



BUILDING ENERGY 14

CONFERENCE + TRADE SHOW FOR RENEWABLE ENERGY AND GREEN BUILDING PROFESSIONALS

Transforming Your Business Towards
High Performance Construction
A Three Year Perspective...



Best Practice

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Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



Learning Objectives

- What are the markers for a business's focus on high performance construction?
- Determine a working timeframe for your business's transformation.
 - *3 years from seed to table!*
- Determine the players, your partners and their roles.
- What makes a successful demonstration project?
- How to make good decisions to avoid costly mistakes.
- What are those mistakes and pitfalls and impacts on various internal components of your business?
- How and why is your changed business different and who cares?
- Celebrating successes and getting the word out!





Who we are at Wright Builders

- Building professionals
- Field supervisors
- Sales and Marketing
- Estimating
- Production
- Project Management
- Service and warranty
- Mark Newey




Why make the change?

What is your personal message and commitment?

- Lead rather than follow - join the future
- Building science is interesting and fun!
- Our industry is still building a great deal of junk... are you?
- Is code minimum good enough?
- Maybe you can move the needle and change the world!
- Efficient, healthy homes and workplaces make people happy = SATISFACTION!

Think about it and decide.





Asparagus Lesson...

3 years from seed to table

- **Year 1**
 - Commitment / buy-in – from your team
 - Keep the home fires burning
 - Marketing research
 - Identify partners
- **Year 2**
 - Customize marketing
 - Make your investment in your team; training & skill building
 - Secure demonstration project and begin execution
- **Year 3**
 - Complete demonstration project
 - Learning from mistakes
 - Celebrate successes... **MORE PLEASE!**

Find visible projects to model and resources to learn from.

- Deep Energy Retrofits
- “Shallow Energy Retrofit” (ala Marc Rosenbaum)
- Zero Net Energy
- Village Hill Northampton
- Volunteer opportunities, such as Habitat for Humanity
- Town / city energy committees
 - Task forces
 - Municipal boards
- Comment to ZBA and Planning Boards



Visible projects...

DER – Northampton, MA



Maple Street
Architects



Visible projects...

Cave's Residence – Hadley, MA



**Coldham and
Hartman
Architects**

**WRIGHT**
BUILDERS



Visible projects... Village Hill Northampton

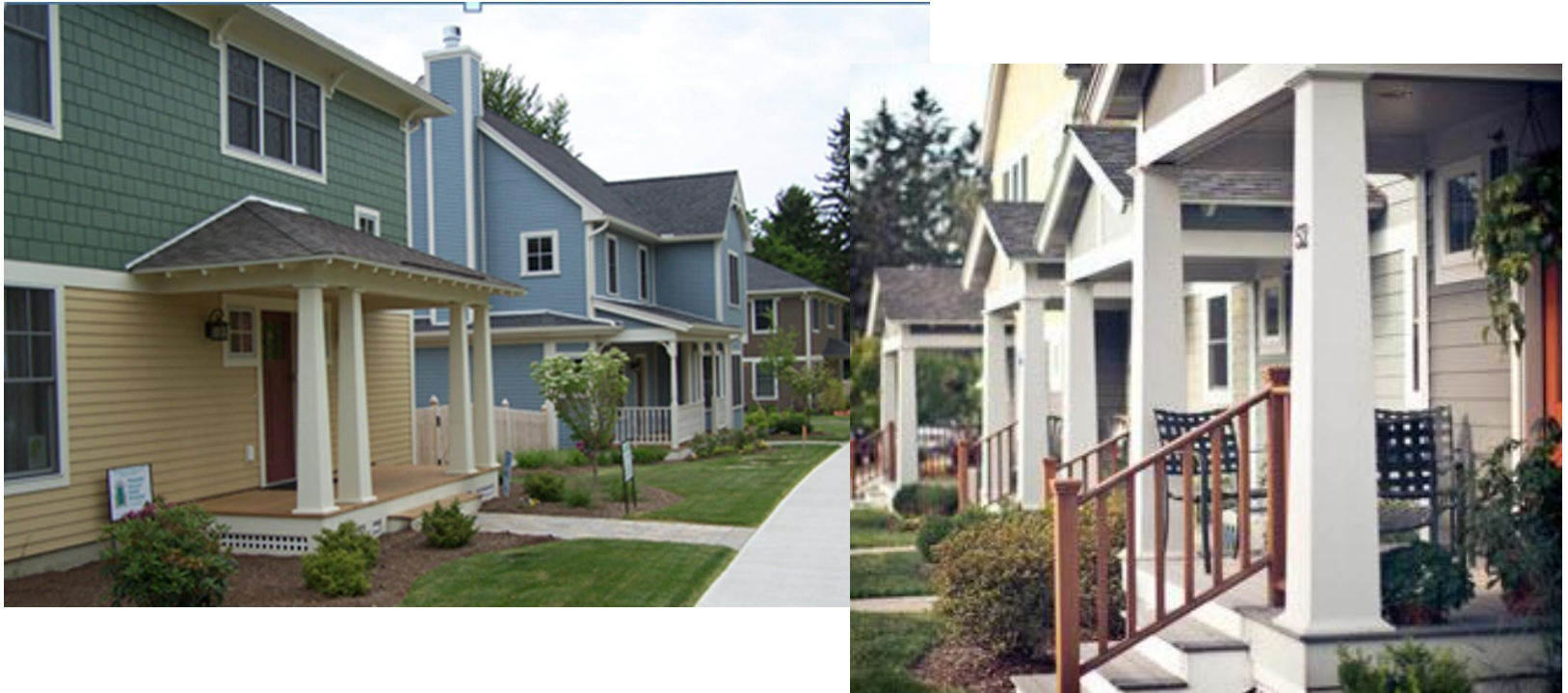


An all LEED certified and ENERGY STAR neighborhood of 17 single family, and 39 townhomes and flats.
Designed, developed and 60% built out.



Visible projects...

Village Hill Northampton



An all LEED certified and ENERGY STAR neighborhood of 17 single family, and 39 townhomes and flats.

Designed, developed and 60% built out.



Getting Exposure.

It takes time...

- Town and city commissions
- Task forces
- Municipal boards
- Comment to ZBAs and planning boards
- Habitat projects



Find your people through...

- North East Sustainable Energy Association (**NESEA**)
 - www.nesea.org
- U.S. Green Building Council (**USGBC**)
 - www.usgbc.org
- **AIA** – sponsor a well attended event
- Eager, willing trades with certification
- Networking, business organizations
- Team up with progressive suppliers, vendors, and manufacturers
- Like minded businesses



Partnering.

- Architects and designers
 - Regular meaningful contact
 - What can you offer their clients?
 - Help them build their businesses too.
- Banks/lenders/realtors
- “Building Energy 101” seminars
- Radio talk/interviews



Partnering.

Third party support and verification:

- Staff training
- HERs ratings
- LEED – Getting to GOLD
- ENERGY STAR – www.energystar.gov
 - Become an ENERGY STAR partner
- USGBC membership
- Center for Eco Technology (CET)
 - www.cetonline.org



Partnering.

Find the gurus and listen up:

- Bruce Coldham, FAIA **Coldham and Hartman Architects**

Smith College – **Bechtel Environmental Classroom**, Whately, MA: classrooms, meeting space, and field station

- Designed to meet the Living Building Challenge, in accordance with the International Living Building Institute. Certified February 2014
- 2,500 sf single-story wood-framed classroom building, acting as a portal to the 233 acre forest and pasture property.



Partnering. Find the gurus and listen up!

Marc Rosenbaum, P.E.:

Director of Engineering, South Mountain Company

“We are convinced that a sane, secure, and sustainable community can only be built on renewable energy sources.”

www.energysmiths.com | www.southmountain.com

Fixing the Pretty Good House :

How a “shallow energy retrofit” achieved net zero for under \$50k.



The Bement School dorms
Jones Whitsett Architects

Energysmiths modeled energy use and analyzed multiple mechanical system approaches.

Andy Shapiro - Principal, Energy Balance, Inc.

Coastal Maine Botanical Gardens |

NESEA Net Zero Award winner |

LEED Platinum with Maclay Architects



Charley Stevenson, LEED AP BD+C

Integrated Eco Strategy, LLC

Schapiro & Hollander Halls, Williams College | Bohlin

Cywinski Jackson Architects | LEED Gold certified.

www.integratedecostrategy.com



Image credit: Williams College

Partnering.

Center for EcoTechnology:

- 3rd Party Rater plus LEED AP
- Recommendations throughout the process
 - HVAC recommendations
 - Mid-construction blower door tests
 - Insulation R-values and techniques



Partnering.

Center for EcoTechnology:

- Program participation assistance
 - Incentive requests
 - Certificates
 - LEED checklists and registration
- Tier III / Option II Mass Save incentives:
 - \$7,000 per single-family home
 - \$4,000 per multifamily dwelling
- More than pays for all technical assistance, certification, and consulting fees



Highlight model projects and gather data.



The Bement School
Deerfield, MA

Jones Whitsett Architects



Highlight model projects and gather data.

ACH @ 50 Pascals | First dorm : 1.0 Second dorm: 0.64



The Bement School
Deerfield, MA

Jones Whitsett Architects



Doing twice is twice as good. Practice!



Highlight model projects and gather data.



The Hartsbrook School
Hadley, MA

Kraus-Fitch Architects

**Construction management planning and
value engineering to meet budget and schedule.**



Highlight model projects and gather data.



Atkinson Family Practice
Amherst, MA

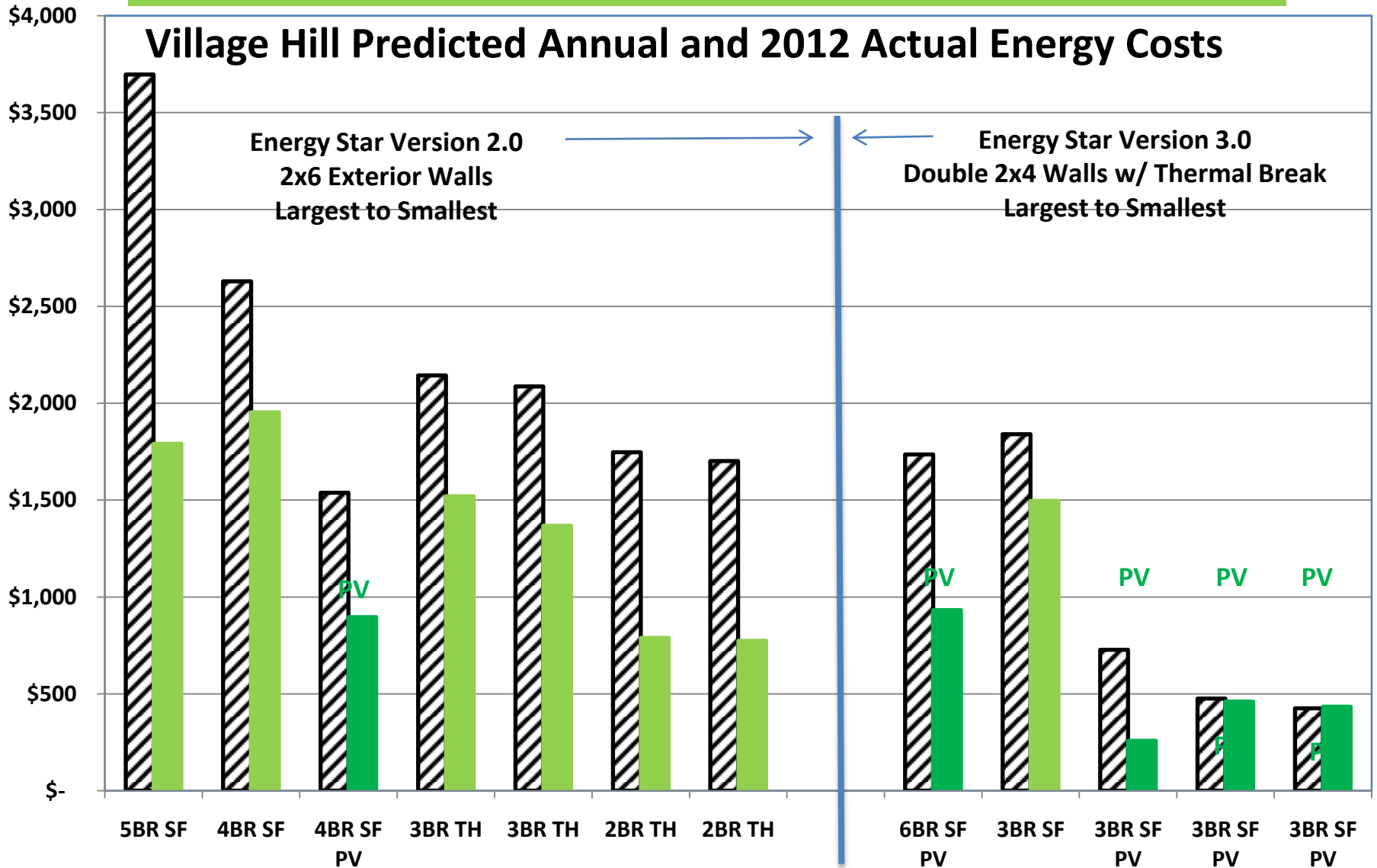
Kuhn Riddle Architects

14,000 sq. ft. medical facility delivered 5 months early.
Comments from world of field planning and supervision.



Show, Don't Tell!

Village Hill Predicted Annual and 2012 Actual Energy Costs



Predicted Annual Energy Cost
 2012 Actual Energy Cost



Payback... Schmaback

- How to talk about the value of your time?
- The sun is the only FREE lunch
 - All other renewables have trade-offs
 - Wood – effects of smoke emissions and clear cutting
 - Hydro – land use and food implications
 - Solar panels – carbon footprint
 - customer payback
- Long term positive life impact of more sustainable lifestyle and building practices



Payback... Schmaback... How do you measure?

- Nuclear reactor
- Hot tub
- 19" wheel rims



What does the customer see?

WRIGHT BUILDERS
I N C O R P O R A T E D



A fuel efficient fleet:



3 VW Tdi sedans:



**Roof top solar panels at
48 Bates Street**



**Construction signs
that reflect
our philosophy
and brand**



Getting the word out

Plain old advertising...

All the expected presence and resources:

- Paper
- Radio – public or private – follow your mission
- Email blasts
- Ground breakings & ribbon cuttings
- Press releases
- Newsletters – what's new!
- Social media
 - Facebook, Houzz, Pinterest, Twitter
- Referrals – send those thank yous
- Repeat customers – big and small projects
- Post project questionnaire – always follow up

**Learn from your customer feedback –
the good, the bad and the ugly.**



Fun, new advertising.

Sustainable building you can live with.
Experience you can trust.



new homes +
renovations +
remodels +
design +
additions +
energy retrofits +
workplaces +
construction
management



Call us today.

Northampton, MA wright-builders.com (413) 586-8287 (x104)

Stay close to
your commitment.



Differentiate from the competition and general construction community.

Have some fun!



WRIGHT BUILDERS

Outgrown your home?
We can help!

new homes + work places + renovations + design +
additions + energy retrofits + construction management

wright-builders.com Call today. (413) 586-8287 x104



Spring is coming...
Really!
Now's the time
to plan your
addition.

WRIGHT BUILDERS

Reg # 101536

wright-builders.com Call today: 586-8287x104

- new homes
- + workplaces
- + renovations
- + design
- + additions
- + remodels
- + energy retrofits
- + construction management



Differentiate from the competition and
general construction community.

Respecting Nature. Building Dreams.



new homes +
renovations +
remodels +
design +
additions +
energy retrofits +
workplaces +
construction
management



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BUILDERS

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BUILDERS



Differentiate from the competition and general construction community.

new homes | renovations | remodels | design | additions
energy retrofits | workplaces | construction management

If you call today,
we can
make plans today,
and help you
with your project.
Let's talk. :)



Northampton, MA wright-builders.com (413) 586-8287 (x104)



Differentiate from the competition and general construction community.

Draw your line in the sand!



On the cutting edge of **GREEN** building.

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NEW HOMES + WORKPLACES + DESIGN + RENOVATIONS +
ENERGY RETROFITS + CONSTRUCTION MANAGEMENT



Getting green **RIGHT** since 1974.

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ENERGY RETROFITS + CONSTRUCTION MANAGEMENT



Differentiate from the competition and
general construction community.



**WHAT HELPS
A NEW
BUSINESS
STAND
OUT?**

Kuhn Riddle Architects

“ We wanted to create a comfortable and inviting space, yet stay within our budget. Wright helped us every step of the way—now we have a light, airy, environment that makes you want to stop in and stay...”

Michele Curry & Eugene Ferrer
Owners SIP Coffee and Tea
Crafts Avenue, Northampton

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NEW HOMES + WORKPLACES + DESIGN + RENOVATIONS +
ENERGY RETROFITS + CONSTRUCTION MANAGEMENT

Let your satisfied
customers speak
for you.



Differentiate from the competition and general construction community.



Why does a builder get asked back?

Architect: Margo Jones

“Returning to Wright was one of the easiest decisions associated with the construction of our second dorm – a true “no brainer.” They were on time, on budget, and a lot of fun to work with!”

Shelley Borrer Jackson
Head of School
The Bement School

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BUILDERS

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**NEW HOMES + WORKPLACES + DESIGN + RENOVATIONS +
ENERGY RETROFITS + CONSTRUCTION MANAGEMENT**

“Returning to Wright was one of the easiest decisions associated with the construction of our second dorm – a true “no brainer”. They were on time, on budget, and a lot of fun to work with.”



Differentiate from the competition and general construction community.

On time, on budget, no matter what the project.

Energy efficiency is what we are all about.


NO surprises.

Smart planning makes any transition easier.

Call Wright Builders.
413 586 8287

wright-builders.com
Building with a conscience since 1974.

NEW HOMES + WORKPLACES + DESIGN + RENOVATIONS +
ENERGY RETROFITS + CONSTRUCTION MANAGEMENT



Don't stop talking about what you believe in.



Lines in the sand.

Will you...

- Install typical old school oil fired 86% efficient heating?
- Install anything less than the best performing windows and products?
- Adamantly protect your customer's health with ERV or other technology?
- Build to stretch code plus?
- Be an ENERGY STAR partner?
- Reduce toxins with paint, insulation and carpet choices?
- Consider "Historic" projects that dodge energy code?
- Research, advocate and use cycled products?

Good decisions, pitfalls & mistakes.

- What are the implications of these changes on your Team
- Sales and Estimating – cost of free budgeting
- Marketing – keep your core business
- Operations – LEED and ENERGY STAR operating impacts
- Production

GETTING ALL THE DETAILS RIGHT



Good decisions, pitfalls & mistakes.

Lessons from Village Hill



Solar array and “off street” vent stud requirements conflict



Celebrate your successes.

Lessons from Village Hill



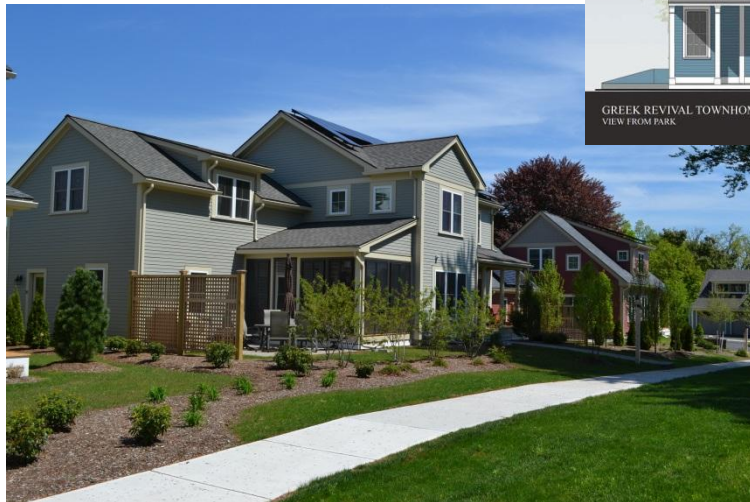
Eastview Townhomes



Morningside Single Family



The Upper Ridge - Townhomes



Beechwood Single Family



The Upper Ridge - Flats



Celebrate your success.



Moving the dial, building community, using less, is not a quick money game.

Living better with a smaller return...

Subsistence farmers are the only carbon neutral life



Thank you for your time.

We welcome
your questions.

**This concludes The American Institute of Architects
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