# FROM LISTINGS TO RESILIENCE

B50-B100 readiness and the strategic role of renewable liquid fuels in a volatile oil market

Dr. Alan Chmiel | R.W. Beckett
Clean Fuels Technical Workshop | October 27, 2026

**The technical ceiling has moved**



# The R.W. Beckett family of companies

A broader portfolio across combustion, heating, precision spray, ignition, manufacturing and engineered industrial systems



## R.W. BECKETT

Oil & gas burners • controls • fuel-system components

## THERMO PRODUCTS

Thermo Pride heating & cooling equipment • Norwood sheet-metal manufacturing

## WAYNE COMBUSTION

Commercial and industrial gas burner systems

## DELAVAN

Precision spray nozzles • combustion and industrial spray technologies

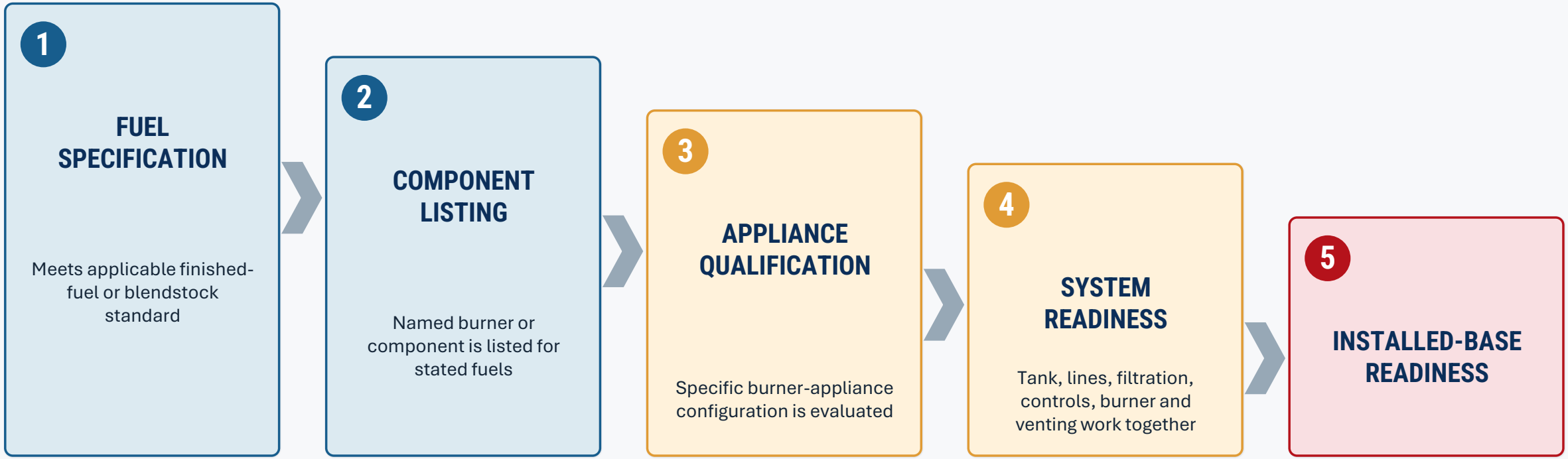
## F.I.D.A.

Igniters and ignition transformers

## UNITED STATES CONTROLS

Engineered precision roll-cooling spray systems

# Readiness is a ladder - not a label




**Each level is necessary. None alone proves the next.**

*Framework synthesized from Beckett product documentation and application-test limitations.*

# What is established - and what is not

## ESTABLISHED

• Current burners are approved through B100 under stated standards and conditions.

• ASTM D396 extends finished heating-fuel grades through B50.

• Specific B100 burner-appliance applications have completed Beckett testing.

• UL actively performing testing for B100 and qualifying burners/appliances for B5-B100

• CSA B140 (Canada) burner standard is up to B20.  CSA is moving much more slowly than UL

## APPLICATION-SPECIFIC

• Firing rate, nozzle, head, pump pressure, chamber geometry and purge timing matter.

• 100-hour endurance is a meaningful milestone - not lifetime validation.

• A successful burner application does not certify overall appliance efficiency, safety or controls.

## NOT YET UNIVERSAL

• Not every burner/appliance combination is covered.

• Not every legacy tank, line, filter, valve, seal, control or nozzle is proven.

• Commercial release, warranty and conversion boundaries remain model-specific.

• Severe outdoor cold-flow evidence remains a gap.

*Sources: Beckett 6104BRF; Beckett 6104BCF3; CF375 application reports; NORA 2026 field study; Clean Fuels/ASTM D396-26a materials.*

# INSIDER INFORMATION

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- Mobile Applications are tied to (diesel) fuel out of convenience
  Also, outdoor cold weather applications (construction heaters, ground warmers) may not be good applications for high bio-blends
  -Some of the heating market will always use over-the-road diesel fuels for convenience/cold flow characteristics

- Over 30 new Beckett B100 burner specifications have been developed in the last 2 years (more than 1 per month) – nearly all of these were subsequently UL listed on the appliance by the boiler/furnace OEM

- **TL;DR: the hardware is certified and available in the US for up to B100.**

# The remaining gap is tank-to-flame



| | |
|---|---|
| **FUEL** | Oxidation reserve, water, sediment, metals, blend verification |
| **STORAGE + DELIVERY** | Tank condition, filtration, suction, materials, fuel conditioning |
| **COMBUSTION** | Cold starts, cycling, deposits, flame sensing, chamber effects |
| **SERVICE** | Diagnostics, screening, commissioning, maintenance intervals |
| **COMMERCIALIZATION** | Labels, manuals, warranty, replacement parts, training and supply |

**UL progress is necessary. A dependable customer experience is the finish line.**

*Source: Beckett burner manuals and application reports; workshop research priorities.*