

# Origin of Deep Energy Retrofit and Deep Retrofit

Where the terminology came from — and why ReCover uses “Deep Retrofit”

## The early term: Deep Energy Retrofit (DER)

The term Deep Energy Retrofit (DER) emerged in the mid-2000s from leading building-science organizations such as the Rocky Mountain Institute (RMI) and the U.S. Department of Energy’s national labs.

At the time, the industry needed a way to differentiate between traditional energy-efficiency upgrades and major, whole-building projects that could achieve 50% or greater reductions in energy use.

DER signaled a shift away from isolated measures toward integrated, systems-based renovation — a precursor to today’s decarbonization strategies.

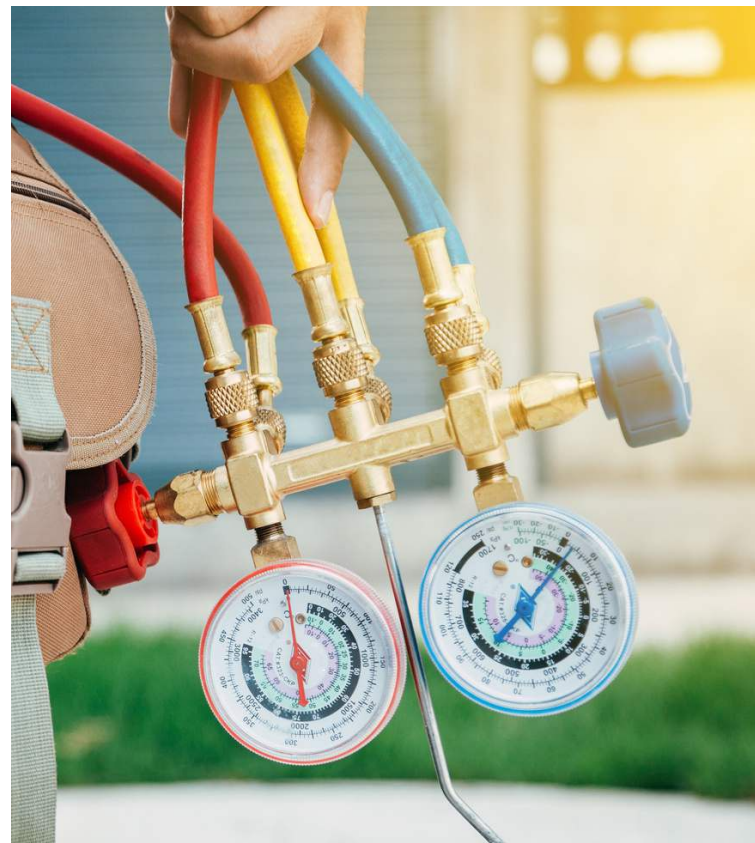
## Why DER was not enough

As climate policy, carbon-pricing, and investment pressures increased, it became clear that “energy” alone was too narrow a lens.

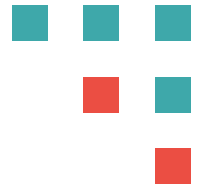
Owners, lenders, insurers and governments were increasingly focused on:

- carbon-reduction requirements
- electrification
- aging building systems
- capital-renewal backlogs
- asset-value preservation
- compliance with climate-risk and reporting standards

These drivers required a more comprehensive transformation than an energy-only retrofit could describe.



## The evolution: Deep Retrofit (DR)



In the late 2010s, the term Deep Retrofit (DR) emerged to reflect this broader reality.

Climate-policy frameworks in the EU, Canada, and the U.S. began using “deep retrofit” to describe major projects that deliver:

- 70–90% GHG reductions
- electrification of heating systems
- envelope and mechanical renewal
- improved resilience and indoor environment quality
- lifecycle cost optimization
- extended building service life and enhanced asset value

The ReCover Initiative (ReCover) exists to help owners navigate a complex and fragmented retrofit ecosystem by positioning DR as a strategic capital investment, not an energy project.

“Deep retrofit” moved the conversation from saving energy to renewing the asset and positioning buildings for a carbon-neutral future.

## Deep Retrofit best describes the outcomes ReCover enables:

### ✓ Carbon-aligned assets

Buildings that meet present and future climate requirements.

### ✓ Renewed building systems

Modernized envelopes, electrified heating, and long-term lifecycle resilience.

### ✓ Optimized total cost of ownership

Reduced operating costs and avoided capital-renewal spending.

### ✓ Higher asset value and reduced risk

Improved NOI, better valuations, and stronger competitiveness.

### ✓ A clear investment-grade business case

A financially credible roadmap owners, lenders, and partners can trust.

## About The ReCover Initiative:

As Atlantic Canada's deep retrofit accelerator, we collaborate with building owners, communities, and industry to improve the efficiency of buildings in our region. Through our flagship Building Transformation Program (BTP), we provide both funding and tailored program coordination to support building owners with their deep retrofit projects.

### Contact us



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