commercial success	Only adopts once technology is industry-standard and down the maturity and cost curves
Innovation culture	Flexible, start-up culture with a flywheel for innovation and change	Culture of innovation that is quick to adapt novel technologies	Established culture that is open to new ideas	Slow moving to change and adding new capabilities
Capability / Talent	Talent acquired from adjacent industries (e.g. Google / Microsoft and Amazon)	Talent can be poached from	SME groups can be used to assess and implement new technologies	Skilled labour, contractors, or training programs more easily available for implementation
Initiative examples	VDC Software such as issue tracking, AR, MR 2015	Field applications for Daily report, Commissioning 2017	HP – adopted Cloud based PM solutions in 2019	Supply Chain Management, and Supply Chain Management Insight

Is this still the strategy moving forward?

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Next Generation Production Tracking

Legend – Readiness
- Commercially Viable
- Prototype
- Concept Stage

Legend – Value
- High
- Medium
- Low
- Bottleneck

	Progress Tracking	QA/ QC	Schedule Integration	Earned Value	Supply Chain	Labor & Equipment Tracking	Estimate Integration
Risk Reduction							
Productivity Increase							
Cost Savings							
Strategic Alignment							
Employee Retention							
Investment Opportunity							
Overall value							
Readiness Assessment	Automated RC AI &object detection Reports	RC &3D model AI &Comparison	Cloud based WBS Standardization Pull Planning	WBS Standardization Contract Mandate	End to End Platform Tracking Systems Integrations	IOT solutions Schedule- Man hour Schedule - Equipment	WBS Standardization Contract Mandate
	Priority focus		Priority focus		Priority focus		Priority focus

How did Green Badger “get in the door” and grow with companies like Hensel Phelps?

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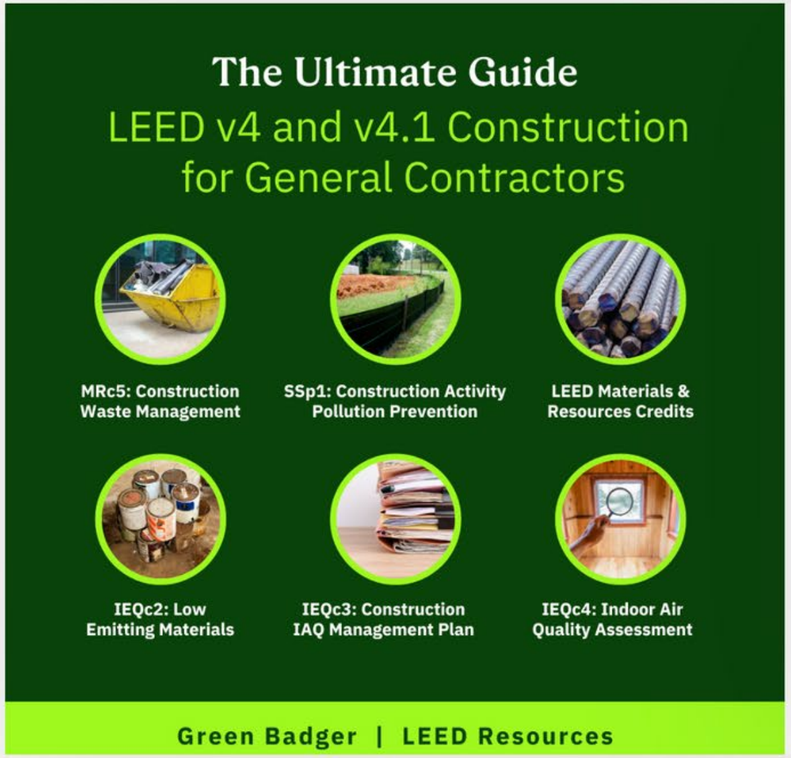

The Ultimate Guide to LEED v4 and v4.1 Construction Credits for General Contractors

The most comprehensive educational resource for general contractors, filled with practical guidance on how to achieve LEED construction credits.

It's essential for project teams to opt into LEED v4.1 for all the BPDO credits and for Low Emitting Materials. It may or may not be useful for Construction Waste Management, and won't make a difference for Construction Activity Pollution prevention or Indoor air quality management.

READ THE ULTIMATE GUIDE →

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What best practices can help expedite or smooth the new tech learning curve?

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#1

Have a Lauren

Lauren Richardson
Sustainability Manager
Green Badger

Green Badger

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#2

SME (Subject Matter Expert)

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#3

Provide Digital Resources

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#4

Feedback Mechanism

You can't just sell into a company and expect success to happen on its own!

1. Have a Lauren
2. Develop Internal SMEs
3. Provide Digital Resources
4. Have a Formalized Feedback Mechanism

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What tactics are needed to develop and deploy new technologies?

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#1 Tactic To Facilitate Implementation….

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Strong IT Security Infrastructure

Green Badger

IT & Security Questionnaire

SaaS Vendor Questionnaire

GENERAL INFORMATION	
Software name:	Green Badger (Green Badger Inc.)
Description:	Green Badger is a comprehensive green construction compliance management software platform tailored to the unique needs of the construction industry. Our top priority is ensuring your critical data's security, integrity, and compliance. With Green Badger, construction companies gain a robust solution for managing green construction requirements – from LEED certification to ESG and everything in between. We are dedicated to taking security and compliance seriously, employing industry-leading practices to protect your data. Our cloud-based platform streamlines and automates green construction compliance, enabling you to confidently track, verify, and maintain compliance across projects and certifications. By choosing Green Badger, you're choosing a partner committed to safeguarding sensitive information while providing efficient, transparent, and user-friendly compliance management solutions.
HQ Location:	Savannah, GA
Sales Contact(s):	Kristin Brubaker; kristin@getgreenbadger.com Tommy Linstroth: tommy@getgreenbadger.com
Customer Success Contact (if applicable):	Lauren Richardson: Lauren@getgreenbadger.com

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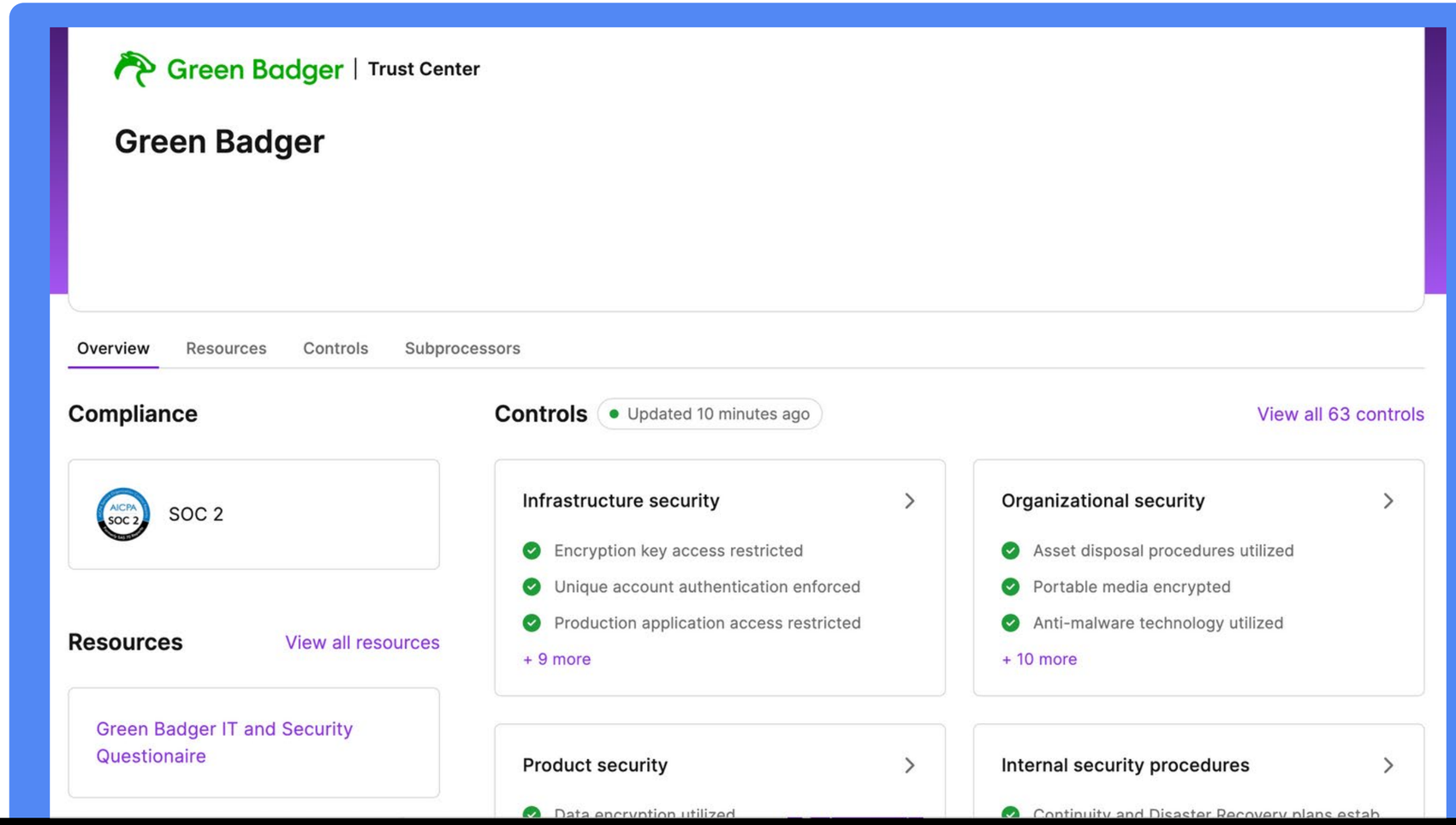

Suggested Remediation Items

	Item	Remediations

SEC	SEC1 - How do you securely operate your workload?
	SEC5 - How do you protect your network resources?
	SEC6 - How do you protect your compute resources?
		- Implement / modify core AWS security services
		  - CloudTrail
		  - Configure a multi-region Trail
		  - Configure Data Events
		  - Configure log file validation
		  - Configure KMS encryption
		  - Security Hub
		  - Configure reporting using a suitable framework
		- Configure EBS Default Encryption
		- Encrypt existing EBS volumes
		- Build a segregated public + private VPC structure
		  - Multi-AZ
		  - Public routes through IGW
		  - Private routes through NAT GWs
		- Implement Secrets Manager for application-consumable secrets

REL	REL2 - How do you plan your network topology? REL9 - How do you back up data?	- Implement and configure AWS Backup for optimal RPO + RTO targets - Separate monolithic network structures into Public + Private subnet groups

Strong IT Security Program

- Focus on security early
- Document efforts in an easily distributable format
- Establish a Trust Center to validate
- Utilize free resources to improve performance

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