

7. Delivery Models & Configuration Options

Ekonod offers a configurable delivery model that allows developers to adopt decentralization at their own pace. Each tier builds on the same apartment-level hub concept, giving clients flexibility to start small or go all-in - without ever losing the core performance, predictability, or sustainability benefits.

7: Configurations & Delivery Spectrum

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What changes between the tiers is not the decentralised logic, but how much of the bathroom Ekonod delivers.

Delivery Tiers

You choose the level that fits your project - the benefits are built in.

Ekonod Premium

Full Installation Package (Hub + Bathroom)

Ekonod Premium is the full Ekonod experience: the bathroom module and installation hub combined into one pre-engineered, factory-tested system. This configuration transforms the bathroom from a simple wet room into the technical core of the apartment — integrating water, heating, ventilation, controls, and safety sensors into a single high-performance module.

This is the "everything integrated" tier. The entire bathroom + hub arrives on site as a single, consistent, moisture-protected, tested product. On-site work becomes: lift \rightarrow connect \rightarrow verify.

Built and tested in a controlled factory environment, each module arrives on site ready to connect. Commissioning and inspection are quicker because every unit is identical and pre-tested. Site overheads shrink — fewer temporary buildings, less supervision churn — and program risk drops as variation is replaced by repeatability.

Result:

- Maximum energy and CO₂ savings
- Maximum time and risk reduction
- Maximum design freedom and lifecycle value
- Maximum moisture safety (factory-sealed bathroom)
- Minimal trade overlap inside the apartment
- Highest ceiling-height recovery & shaft reduction

Ekonod Premium is the shortest path from concept to building performance — a fully industrialised bathroom + installation system.

Ekonod Plus

Installation Package Only - Hub from Ekonod, Bathroom from Any Source (Mid-Level or Hybrid)

Plus = Ekonod builds the hub, but YOU choose how the bathroom is built. Ekonod Plus introduces the physical backbone of decentralization:

the apartment-level installation hub, factory-assembled and QA-tested.

The bathroom itself may be:

- site-built by your contractors
- supplied by your preferred bathroom-pod supplier
- built using an existing framework agreement
- provided through any other procurement route

In other words: the decentralised system is industrialised; the bathroom is not.

Installation hub integrated with the client's chosen bathroom pod supplier.

This tier can be configured in two ways: Mid-Level

- Installation hub only. Bathroom is built on site.
- Hybrid

CO₂ savings, simplified commissioning, and localised resilience - while retaining full flexibility in procurement and design. **Result:**

In both cases, the project captures nearly all systemic benefits of decentralization - energy and

Shorter pipe runs and no VVC circulation losses

- Nearly the same CO₂ and energy performance as Premium
- Simplified commissioning
- Faults isolated to one apartment Digital readiness (Matter + Modbus)
- **What differs from Premium**
- More collision between trades inside the bathroom

Moisture protection depends on your bathroom supplier / site team

- Slightly less ceiling-height and shaft optimisation Not fully "apartment-as-a-station"
- Less onsite speed than Premium (but still far better than traditional)

by step while obtaining measurable performance gains.

Ekonod Plus is the low-barrier entry to decentralization, ideal for clients who want to move step

Ekonod provides early-stage advisory for projects that want to apply decentralized design principles without yet committing to modular hardware. Through design collaboration, modelling,

EKONOD - CONSULTING & DESIGN SUPPORT

and MEP topology guidance, Ekonod helps shape layouts, reduce risk, and prepare for future modularisation. **Result:** • Clearer design coordination

Reduced risk of late-stage installation conflicts

- Insight into lifecycle cost and CO₂ impact
- Early ESG alignment
- Foundation for future adoption of Plus or Premium This tier transfers decentralised thinking into the project - even before modular products are used.

All three tiers are built on the same core principles: No matter where you enter, each step moves your project toward:

Choose Your Level - The Logic Stays the Same

shorten runs eliminate circulation losses

- contain risk to the apartment

decentralize distribution

enable digital-first operation

lower CO₂

higher efficiency

better comfort

faster build time higher asset value

Always Configurable

Ekonod's decentralized platform integrates with any structure, distribution method, or energy source.

Compatible with:

Structure

- Concrete Steel
- Timber / CLT

Heating

- Radiators
- Underfloor Hybrid

Energy

- District heating
 - Heat pumps (central or apartment-level)
 - Solar and hybrid grids

Your design choices remain open. Ekonod adapts to the project - not the other way around.

7A: Ekonod Premium - Full Installation **Package with Bathroom**

The complete, fully integrated delivery: bathroom + installation hub as one factory-built system

Ekonod Premium is the optimal delivery model because it includes both components of decentralization: the bathroom module and the installation hub integrated into a single, factory-built unit.



In this configuration, the bathroom doesn't just house plumbing fixtures - it becomes the technical backbone of the apartment, where water, heating, ventilation, controls, and safety sensors converge into one coordinated module.

Because everything is designed, assembled, moistureprotected, and tested in the factory, on-site work shifts from improvisation to simple connection and verification. Complexity is absorbed upstream, long before the module reaches the building.

From day 0 - design clarity, not compromise

In traditional projects, architects design layouts first, and engineers later "fit" installations around them. This often forces misaligned bathrooms, long risers, dropped ceilings, and trade collisions.

Ekonod reverses this sequence. The integrated bathroom hub becomes the anchor point in early design, ensuring that apartments are optimized for people - not for riser placement.

This makes early planning radically simpler:

- Bathrooms and kitchens can be placed for daylight, flow, and plan efficiency rather than shaft convenience. Ceiling height is preserved because distribution runs are short, local, and unobtrusive.
- Architects gain design freedom; developers gain more usable floor area.
- By using standard hub geometries compatible with concrete, steel, or CLT structures, the MEP

topology is decentralized from the outset: no VVC circulation loops

- no balancing manifolds between floors
- no oversized pumps running 24 hours a day The result is fewer overlapping trades, clearer scope boundaries, and a calm, sequential

installation process. Each apartment becomes its own station, not a multi-trade bottleneck.

Every Premium module is assembled in a controlled environment where moisture risk is removed

In the factory - precision and protection

before the bathroom ever reaches the site.

plumbing and heating loops

All services are installed and tested in the factory:

- 2 ventilation (FTX) ducts and controls
 - leak, fire, and moisture sensors

Each unit undergoes full QA to eliminate classic on-site failures, such as misconnected terminals or incomplete insulation.

Matter for tenant-facing smart home integration.

Digital readiness is standard. Each hub communicates via Modbus for building automation and

Because the bathroom and hub arrive as a single tested system:

On site - faster, simpler, more predictable

commissioning and inspection are faster site overheads shrink due to fewer trades and fewer coordination rounds

 CO_2

3

1

- program risk drops dramatically, as variation is replaced with factory repeatability
- This transforms the most unpredictable part of construction into one of the most predictable.

Performance Benefits



water energy savings of 20-30

percent. Benchmark projects have achieved ≈ 3

Resilience

headaches)

Energy

kWh/m²/year for hot water.

 \approx 12.5 kg CO₂e/m² \rightarrow

decentralized ≈ 6.0 kg

 CO_2e/m^2 .

Comfort

airflow without waste.

Instant hot water, stable heating, and "away mode" that

maintains 18°C and minimum

A failure is localized to one apartment. The building continues operating normally. Sensors

shut-off.

provide early warnings and trigger automatic

Mid-life service is modular and local. No buildingwide shutdowns to replace pumps or rebalance loops.

Maintenance

Why Premium maximizes savings (and minimizes

2 1 Time Cost

Complexity moves upstream to design and factory

production. Program slippage stops.

3

MSEK for 42 units) hides decades of inefficiency. Decentralization separates lifecycle cost curves

year after year as energy prices rise.

4 Risk & insurance Factory-sealed wet rooms, moisture protection,

and auto shut-off reduce Sweden's most common

Traditional MEP ≈ 300,000 SEK per apartment (≈13

apartments feel larger and more premium.

5

Large shafts and plant rooms disappear. Ceiling

height increases. Net lettable area grows and

Space & value

Compliance & ESG Factory QA and measured CO₂ data streamline inspection and help secure green financing.

insurance claim category.

Future-proofing Modbus + Matter connectivity ensures easy

integration with BMS, tenant apps, and future grid

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More than a bathroom pod

Prefab bathrooms improve logistics but do not eliminate circulation losses, centralized risk, or the commissioning burden. Ekonod Premium goes further - it makes the bathroom the installation hub itself, integrating every service into one coherent platform.

services.

This is not a pod. It is a complete, decentralized installation system delivered as a product. Independence from structure and energy source

Heat distribution Structure Energy source · Works with radiators or Compatible with concrete, Compatible with district

The hub is a neutral coupling point — never a lock-in.

CLT, and steel.

underfloor systems.

heating, heat pumps, solar, or hybrid grids.

Summary

The Ekonod Premium configuration - full installation package with bathroom - is the gold standard. It delivers:

It is the most direct path from architectural intent to real-world building performance - for tenants,

- maximum energy and CO₂ reduction
- maximum program stability and risk reduction
- maximum architectural freedom and commercial value

developers, and long-term owners.

building

a digitally ready, resilient, easy-to-operate

7B: Ekonod Plus - Installation Package Only

Hub from Ekonod, Bathroom from Any Source (Mid-Level or Hybrid)

Ekonod Plus delivers the core of decentralization - the apartment-level installation hub - while allowing full freedom in how the bathroom itself is designed, sourced, or built.

Where Premium integrates both the hub and a factory-built bathroom, Plus gives you the hub from Ekonod, and the bathroom can come from anywhere.



This makes Ekonod Plus the low-barrier, high-impact entry point to decentralization. You capture almost all the system-level energy, CO₂, and risk-reduction benefits, without needing to change existing bathroom suppliers, framework agreements, or procurement routes.

Bathroom Source Options

- Site-built by your contractors
- supplied by your preferred bathroom-pod supplier
- provided under an existing framework agreement
- integrated with any other procurement model you already use

In other words: the decentralised system is industrialised; the bathroom is not.

Mid-Level Configuration

Hub only - bathroom built on site

- Ekonod supplies the installation hub
- Wet-room construction, tiling, fixtures, and finishes are done conventionally

Ideal when clients prefer traditional bathrooms or have local contractors they trust.

Hybrid Configuration

Hub integrated with your chosen bathroom-pod supplier

- Ekonod supplies the installation hub
- Bathroom volume is delivered by your preferred pod manufacturer

Perfect if you already have framework agreements and want to keep them.

In both Mid-Level and Hybrid cases, the MEP topology becomes decentralized - which means you capture the systemic benefits of Ekonod even when logistics remain flexible.

What You Gain with Ekonod Plus

System benefits (almost identical to Premium)

- No VVC circulation loops → eliminates 20–30% hot-water losses
- Shorter pipe runs → lower heat loss, fewer penetrations
- Energy & CO₂ performance nearly identical to Premium
- Simplified commissioning → each hub is factory-tested
- Faults localized → only one apartment affected
- Digital readiness → Matter + Modbus as standard
- Predictable servicing → modular, repeatable installations

Ekonod Plus gives you the performance and reliability of decentralization without requiring full bathroom integration.

What Differs from Premium

1. Moisture protection depends on your bathroom supplier / site team

Ekonod guarantees moisture-safe modules only in Premium. In Plus, the wet-room quality comes from your chosen contractor or pod supplier.

2. More trade overlap inside bathrooms

Because the bathroom is not factory-built, trades still work in the same small zone - tilers, plumbers, electricians - meaning more sequencing and coordination than in Premium.

3. Slightly less ceiling-height and shaft optimisation Bathroom placement must still consider certain service paths if the bathroom is site-built or supplied

separately.

4. Not fully "apartment-as-a-station"

Installation is faster and cleaner than traditional MEP, but not as streamlined as Premium.

Still dramatically faster and more predictable than traditional, but not the full industrialised speed of

5. Slightly slower on-site pace than Premium

Premium.

Lowest barrier to adoption - keep your bathroom suppliers, gain the decentralised system

Why Ekonod Plus Matters

- Retain maximum procurement flexibility
- Demonstrate the business case immediately energy, CO₂, commissioning, and risk reductions visible from

Ideal for developers modernising gradually

- Day 1 • Build internal buy-in before moving to Premium on future projects
- Compatible with any bathroom pod supplier or site-built approach

Ekonod Plus is the practical first step: you get the installation platform of the future, without needing to change your bathroom strategy today.

Ekonod Plus = Hub from Ekonod + Bathroom from any source.

It is the flexible, mid-level delivery tier that preserves all the structural advantages of decentralization:

localized failures

no circulation losses

- simplified commissioning
- measurable CO₂ and energy savings
- digital-ready operations
- While Premium delivers the full "everything-clicks" industrialised apartment package, Plus captures the core system benefits with full freedom in bathroom procurement.
 - reduces inter-trade clashes,
- simplifies commissioning, and

eliminates distribution losses,

localizes risk to each apartment.

nordnest

It may not be the "everything-clicks" version, but it remains a major leap forward from centralized systems -

and the most common first step in demonstrating Ekonod's value on the ground.

7C: Ekonod - Consulting & Design Support

Not every project is ready to commit to Ekonod hardware immediately. Sometimes the timing isn't right, the procurement chain is locked, or the developer simply wants to test the approach before adopting it fully.



For these cases, Ekonod offers a consulting and design support model - delivering process expertise and system logic without supplying physical modules. This may sound like a smaller step, but experience shows that process intelligence alone can unlock significant savings and risk reduction - even when the installations themselves remain traditional.

What this configuration looks like in practice



Early Design Phase Involvement

Ekonod engineers join early in the design phase to help shape layouts, installation strategies, and trade sequencing.



MEP Topology Advice

We advise on MEP topology - showing where circulation loops, long risers, or oversized systems will create long-term inefficiency.



Benchmark Data Modeling

We use real benchmark data to model scenarios for energy and CO₂ impact under different design choices.



Coordination Error Prevention

We support the design team to avoid classic coordination errors - such as misplaced bathrooms, misaligned shafts, or dropped ceilings caused by late-stage rework. The hardware may still be central, but the thinking becomes decentralized: risks are caught earlier, design clarity improves, and coordination between disciplines becomes smoother and faster.

Benefits captured without hardware



Reduced design risk

early coordination checks prevent costly conflicts later.



Program predictability

clear scope boundaries reduce disputes between trades.



Cost insight

lifecycle models connect
CAPEX and OPEX, exposing
designs that appear cheap
upfront but lead to high longterm costs.



Climate credibility

early CO₂ modelling supports ESG reporting, green financing, and compliance with frameworks like the Kyoto pyramid.



Learning curve reduction

the project team becomes familiar with decentralized principles, paving the way for hardware integration in future projects.

Limitations compared to Plus or Premium



Circulation losses remain

Hot-water loops still waste 20–30% energy.



Systemic failures remain systemic

A single central fault still affects the entire building.



On-site complexity persists

Installations remain multitrade, improvised, and variable.

(We reduce the risk, but only hardware can eliminate it.)

Why this tier matters



A no-commitment entry point

Developers can access Ekonod's expertise without changing suppliers or signing hardware contracts.



Measurable improvements

Design quality rises, program friction drops, and ESG alignment improves — even before decentralization is adopted.



Builds internal buy-in

Many clients use this tier to introduce decentralized thinking, and later transition to Ekonod Plus or Premium with confidence.

- Ekonod's consulting and design support tier is about knowledge transfer and risk reduction, not hardware. By engaging Ekonod early in the process, developers capture:
- → earlier design certainty

predictable from the very beginning.

- → better lifecycle cost visibility
- → fewer contractual disputes
- → stronger ESG positioning

It is not a replacement for decentralization hardware - but it is a highly effective first step.

It prepares teams, stabilizes projects, and makes future Ekonod integration smoother, faster, and more