

Profiting from Home Performance



Performance Systems



PIER Whole House Contracting Study

- Report on the results of contractor surveys
- Defining best practices
- Developing comprehensive training program



Two Part Survey Process

- Online Survey
 - 118 contractor respondents from 35 states, the District of Columbia and Canada
 - Focus on basic business characteristics and basic testing used
- Phone Survey
 - 15 selected contractors
 - Variations in type, location, and business model
 - Contractors talked about what concerned them
 - Explored best practices (see survey)

Who is making HP work?

- Large and small
- Different climates
- Inspector/Raters and installers
- Start ups and conversions or extensions of existing business
- Trade-focused or whole house



Key Findings of the Online Survey

- Very diverse response
 - Lots of contractors self identifying as Home Performance contractors outside of the programs
- Patterns in the use of testing
 - Blower doors, Billing, Baseload and IR

Key Findings of Phone Survey

- Not as much whole house
 - Trade contractors tend to stay focused on their trade
 - Startups and remodelers doing more comprehensive workscopes
- Advice to contractors should be tailored
 - To climate and trade add origin and business model
- Full report at www.psdconsulting.com

Home Performance with Energy Star

- A whole-house, fuel neutral approach to improving the energy efficiency of existing homes using differentiated local contractors who evaluate homes and implement performance tested improvements within a quality assurance context

The screenshot displays the Energy Star website's navigation and content for the Home Performance with ENERGY STAR Overview page. The header includes the Energy Star logo, a search bar, and the slogan "BE A LEADER—CHANGE OUR ENVIRONMENT FOR THE BETTER". A navigation menu lists categories: PRODUCTS, HOME IMPROVEMENT, NEW HOMES, BUSINESS IMPROVEMENT, PARTNER RESOURCES, and WHAT IS ENERGY STAR? NEWS ROOM. The main content area features a breadcrumb trail: Home > Partner Resources > Utility & EEPS Resources > Home Performance > Home Performance with ENERGY STAR Overview. Below this is the title "Home Performance with ENERGY STAR Overview" and a paragraph explaining the program's launch in 2001 and its focus on whole-house energy improvements and building performance contracting. A "Quick Links" box on the right contains links for a Partnership Agreement (42 KB), Partner Web Sites, Web Linking Policy, Brochure (139 KB), and Ad Template (35 KB). A "Quick Tips" section at the bottom right encourages saving energy.

Motivations

- **Ethics:** "I want to do good work."
- **Differentiation:** "I want to be different and better and maybe charge more for my work."
- **Risk avoidance:** "Problems are eating up my profits."
- **New markets:** "I want to be part of the next big thing."
- **Business stability:** "I lay off too many trained people in the off season."

Basic Steps For Everyone

1. Investigate your market
2. Get ongoing access to technical training
3. Choose a business model and assemble the team
4. Buy equipment
5. Get access to customer financing
6. Develop or change your business process (often the missing link)
 - Set up and run marketing and sales
7. Be able to deliver on the quality of the installations

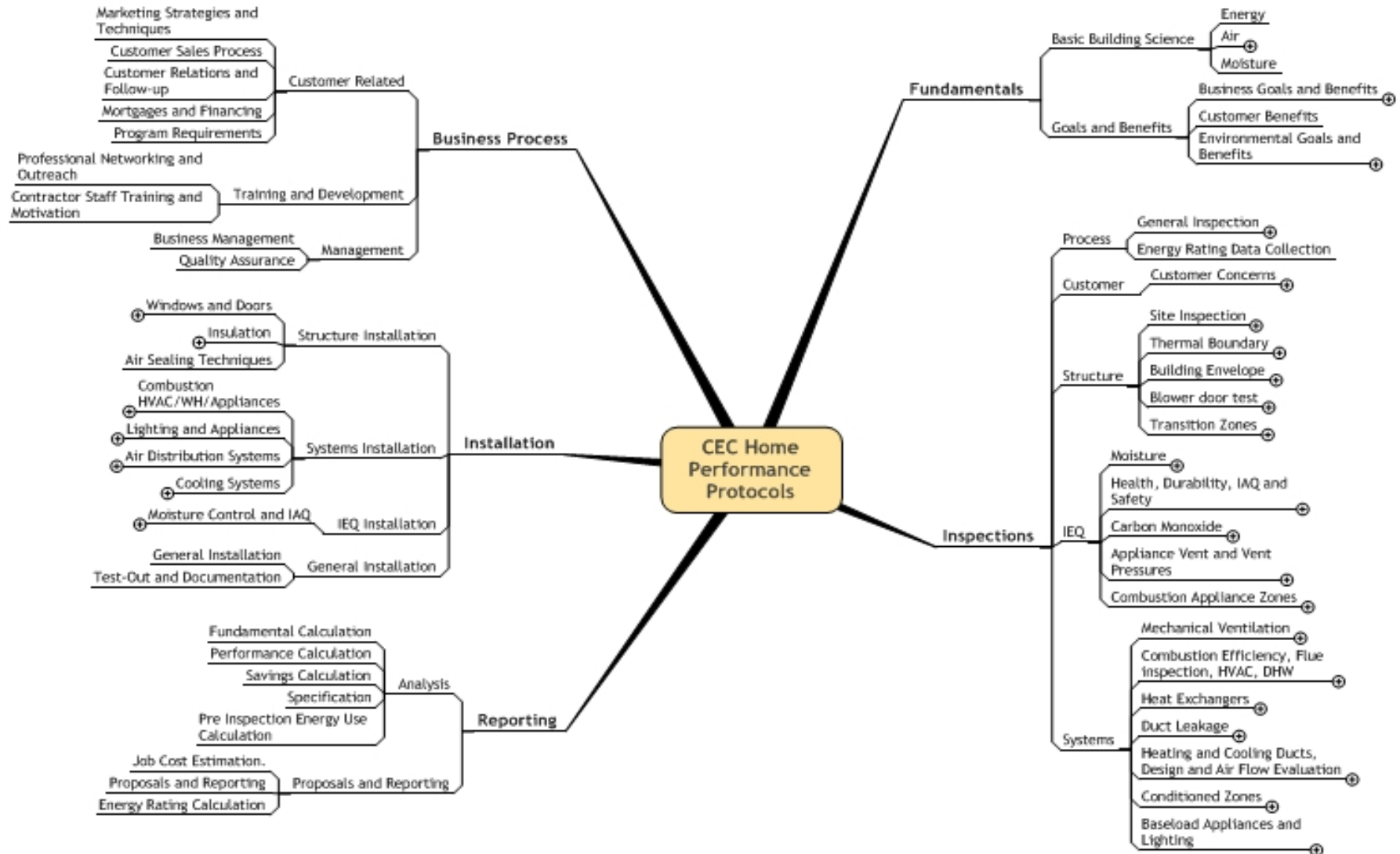
Develop a List of Local Problems

- What are the drivers for performance problems in your market?
 - Comfort – Cold or hot rooms
 - Health – Mold, CO, poor ventilation
 - Durability – Moisture control, window condensation paint
 - Efficiency – High bills
- Do you have the technical training to recognize and solve these problems?

Ongoing Access to Training

- Take advantage of any building science based training that is out there offered by utilities or weatherization
 - The training may be based on a different business model but the physics is always the same
 - Train crews too, not just yourself, internal training
- Training Resources list (to be provided)
 - Information resources like Home Energy CD, BPnet
 - Conferences like Affordable Comfort
 - Trainers like PSD and Weatherization training centers

CEC Home Performance Contractor Protocols

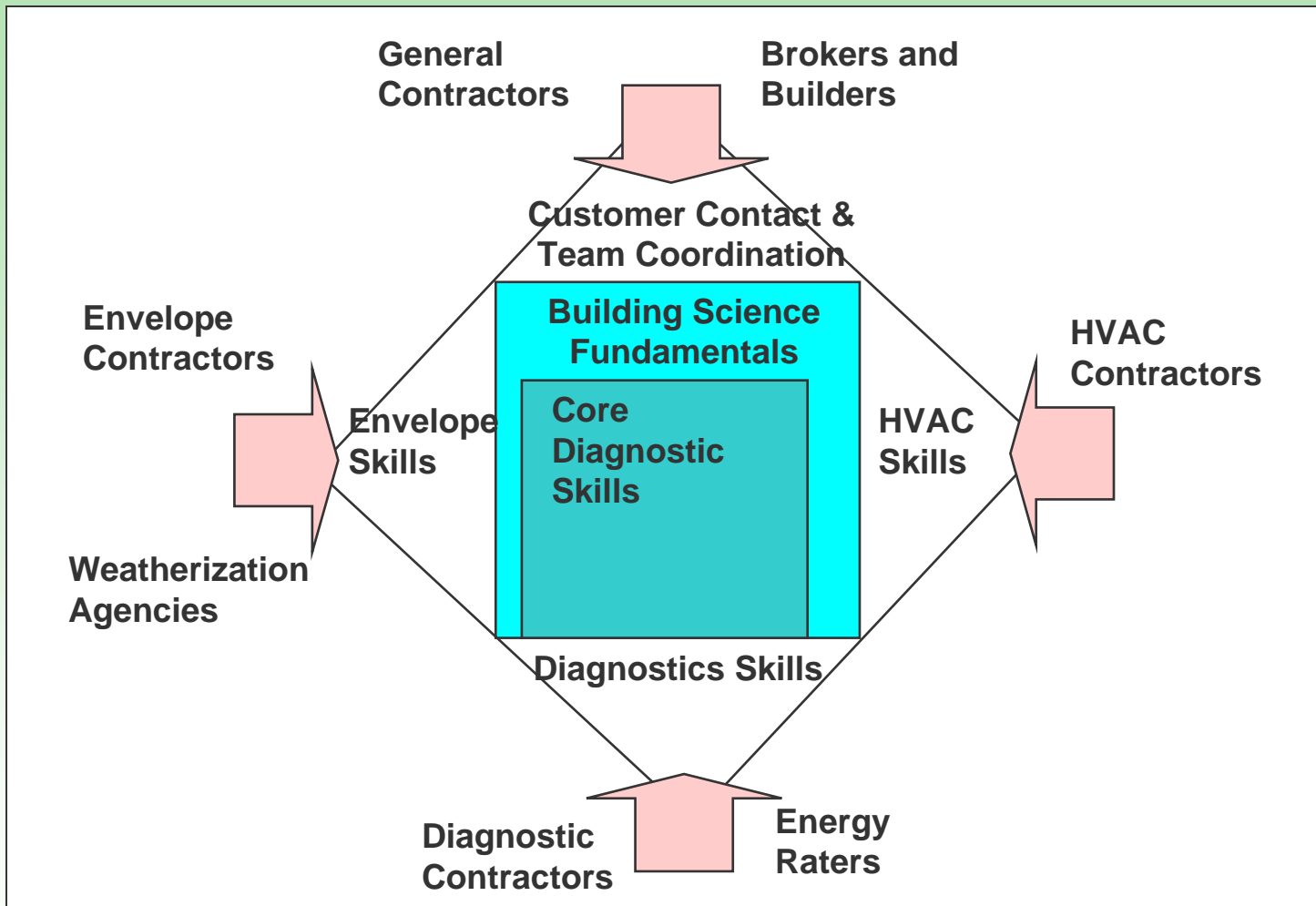


Business Model Choices

- The Consultant (rater or otherwise)
 - Independent or as a Sub
- The General Contractor
 - Responsible for coordination
 - Sales heavy variation
- The Facilitator
 - EEMs
- The Subcontractor
 - Not responsible for marketing
- The Whole House Option
 - Do it all



The Whole House Team



“It takes a team to cover all the bases”



Decision: Am I going to be a prime contractor or a sub?

- Cost to get started
 - Do you have the money for investing in equipment and marketing?
- Marketing interest and skills
 - Are you a people person?
- Technical difficulty and interest
 - Do you want to engage in a long term technical learning process?
 - Are you familiar with the contracting business?
- Financial risk
 - Do you want to take financial risks for potential payoffs
- In the end: personal goals and desire!

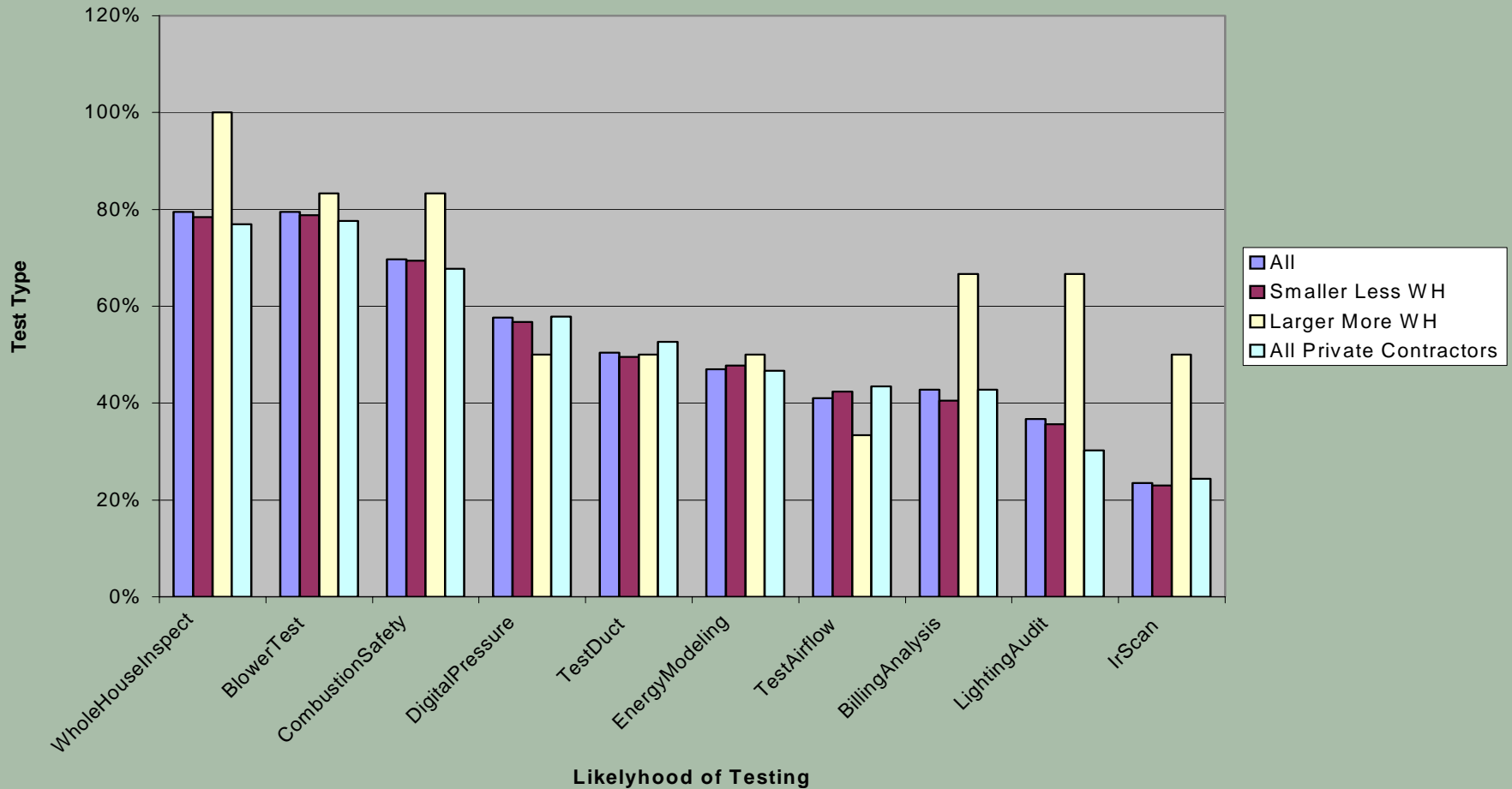
Greening the Business Model

- Take advantage of public perceptions
- Renewables – Solar, wind, etc.
- Recycling and waste control
 - Toxics
 - Waste
- Materials choices
 - Green product branding
 - Low impact materials
- Presenting carbon information



What is the Minimum Test?

Comparison of Larger Whole House Contractors to Other Private Contractors



Minimum Diagnostics Equipment for a Basic Test

1. Blower door
2. Digital manometer
3. CO measurement
4. Combustion efficiency
5. Flow hood or fixed orifice devices (for exhaust fan flow)
6. 2 Thermometers (two sensor differential or equivalent preferred)
7. Hygrometer (%RH and temperature)
8. Duct blaster (climate dependent)
9. AC Gauges (climate or commercial)
10. Computer and printer with Microsoft Word and Excel

Equipment Options

1. IR (a real crowd pleaser)
2. Wood moisture meter
3. Watt hour meter (appliances)
4. Software (energy and loads)
5. Water flow (showers)
6. Temperature sensors dataloggers (commercial and multifamily)
7. Run-time meters (savings and analysis)

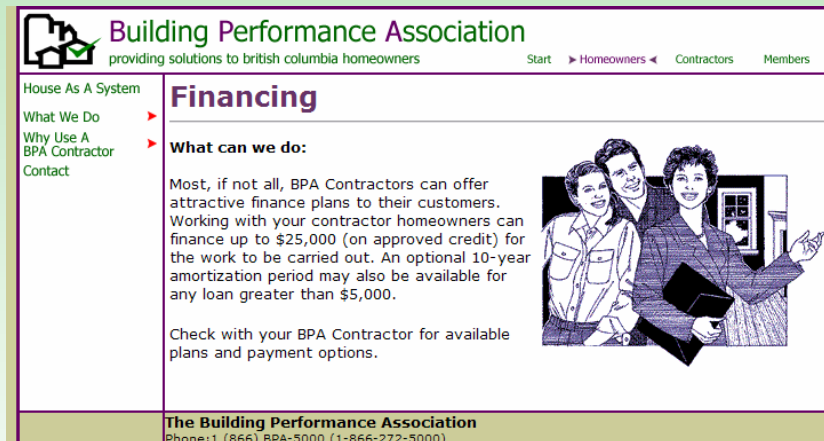
Buy Installation Equipment

- Equipment and vehicles
 - HVAC
 - Shell



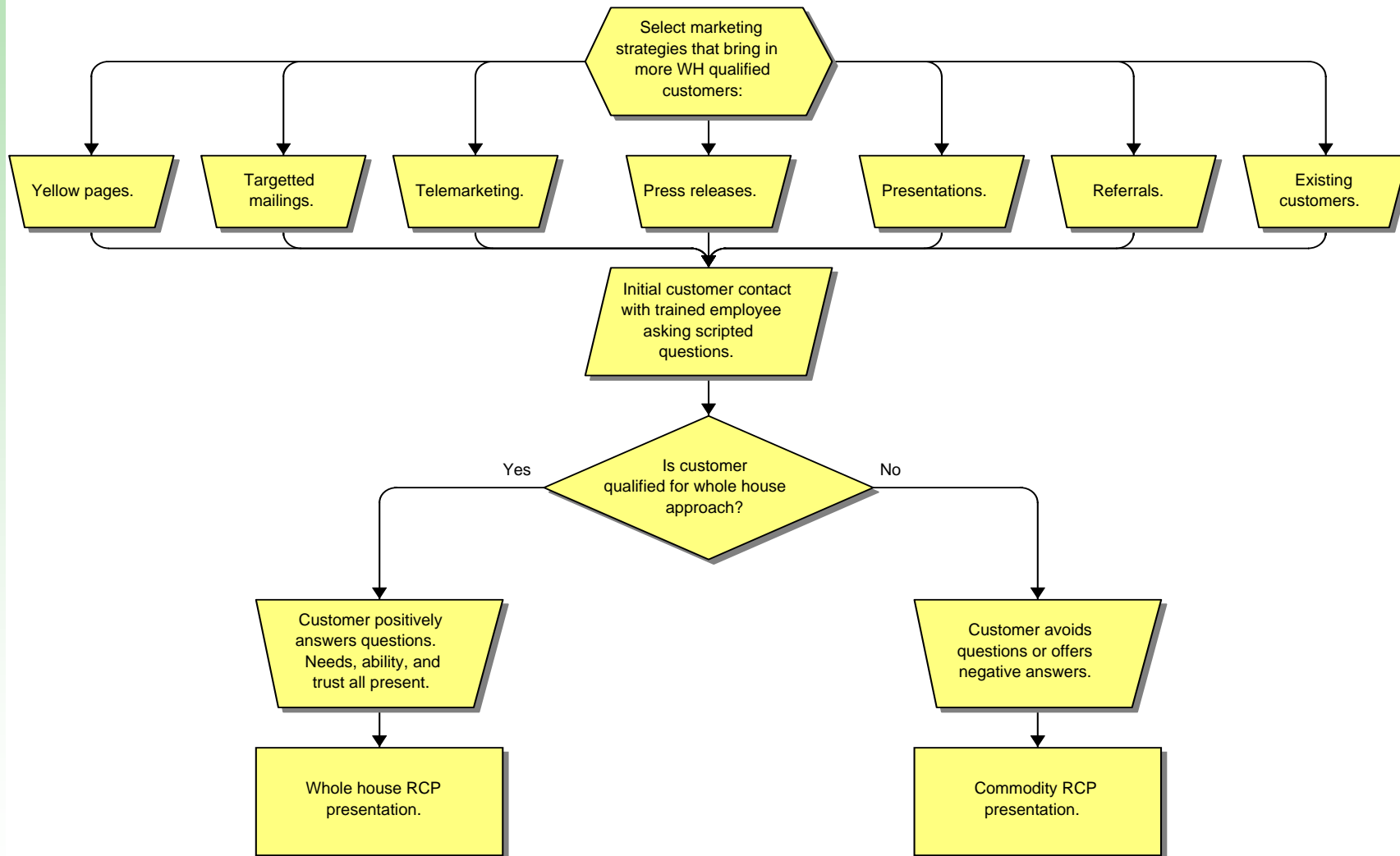
Get Access to Homeowner Financing

- Make it easy to expand the work scope and meet the first cost objection!
- Sources
 - Fannie Mae (federal)
 - EGIA
 - State housing finance
 - Manufacturers
 - Credit cards
 - Banks (Contractor originated important)
- Typical rates
- Subsidies



The screenshot shows the website for the Building Performance Association (BPA). The header includes the BPA logo and the tagline "providing solutions to british columbia homeowners". Navigation links for "Start", "Homeowners", "Contractors", and "Members" are visible. The main content area is titled "Financing" and includes a section "What can we do:" which states that BPA Contractors can offer attractive finance plans to their customers, with financing up to \$25,000 (on approved credit) for work to be carried out. An optional 10-year amortization period may also be available for any loan greater than \$5,000. A small illustration of a family (a man, a woman, and a child) is shown next to the text. At the bottom of the page, contact information for The Building Performance Association is provided: Phone: 1 (866) BPA-5000 (1-866-272-5000).

Sample Whole House Marketing and Sales Qualifying Process



Getting the Work Done Right



Hiring, Motivating and Retaining Trained Crew

- Feedback on results
- Benefits (health, etc.)
- Training
- Post Inspections
- Other Motivations?

Basic Steps For Everyone

1. Investigate your market (climate, housing types, etc.)
2. Get ongoing access to technical training
3. Choose a business model and assemble the team
4. Buy equipment
5. Get access to customer financing
6. Develop or change your business process to be HP suitable (often the missing link)
 - Set up and run marketing and sales adapted to HP
7. Be able to deliver on the quality of the installations

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