Advanced Building Science Spring Training Camp

April 14-16, 2019 **Hockley Valley Resort**



Gene Myers CEO Thrive Home Builders Denver, Colorado

Scaling Up High Performance Homebuilding

- · What is it?
- Our journey.
- Winning the Hearts and Minds of Our People, Our Trades and Our Customers.







About Thrive Home Builders

Nationally acclaimed niche builder

- · Of affordable housing
- · Of zero energy homes
- Of healthy homes





Niche Home Builder

- Founded in 1992
- 252 closings in 2018
- National builder dominated market





What is High Performance Homebuilding?

The Thrive Definition:

- Products: 100% DOE Zero Energy Ready, EPA Indoor airPLUS, LEED
- People: Fully Engaged and Empowered
- Financial Performance: The financial strength to prevail in all market conditions





Homes that do more.

Our Niche: Efficient, Healthy and Local

Efficient: To be the most energy efficient builder

Healthy: To build the healthiest homes

Local: Exploit this advantage over our large competitors



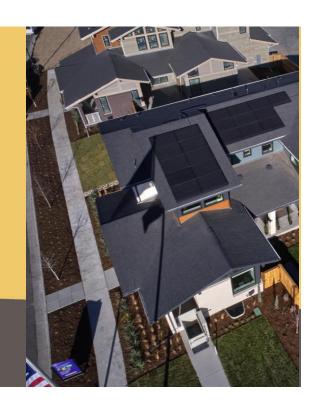


Efficient: Energy Efficiency

Colorado's largest builder of

- Net Zero Energy homes
- DOE Zero Energy Ready Homes
- EPA Indoor airPLUS Homes
- USGBC LEED for Home





Healthy: Indoor Air Quality

Colorado's largest builder of EPA Indoor airPLUS homes.

100% of our homes have: Active radon mitigation EPA Indoor airPLUS Certified







Local

Born in Colorado in 1992, Thrive understands what matters to Coloradan's.

Colorado's leading builder in using pine beetle-killed forests to build our homes.





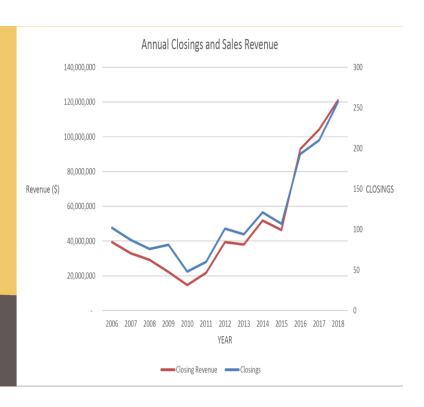
Homes that do more.

We Barely Made It Through The Recession

We bottomed out in 2010 with 13 employees and 50 closings.

How on earth could we recover?





Scaling Up Became Our Priority

- To become the low-cost producer of something no one else has.
- In order to execute well: To win the hearts and minds of:
 - Our people
 - · Our trade partners
 - Our customers





Winning the hearts and minds of our People.

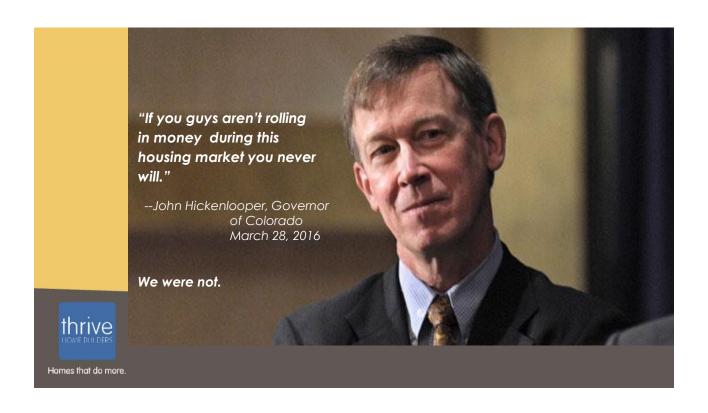
In 2016 I looked at our 2005 business plan. We were still working on the same initiatives.

Clearly we needed a new approach.





We were building great homes, but we hadn't yet built a great company.



Our business is **challenging**...even in the good times.

After-tax margins are in the 3%-4% range.

Source: The Cost of Doing Business Study, 2016 Edition, NAHB, used with permission.

Thrive was no better.

How hard is it to make a 1% mistake?



Good ROI can come from tight margins... but only with higher risk.

In light of low margins, high leverage becomes our only option.

But high leverage is what makes our industry so precarious.





Homes that do more.

Many variables are out of our direct control.

Can any company, let alone a small builder like Thrive, tackle these seemingly intractable problems?

I went on a research journey to find out.





In a survey of 1500 executives in 15 countries, IBM found that 60% of major projects fail. Often they made things even worse.

IBM Global Study, 10/14/08, http://www. 03.ibm.com/press/us/en/pressrelease/25492.wss

What if I curbed my instinct to "take charge"...and let the REAL experts lead?





In the US and Canada only 29% of workers are engaged at work, 54% not engaged and 18% actively disengaged.

State of the Global Workplace, Gallup, 2013,

What if the answer lies within our own people—fully engaged and empowered?

What if we could actually get results from the cliché that "Our people are our most important asset?"





But first, they have to trust us.

If our people are our most important asset, we can't throw them overboard at the first sign of trouble.

"We know that among the tragic legacies of the past decade's catastrophic meltdown was a profound loss of trust.

Will a 20-year-old today choose to enter a career that sheds 65% of its workers every 10 years or so?"

-- John McManus, Builder Magazine, August 2015





Homes that do more.

I simply do not want to be that builder...again.

What is your greatest fear for your career?

"Will you help me build a company with the financial strength to overcome all market conditions?"

This question galvanized our people in a common cause that really matters.



Joel Richmond, Project Manager

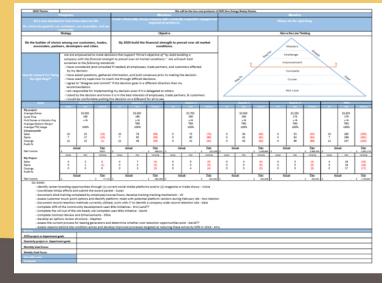


It all started with getting everybody on the same page.

Literally.

The One-Page Business Plan.

We wrote it together.





The top is about us.



2019 Theme: We will be the low-cost producer of Zero Energy Ready Homes.

Purpose:

- Set a new standard for how home improves life.
- Be a force for good for our customers, our associates and our community.

Mission:

· Create a financially strong company with a mutually respectful, engaged and empowered workforce.

Mantra:

· Always do the right thing.



To meet our goals we need a company of believers. But if we expect that, we must first have a company worth believing in.



Strategy and Objective

Strategy. Objective.

Be the builder of choice among our customers, trades, associates, partners, developers and cities.

By 2020 build the financial strength to prevail over all market conditions.

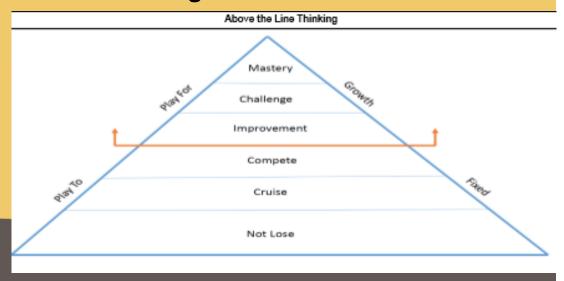
How do I know if I'm "doing the right thing?" We are empowered to make decisions that support Thrive's objective of "by 2020 building a company with the financial strength to prevail over all market conditions." We will each hold ourselves to the following standards:

- I have considered (and consulted if needed) all employees, trade partners, and customers affected by my decision.
- · I have asked questions, gathered information, and built consensus prior to making the decision.
- · I have used my supervisor to coach me through difficult decisions.
- I agree to "disagree and commit" if the decision goes in a different direction than my recommendation.
- · I am responsible for implementing my decision even if it is delegated to others.
- · I stand by the decision and know it is in the best interests of employees, trade partners, & customers.
- · I would be comfortable putting this decision on a billboard for all to see.



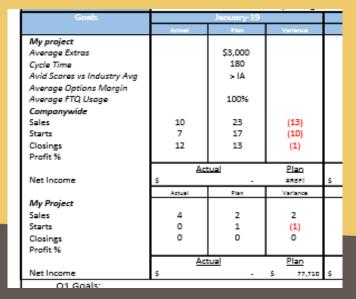
Homes that do more.

Above the Line Thinking



Project and Companywide Metrics

Tracking monthly, quarterly and annual metrics help connect the dots between each employee's and project's performance and reaching our annual goals.





Homes that do more.

Group Goals

O1 Goals:

- Identify career branding opportunities through (1) current social media platforms and/or (2) magazine or trade shows Vickie
- Coordinate NHQA efforts and submit the award packet Susan
- Document 2018 training completed by employee/course/hours; develop training tracking mechanism Jill
- Assess customer touch point options and identify platform; meet with potential platform vendors during February IBS Ron Stanton
- Document record retention methods currently utilized; work with IT to identify a company-wide record retention site Deia
- Complete 25% of the Community Development Lean Blitz initiatives Eric/Land??
- Complete the roll out of the Job Ready Job Complete Lean Blitz initiative David
- Complete Contract Review and Enhancements Elitia
- Develop an options review structure Stephen
- Assess the current process for leasing generators and determine whether cost reduction opportunities exist David??
- Assess reasons behind site condition extras and develop improved processes targeted at reducing these extras by 50% in 2019 Amy



Personal Priority Lists—My Plan

Each employee completes a weekly update.

It's not a "to do list." It is a list of the important things that must not be crowded out by the urgent.

ASSESS TESSORS BETTING SIZE CONTRICTOR EXCE	
My Pien	
2019 project or department goals	
Quarterly project or department goals	
Monthly Goal Focus:	
Weekly Goal Focus:	
End with a win:	
Gratitude:	



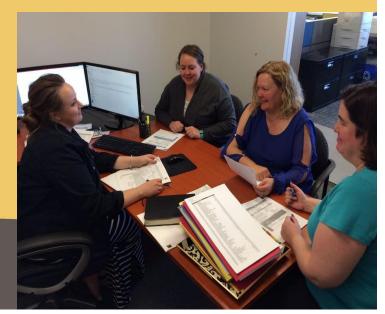
Homes that do more.

The weekly Huddle, End with a Win and Gratitude.

The huddle is the update of weekly tasks. How did I do last week? What's next?

Remember to celebrate wins and step back. We have much to be grateful for.





Open Book Management

- Transparency—sharing financials; good and bad.
- Education—every Thriver reads and understands our balance sheet and income statement for their project and the company.





"When people set their own targets, they usually hit them."—Jack Stack, The Great Game of Business

- "Games" are run by mid managers to target specific goals.
- The teams are selected by the mid manager in charge.





The Great Huddle

Keeping every Thriver in the loop:

- Safety meetings
- Department updates
- Financial literacy
- · Review financials
- Review goal progress
- · Wins and Gratitude





Homes that do more.

70 minds are better than one. It takes time. It's messy. But when we are done, change actually happens.





And for me...I have new job.

It doesn't require me to have all the answers.

It doesn't require me to solve all the problems.

The real wisdom in our company lives on the front lines.

I am the "Catalyst in Chief," bringing this new, dynamic, crazy idea to life.





Winning the Hearts and Minds of our Trade Partners

Our secret weapon is US

- First say "thank you"
- Recognize good performance
- Build a relationship

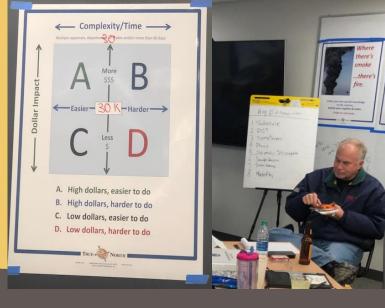






Trade Partner Survey—December 2017 Lean building blitz

- 24 hours of trade partner interviews
- 83 Opportunities for Improvement
- \$3.9M in potential Thrive Savings
- \$2.7M in potential Trade Partner
- 46.5 Days in Cycle Time Reduction
- **Vendor Council**



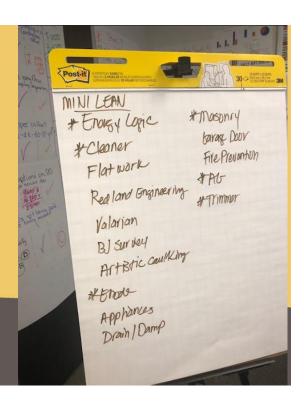


Homes that do more.

The Trade Council

- Comprised of only 9 individuals
- Voice of all suppliers and trades to Thrive Home Builders.
- Several Thrive employees are included on the council to help coordinate activities
- Reduce wasteful processes and product, and to help us be the best builder in Colorado.
- The "Job Ready-Job Complete Handbook





Winning the Hearts and **Minds of our Customers**

Understanding our customer and how our homes meet her needs.





Develop your marketing "voice."

- What is our strong value proposition?
- Who is our buyer?
- What does she care about?
- How do our homes address that?
- What is the economic case?
- What is the emotional case?





Who is our buyer?

She is a 35 year old woman who drives a Prius, shops at Whole Foods and has "Boulder-like" tendencies.

"The green consumer revolution has been led by women aged between 30 and 49 with children and better-than-average education.

They are motivated by a desire to keep their loved ones free from harm and to secure their future."

-Jacquelyn A. Ottman, The New Rules of Green Marketing





Homes that do more.

Who is our buyer?

We believe she:

- · Is a strong CEO for the family.
- Is the primary shopper and makes buying decisions.
- Confidently pays more for things she believes offer superior value and performance.
- As a consummate consumer, she looks for authenticity, honesty, credibility from the brands she chooses.
- · Loves local.





We believe she:

Seeks control, empowerment and peace of mind by knowing she has done all she can for the people she loves.





Homes that do more.

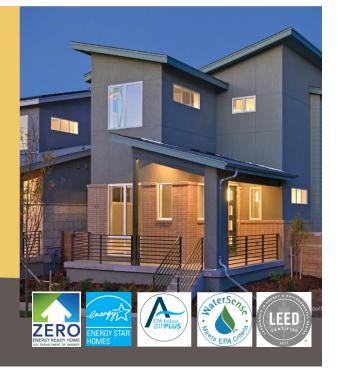
How do our homes meet her needs?

Authenticity and credibility.

The only authentically verified high performance home of its type. Something no one else has.

- EPA Indoor AirPlus
- EPA WaterSense
- EPA EnergyStar
- DOE Zero Energy Ready Home
- USGBC LEED for Home





What is the economic case?

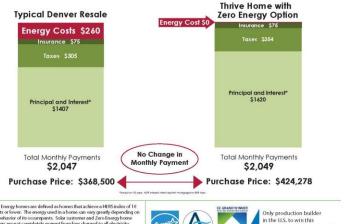
The Total Cost of Home Ownership— PITI+e





MORTGAGE COMPARISON TYPICAL DENVER RESALE HOME to ZERO ENERGY HOME

PITI + E = Principal, Interest, Taxes, Insurance + Energy



Zero Energy homes are defined as homes that achieve a HERS index of 10 points or lower. The energy used in a home can vary greatly depending on the behavior of its occurpents. Solar customer and Zero Energyhome owners are not completely exempt from free sharped to all electricity customers, even when you produce more electricity than you use. Price features, specifications, availability and other terms and conditions are subject to change without notice.

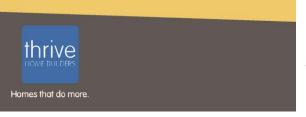




in the U.S. to win this Innovation in Housing Award 5 years in a row!

What is the economic case?

The Total Cost of **Home Ownership**





Score **LOW** for Big GAINS

The Home Energy Rating System (HERS) is an independently tested industry standard for measuring energy performance. The lower the rating, the lower your energy costs and the lower your impact on the environment.









What is the emotional case?

Homebuying is an inherently emotional decision.

What makes our customers fall in love with our homes?





Selling it.

Highly trained sales staff

- Outside sales training on basics of selling
- Constant in-house training on our product differentiators
- Attendance at high performance home conferences like EEBA





Selling it.

Great models support the emotion of buying.





Homes that do more.

Sales office messages

Show that there is a meaningful and tangible benefit.





So how has all of this worked?

- · We have collaboratively evolved our products.
- · We have received a number of accolades.
- · We have put more profit to the bottom line.

What follows is a recap of our journey.



Homes that do more.

Product Evolution: Solaris Single Family

2009 · Standard Solar

Energy Star

Standard HERS 40-48

with 2.5 kW PV

2011 · Build with local beetlekill lumber

> Zero Energy Option HERS <10 with about 10kW PV

2012 •

DOE Zero Energy Ready

Learning how to sell it

2013 .

DOE Grand Winner Housing Innovation, **Production Home**





ZEN--Zero Energy Now

2013 · HERS 40 without Solar

- HERS <10 with 7-8kW PV
- Zero Energy as a standard feature
- DOE Zero Energy Ready Home
- 2014 DOE Grand Winner Housing Innovation, Production Home





Homes that do more.

Perrins Row Townhomes

2014

- · 3 three-story floor plans
- HERS 24-31 with 3 kW
- Solar leases—prepaid and zero-down

2015

 DOE Grand Winner Housing Innovation, Multifamily





RidgeGate 3-Story Townhomes

2016 • HERS 24-31 with 3 kW PV

- Optional Zero Energy with 5 kW PV
- · Staggered stud double 2x4 wall
- · Our first location in the suburbs
- DOE Grand Winner Housing Innovation , Multifamily





Lowry Courtyards

2016

- Standard HERS 4 with 8.7 kW PV
- · Staggered stud double 2x4 wall
- "Z" Lot configuration allows marketable main floor master floor plans on average 40' lot
- Target of aging boomer buyers with main floor living

2017 • DOE Grand Winner Housing Innovation, Production Home





RidgeGate 2 Story Townhomes

- Innovation, Multifamily





Vita

2017

Our first homes designed specifically for health

- **EPA Indoor AirPlus**
- **ERV**
- Active Radon Mitigation
- Indoor Air Quality **Leadership Award**









ZEN 2.0

- 2017 · Complete redesign
 - · Zero Energy Standard
 - · Prewire for Car Charging
 - Tesla PowerWall

2018 • DOE Grand Winner Housing Innovation, Production Home





Homes that do more.

Elements Affordable Townhomes

2017 • Housing for low income families

- HERS Scores in the 30's
- Zero Down Solar Lease
- DOE ZERH and EPA Indoor airPLUS

2018 • DOE Grand Winner Housing Innovation, Affordable

2019 • Best in Green, International Builders Show





Panacea

Best of all worlds:

- · Nature—walkable to wildlife refuge
- Urban—connected by light rail, downtown and DIA
- Zero energy—HERS 8
- Battery storage—Tesla PowerWall
- Electric Car Charging PreWire
- Active Radon Mitigation
- · Panasonic ventilation throughout



2019 Home of the Year, Green Builder Magazine Best in Green, *International Builder Show*



Homes that do more.

Not just another pretty home.

The only authentically verified high performance home of its type.

- EPA Indoor AirPlus
- EPA WaterSense
- EPA EnergyStar
- DOE Zero Energy Ready Home
- USGBC LEED for Home



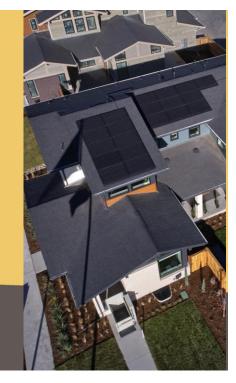












EPA Indoor airPLUS

Colorado's largest builder of EPA Indoor airPLUS homes.

100% of our homes have: Active radon mitigation EPA Indoor airPLUS Certified

EPA Indoor AirPlus Leader Award, 2016, 2017 and 2018







Homes that do more.

DOE Zero Energy Ready

Largest builder of Zero Energy Ready Homes.

100% Energy Star.

100% US Department of Energy Zero Energy Ready Homes.

Housing Innovation Grand Award Winner 9 times in the last 6 years.











2018 and 2019 Awards

- Developed alternative compliance path through DOE Zero Energy Ready Home
- · 100% of our homes are LEED Certified.
- 2019—LEED Partner of the Year
- Energy Star Market Leader
- 2 EPA Indoor airPLUS Leader Awards 2018
- 5 DOE Grand Awards for Housing Innovation
- 2 Professional Builder 40 under 40







Homes that do more.



Accolades for our trade relations, HR, processes and controls.

Per Scott Sedam, TrueNorth owner, Thrive "reported the biggest year-to-year score improvement they have ever seen in 10 years running the survey with more than 75 builders. nationwide."



AROFESSIONAL BUILDER

2018 National Housing Quality Award, Bronze

Accolades and Awards 2015-2019

2015

- •DOE Housing Innovation Award GRAND WINNER, Multi-Family Home -Perrin's Row ~ U.S. Department of Energy
- •DOE Housing Innovation Award, Multi-Family Home Perrin's Row ~ U.S. Department of Energy
- •National Best Green Home Design ~ National Association of Homebuilders
- •Best in Green Award 2015 Best in Green Single Family Production Homes
- ~ National Association of Homebuilders
- •Energy Star® Market Leader Award ~ U.S. Environmental Protection Agency



Homes that do more.

2016

- *Builder of the Year ~ Home Builders Association of Metro Denver
- •Builder of the Year ~ Green Home Builder Magazine
- •DOE Housing Innovation Award GRAND WINNER, Multi-Family Home RidgeGate ~ U.S. Department of Energy
- *DOE Housing Innovation Award, Single Family Home Hyland Village ~ U.S. Department of Energy
- *DOE Housing Innovation Award, Multi-Family Home RidgeGate ~ U.S. Department of Energy
- •Green Home of the Year MAME Award RidgeGate ~ Home Builders Association of Metro Denver
- •Best On The Boards Community MAME Award Boulevard One Lowry ~ Home Builders Association of Metro Denver
- •Indoor airPLUS Leader Award ~ U.S. Environmental Protection Agency
- •Energy Star® Market Leader Award ~ U.S. Environmental Protection Agency



2017

- •Builder of the Year Award--Professional Builder
- •LEED Certified 100%
- •DOE Housing Innovation Award GRAND WINNER, Multi-Family Home RidgeGate ~ U.S. Department of Energy
- •DOE Housing Innovation Award GRAND WINNER, Single Family Home Boulevard One Lowry ~ U.S. Department of Energy
- •Green Home of the Year MAME Award Z.E.N. 2.0 ~ Home Builders Association of Metro Denver
- •Indoor airPLUS Leader Award ~ U.S. Environmental Protection Agency
- Energy Star® Market Leader Award ~ U.S. Environmental Protection Agency
- •DOE Housing Innovation Award, Multi-Family Home RidgeGate ~ U.S. Department of Energy
- *DOE Housing Innovation Award, Single Family Home Boulevard One Lowry ~ U.S. Department of Energy



Homes that do more.

2018

- •National Housing Quality Award, Bronze Professional Builder
- •LEED Homes Power Builder ~ U.S. Green Building Council LEED Certified
- •DOE Housing Innovation Award GRAND WINNER, Affordable Home − Elements ∼ U.S. Department of Energy
- •DOE Housing Innovation Award GRAND WINNER, Single Family Home − Z.E.N. 2.0 ~ U.S. Department of Energy
- *DOE Housing Innovation Award GRAND WINNER Most Homes Built~ U.S. Department of Energy
- •Green Home of the Year MAME Award Panacea Collection ~ Home Builders Association of Metro Denver
- •Indoor airPLUS Leader Award ~ U.S. Environmental Protection Agency
- •Energy Star® Market Leader Award ~ U.S. Environmental Protection Agency
- *DOE Housing Innovation Award, Affordable Home Elements ~ U.S. Department of Energy
- •DOE Housing Innovation Award, Single Family Home Z.E.N. 2.0 ~ U.S. Department of Energy
- •LEED Certified 100%



2019

- •Stephen Myers, Top 40 Under 40 ~ Professional Builder
- •Nathan Kahre, Top 40 Under 40 ~ Professional Builder
- •Green Home of the Year Panacea ~ Green Builder Magazine
- •LEED Organization of the Year
- •IBS Best in Green—Panacea
- •IBS Best in Green—Elements Affordable Townhomes
- •BALA, Best in American Living--Panacea



Homes that do more.

In conclusion:

We are the low cost producer of homes that no one else offers.

We build homes that do more:

- · Our homes help pay for their own energy.
- · Our homes make people healthier.
- Our homes give you the peace of mind of knowing that you have done all that you can for the people you love.

thrive



I hope in some way our journey can help you.

- We have the technology to build great homes.
- Winning the hearts and minds of our own people, our trade partners and our customers is the key to scaling up.



