



Circular Friends – Join Us!

For inquiries about Circular Friends,
please contact us here.



CIRCULAR DESIGN BUILD

vol.1 CONCEPT BOOK



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From Scrap and Build to Circular Design-Build

Leveraging our accumulated expertise and craftsmanship, Takenaka Corporation has long upheld a commitment to creating architectural works of enduring value.

Today, our society faces a wide range of challenges

— the depletion of natural resources, waste generation, and greenhouse gas emissions, to name a few.

As the global community strives toward realizing a circular economy,

Takenaka advocates for Circular Design-Build,

a holistic approach to architecture that enables a truly circular society.

While preserving the spirit of craftsmanship that

we have cherished for generations,

we are moving beyond the conventional “scrap and build” model

to create buildings where resources circulate continuously.

Our goal is not to choose between the present or the future,

but to value both — building a sustainable society

that nurtures today while safeguarding tomorrow.

Societal Challenges



The urgent need for decarbonization



Environmental impact of resource extraction



Shortage of landfill sites



Rising material costs and inflation



Strengthening domestic distribution independent of imports

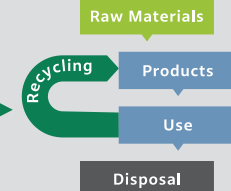
What is a Circular Economy?

Linear Economy



A traditional economic model based on the extraction of resources, mass production, mass consumption, and mass disposal.

Recycling Economy



An improved model that reuses part of discarded resources to reduce waste and environmental impact.

Circular Economy



A new economic model that aims to eliminate waste entirely by continuously circulating resources from a single initial input.

A New Architectural and Construction Solution for a Circular Society

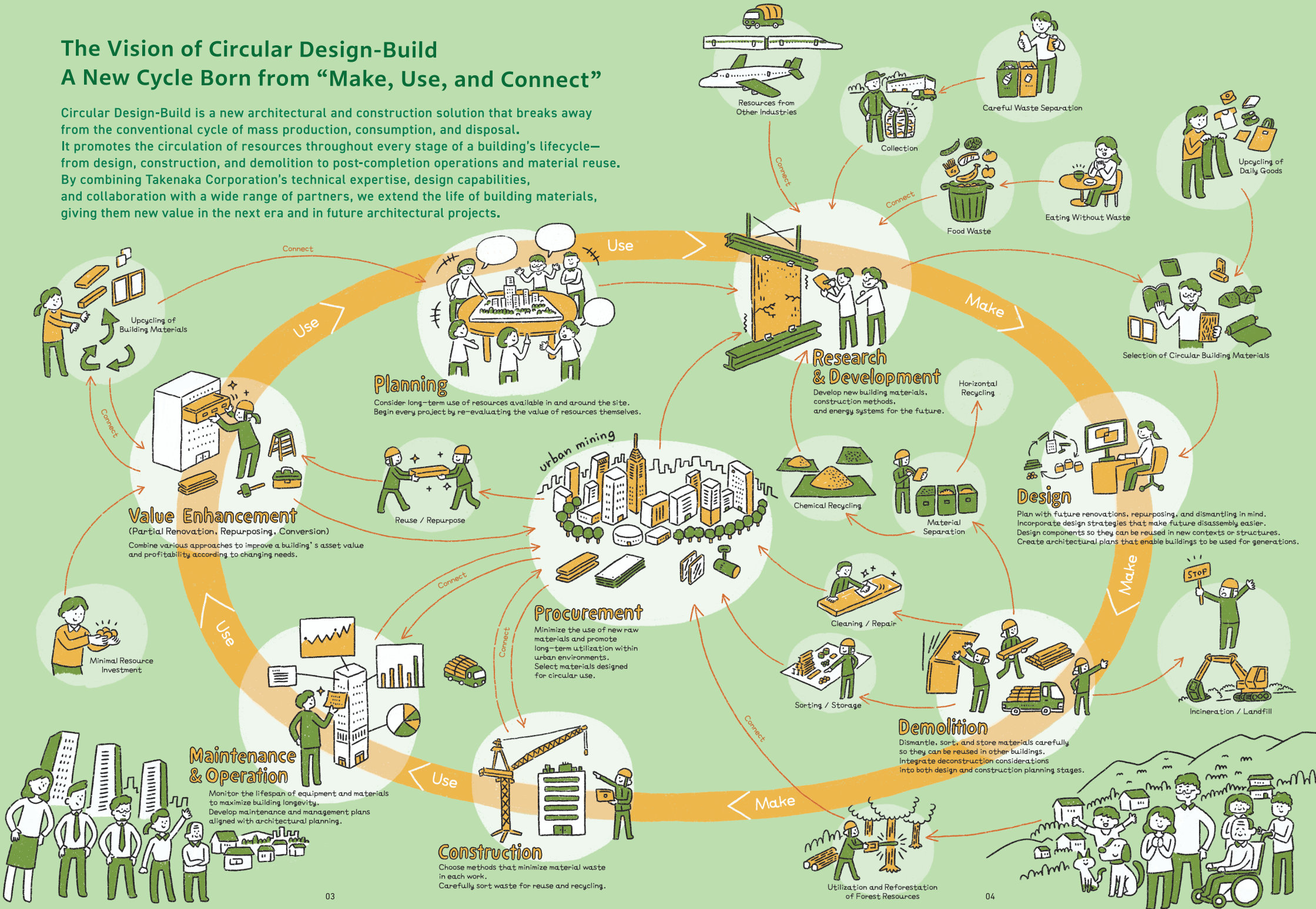
Circular Design-Build



The Vision of Circular Design-Build

A New Cycle Born from “Make, Use, and Connect”

Circular Design-Build is a new architectural and construction solution that breaks away from the conventional cycle of mass production, consumption, and disposal. It promotes the circulation of resources throughout every stage of a building's lifecycle—from design, construction, and demolition to post-completion operations and material reuse. By combining Takenaka Corporation's technical expertise, design capabilities, and collaboration with a wide range of partners, we extend the life of building materials, giving them new value in the next era and in future architectural projects.



The Journey of Circular Design-Build

Osaka Lighting Protection & Earthing System Mfg. – Kobe Office
Building Use: Office / Warehouse
Total Floor Area: 471 m²
Completion: 2024

DESIGN
DEMOLITION
VALUE ENHANCEMENT

Creating Value Through Time – Connecting by Reduction, Opening by Expansion



Exterior after renovation (Photo: Takuji Yamamoto)

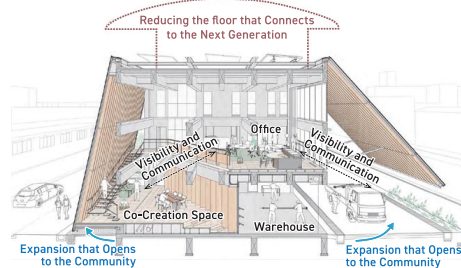
This project transforms a 35-year-old building into a new form while preserving its structural frame and exterior. Rather than demolishing and rebuilding—a scrap and build approach—our goal was to create new value by reinterpreting what already exists. In Japan, even today, it is common for buildings to be torn down after only a few decades, despite declining population trends. In this project, we sought value not in novelty, but in the character and presence that emerge over time. Our aim was to design architecture that continues to mature and become more beautiful as the years pass.



Interior of the former third-floor office.
Blinds were kept closed at all times.



New office space with a double-height ceiling. The former third-floor doorway opening was reused as an air-conditioning outlet.
(Photo: Yosuke Ohtake)



By removing part of the existing slab, saved weight realized the additional structure without new foundations.

Significant Reduction in Environmental Impact!

By effectively reusing the existing structural frame and employing ECM concrete and electric furnace steel for the new additions, we achieved approximately a 70% reduction in CO₂ emissions. In addition, through the reuse of the existing structure, the project realized:

- 40% shorter construction period
- Significant reduction in noise and vibration during demolition
- 80% reduction in construction waste

Takenaka Corporation, Osaka Main Office, Design Department



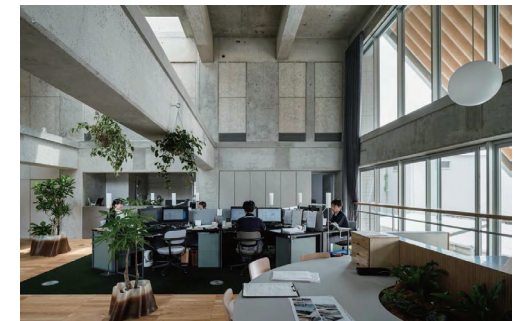
From left
• Kentaro Konomi
Structural Engineering
• Risa Yoshimoto
MEP Engineering
• Atsushi Yamazaki
Architectural Design
• Yukina Oishi
Architectural Design
• Tomonori Murakami
Structural Engineering



The co-creation space between the warehouse/workshop and the second-floor office connects appropriately through the existing beam-retained atrium.



The second-floor office bathed in natural light streaming through the newly installed skylight



A two-story office with a ceiling height of two stories



A washroom that preserves the traces of the old staircase



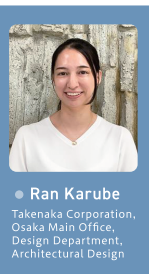
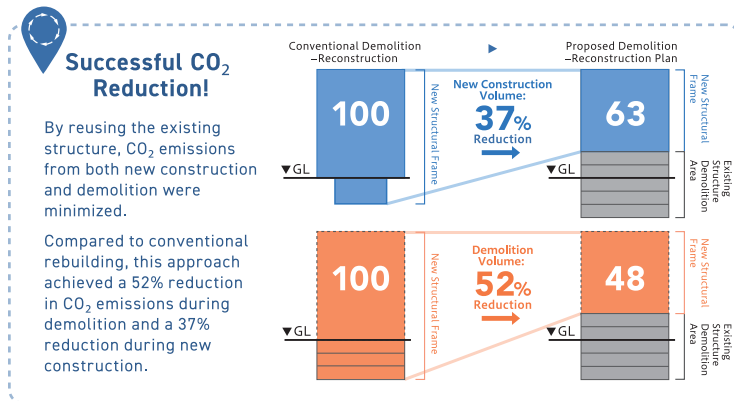
The situation upon completion of the reduction and demolition

Pushing the Boundaries of Reconstruction – Discovering a New Answer Beyond Imagination



The Chuo Nittochi Hakata Ekimae Building is a redevelopment project that reuses the existing structure from the basement through the second floor, introducing a mid-level seismic isolation layer between the retained and newly constructed portions.

After demolishing the existing structure from the third to the tenth floor, the remaining basement and lower levels were reinforced, and a seismic isolation layer was installed at the intermediate level (the former third floor). A new superstructure was then built above it, achieving both enhanced seismic performance and a significant reduction in environmental impact through the reuse of the existing structure.



This project involves the preservation and adaptive reuse of the Hori Building, a Registered Tangible Cultural Property of Japan, located in Shimbashi, Minato-ku, Tokyo. Originally completed in 1932, the building was master-leased (partially leased) by Takenaka Corporation, renovated, and now operates as a shared office space.

Maintaining a historically valuable structure in the heart of Tokyo presented many challenges. Through the integration of design excellence and technical innovation, we enhanced its cultural appeal and revitalized it as a dynamic presence capable of engaging diverse audiences.

Today, the renewed Hori Building attracts a vibrant community of co-working professionals and serves as a platform for collaboration – hosting seminars, workshops, and various community events.

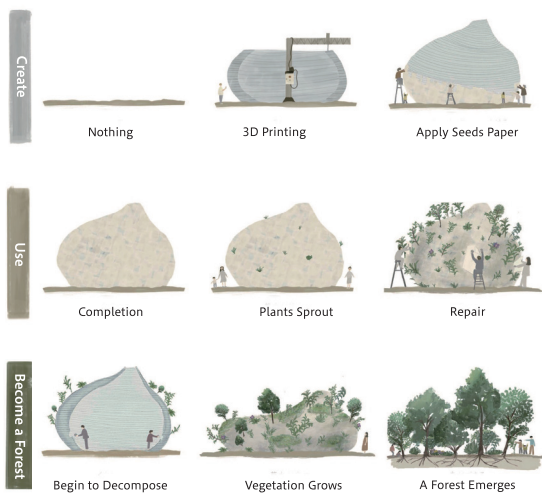




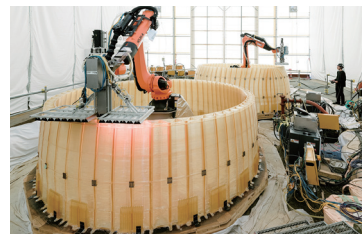
View of the pavilion at Expo 2025 Osaka, Kansai, Japan (Photo: Yosuke Ohtake)

This rest pavilion, created for the Expo 2025 Osaka, Kansai, Japan, was designed as a place for visitors to pause and relax. It was constructed using biodegradable resin through 3D printing, and has been recognized by the Guinness World Records™ as the world's largest single-piece 3D-printed architecture using biodegradable material.

Because it is a structure designed to exist for only 6 months during the Expo, every aspect—from the materials used to its post-use transformation—was carefully considered and designed as part of the architectural process.



Designing the lifecycle of architecture through three stages: Make, Use, and Become a Forest



3D printing process (Photo: Yoshiro Masuda)



Field and Community Development Independent from Existing Infrastructure



As a model case, an Off-Grid Experience Park is currently under development in Odawara City, scheduled for full opening in 2027.

This initiative proposes a new type of community independent from existing infrastructure, featuring off-grid trailer houses equipped with self-sustaining power generation and satellite communication systems. Each unit also integrates water supply, sewage (toilet), and waste treatment systems, forming a lineup of truly autonomous, self-contained facilities.

Looking ahead, these mobile trailer houses will serve not only as everyday living and working spaces, but also as disaster-resilient infrastructure, contributing to solutions for social and environmental challenges.

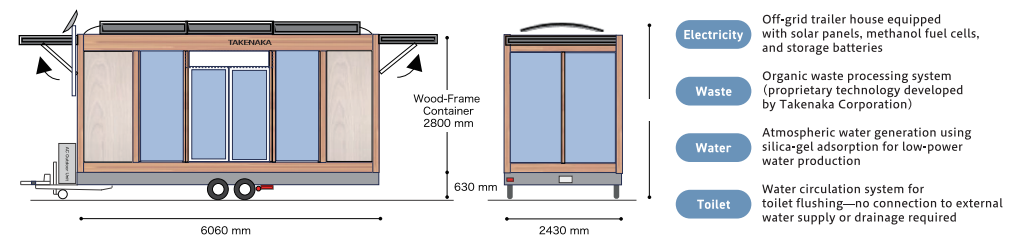


I aim to propose new forms of community development that do not rely on existing infrastructure.

• **Naritaka Hiroساتo**
Takenaka Corporation, Corporate Planning Department, Business Development Promotion



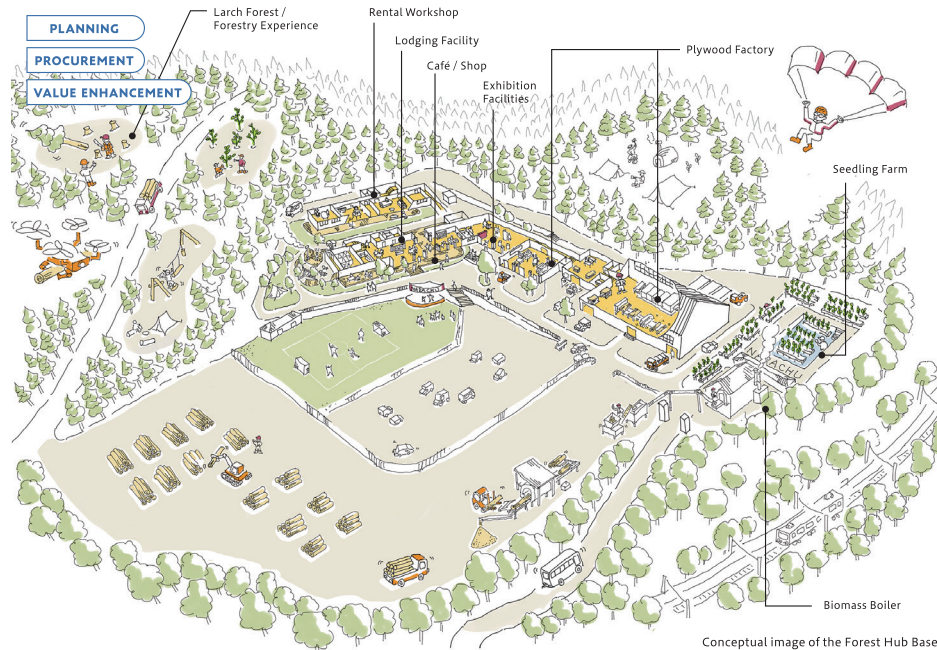
Exhibited as a mobile retail unit at Expo 2025 Osaka, Kansai, Japan



NEXT CHALLENGE

Kiso Forest Grand Cycle
 Building Use: Factory, Accommodation, Café, Shop, and Exhibition Facility
 Total Floor Area: 4,847 m²
 Completion: Scheduled for 2026

Reviving an Abandoned Mountain School as a Hub for Forest Utilization

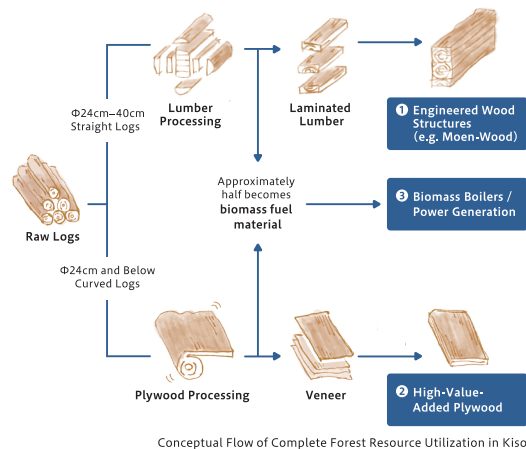


Conceptual image of the Forest Hub Base

The Kiso Forest Grand Cycle Project is a new initiative that revitalizes the abundant forest resources of Kiso—a region rich in larch and cypress trees—through comprehensive utilization.

Large-diameter logs are processed into large-section structural lumber through lamination and adhesion, while smaller logs are transformed into high-value plywood using rotary peeling, adhesion, and molding techniques. Wood waste generated during production is thermally recycled as an energy source, ensuring that no part of the forest resources goes unused.

By repurposing closed schools in Shiojiri City and Kiso Town, Nagano Prefecture, the project transforms them into a plywood factory and "forest hub", creating a sustainable cycle that regenerates both forest resources and architectural stock in rural mountain communities.



Exterior of the existing school building



This project connects mountains and forests with the city, a challenge that I'm truly enjoying working on.

Yohei Takahama
 Takenaka Corporation, Headquarters, Urban Development Strategy Office

Circular Design-Build — Connected by Every Human Intention

Every work created through Circular Design-Build carries with it human thoughts, care, and creativity.

For the animals, insects, and plants that share this planet.

For the next generation who will live in the future.

For someone who will use this building next.

The more ideas, skills, and passions come together, the more Circular Design-Build will continue to expand and connect.

Why not join us as a Circular Friend to help shape the future through architecture?

From new construction projects to renovations, many Circular Friends have already begun this new journey together with Takenaka Corporation.

Now, it's your turn.

Go with! Circular Friends!

Architecture That Evolves – and Is Always Loved

Toward a Future Where Customization Becomes a Joy

This is a new circular construction model designed for new buildings such as production facilities, commercial complexes, tenant buildings, and educational institutions. Envisioned as a prototype for future architecture that grows in character and continues to evolve over time, it is composed of variable disassemblable detachable structural components. The design and construction plan also anticipates future adaptability and conversion to various building uses.



TECHNOLOGY DEVELOPMENT

DEMOLITION

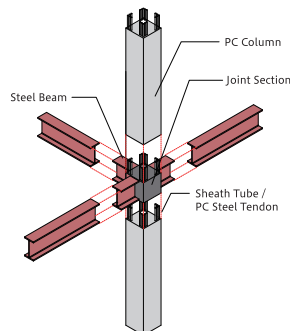
A Structural Framework Designed to Be Assembled, Used, Disassembled, and Reused

Circular Structure Development Phase

We are developing technologies that enable the reuse of structural frameworks.

The columns employ an unbonded post-tensioned concrete (PC) structure using PC steel tendons, while the beams utilize a steel frame with bolted connections, allowing each structural member to be easily detached and reused.

Currently, we are conducting a series of experimental verifications to identify connection methods that ensure both ease of dismantling and maintenance of structural integrity and quality.



Although there are still challenges to overcome, we are working toward the early practical application of structural frame reuse.



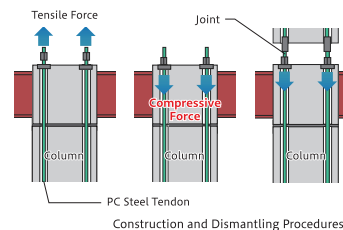
Circular Friend
Satoshi Kake

Takenaka Corporation,
Research & Development Institute,
Structural and Construction
Methodology



Circular Friend
Fumi Ushiwata

Takenaka Corporation,
Research & Development Institute,
Structural and Fireproof
Engineering



①Permanent lightweight crane built into the substructure steel frame to facilitate partial renovations. ②Easily attachable and detachable exterior units—including green walls, solar panels, sun-shading louvers, and signage—allowing customization based on use or location. ③Detachable structural frame ("Circular Structure") designed for assembly, disassembly, and reuse. ④Substructure steel reused from existing building equipment frames to support new exterior panels. ⑤Recycled concrete from existing buildings, crushed and reused as roadbedbase course material.

MAINTENANCE & OPERATION

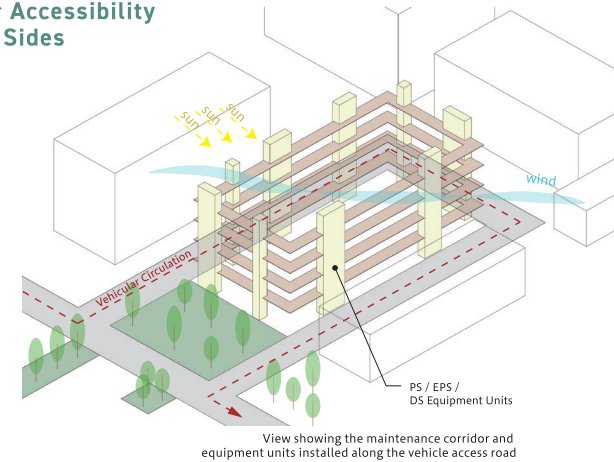
DESIGN

A Building Layout Designed for Accessibility and Adaptability from All Four Sides

This building plan is designed with future tenant reconfiguration and functional conversion in mind, aiming to achieve long-term building life and sustained value.

By securing open space on all four sides, the layout eliminates the concept of a "back side" and provides maintenance corridors along the perimeter that house PS, EPS, and DS systems. These semi-outdoor terraces encourage natural ventilation, reduce solar radiation to the interior, and consequently lower thermal loads during building operation.

The design separates the structural frame, intended for long-term use, from the exterior, equipment, and finishes, which can be flexibly adapted to meet changing times and user needs.



Working together with various related departments, I am engaged in concept development for Circular Design-Build, as well as in planning prototypes and advancing technological development for the architecture of the future.



Circular Friend
Daiki Yokoyama
Takenaka Corporation, Tokyo Main Office,
Design Department, Architectural Design

DESIGN

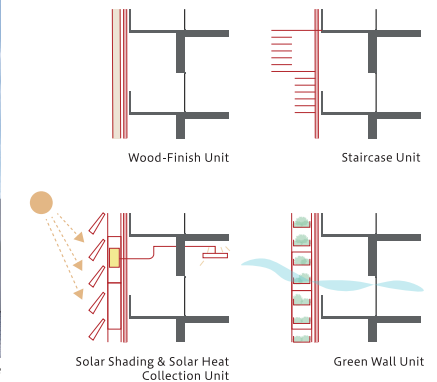
DEMOLITION

MAINTENANCE & OPERATION

A Reusable Facade Design with Detachable, Multi-Functional Units



Exterior Image



This facade concept features detachable, multi-functional units that can be replaced or rearranged for different purposes—including green walls, solar panels, wood panels that add warmth to the exterior, sun-shading louvers, and advertising displays.

The design envisions that these units can be interchanged according to the needs of building owners or tenants. A maintenance corridor runs along the facade, allowing easy access for inspection and replacement of panels from the exterior side.

From Factory to Office, to Housing, and Beyond — Designing a System That Allows Buildings to Evolve with the Times

TECHNOLOGY DEVELOPMENT

DEMOLITION

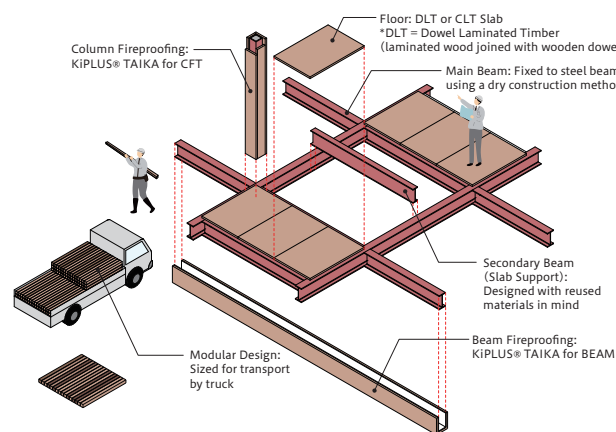
VALUE ENHANCEMENT

A Flexible Structural Plan Designed for Reuse and Customization

Development of an Adhesive-Free Timber Framework

Development Phase

We are developing technologies that incorporate wood into components such as fireproof coverings that protect steel columns and beams from heat during a fire, and dry floor slabs that can be easily disassembled when changing the building's function or tenant layout in the future. The use of reclaimed wood is also being explored. Additionally, screw fastening is adopted to allow for easy removal and reuse of components, contributing to decarbonization and the circular use of resources.



Circular Friend
Tomohiro Iida
Takenaka Corporation,
Timber & Wood Construction
Promotion Department



Circular Friend
Takahiro Hebiishi
Takenaka Corporation,
Technical Headquarters,
Intellectual Property Department



This architectural plan focuses on ease of renovation and minimization of waste by carefully organizing floor height, separating the levels of beams and service pipes, and planning for future-ready cores, maintenance routes, and atrium spaces. The design enables adaptability to diverse future uses, such as tenant reconfiguration and functional conversion.

- ① Detachable radiant air-conditioning panels using chilled and hot water, made from reused aluminum louver materials from the exterior.
- ② Flexible ceiling-suspended power cables that eliminate the need for underfloor wiring and allow unrestricted placement.
- ③ Easily detachable wooden dry slabs, designed to accommodate future changes in tenant layout or ceiling height.
- ④ Perimeter shared terraces that double as maintenance access routes, allowing direct servicing of facade panels and pipe shafts.
- ⑤ Floor height configuration that avoids interference between structural beams and ceiling service ducts, enhancing maintainability.
- ⑥ Minimal decking installation, limited to essential areas only.

PLANNING

TECHNOLOGY DEVELOPMENT

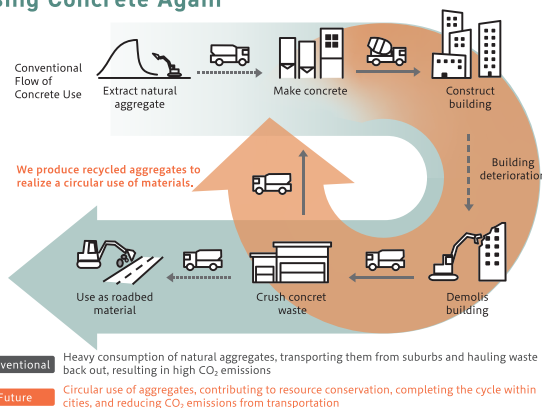
CONSTRUCTION

Casting, Using, Demolishing — and Using Concrete Again

Circular Concrete

Development Phase

We are developing a resource-circulating concrete that reuses aggregates such as sand and gravel, significantly reducing environmental impact. Since fiscal year 2024, we have launched a joint research project with ten partner companies in the Tokyo metropolitan area, supported by NEDO (New Energy and Industrial Technology Development Organization). This initiative aims to expand the application of Circular Concrete across major urban regions.



Circular Friend
Daisuke Honma
Takenaka Corporation, Headquarters,
Research & Development Institute,
Construction Materials

PLANNING

TECHNOLOGY DEVELOPMENT

CONSTRUCTION

Turning Excavated Soil into a New Building Material

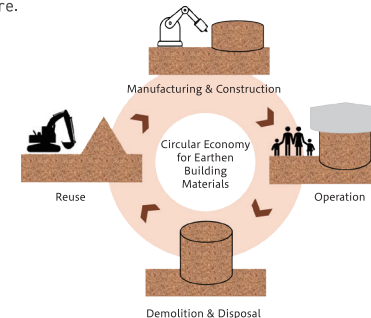
Circular Economy Building Material Using Excavated Soil

Research Phase

This eco-conscious building material is made by mixing excavated construction soil with biodegradable resin and hardening it. It can be produced and applied directly on-site, supporting a local production and local use approach. By adopting a drying process instead of firing, CO₂ emissions are significantly reduced. Combining the natural warmth of earthen materials with environmental sustainability, this innovative material aims to contribute to decarbonization, resource circulation, and coexistence with nature.



Eco-Conscious Building Material Made Primarily from
Excavated Construction Soil



Circular Friend
Naoko Nakajima
Takenaka Corporation, Headquarters,
Research & Development Institute,
Advanced Materials

A Future City Where Buildings, Roads, Airplanes, and Furniture etc. Are All Connected Through Shared Resources

This circular city model envisions the year 2050, where materials and energy are shared across the entire urban system—including the reuse of existing structures and facades, energy circulation, mobility, and infrastructure. Looking toward 2050, the goal is to achieve a 100% reduction in construction waste generated during demolition or renovation. Beyond the construction industry, the model envisions a resource-circulating society that connects multiple sectors and industries.



PROCUREMENT TECHNOLOGY DEVELOPMENT DEMOLITION

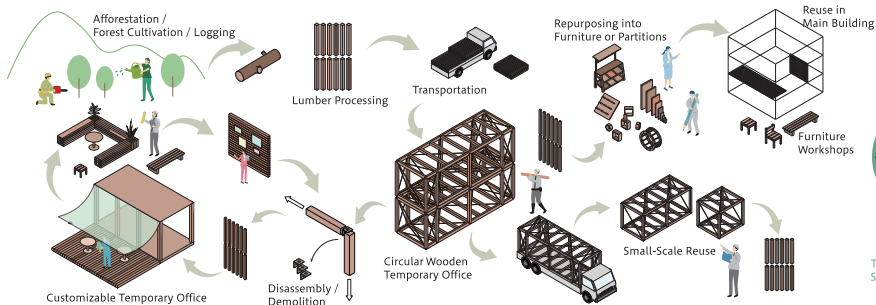
Toward Reusable and Convertible Temporary Offices

Development of a Flexible and Circular Wooden Temporary Office Development Phase

We are developing a wooden temporary office that replaces the conventional prefabricated steel structure with a modular timber system, enabling each component to be reused for multiple purposes after use.

The wooden interior environment provides a sense of psychological comfort and offers a variety of workspace options, contributing to improved work engagement and employee well-being.

Furthermore, the timber components used in the temporary office are designed to be reused as partition walls or furniture in permanent buildings, extending the material's lifecycle beyond temporary use.



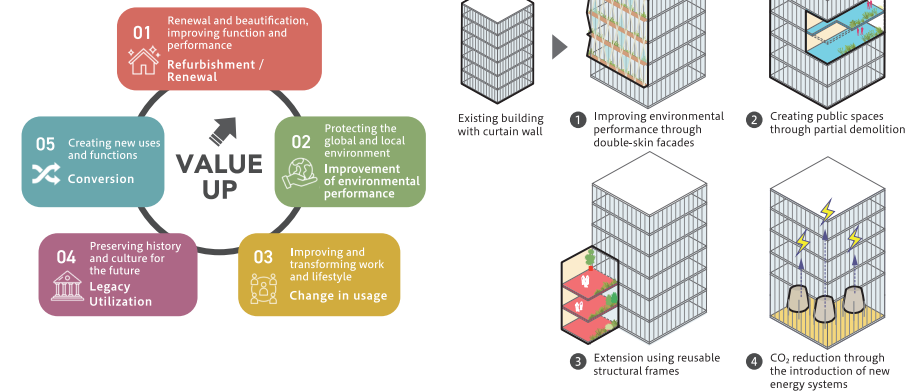
Circular Friend
Yuito Mori
Takenaka Corporation,
Structural Engineering

① Additional facade skins are applied to existing buildings as needed to improve envelope performance. ② Temporary wooden office structures, adaptable for various purposes such as modular shops or street furniture. ③ Removable floor systems created through partial floor reduction and the use of standard lumber processing systems, allowing flexible, temporary extensions based on user needs. ④ Excavated soil generated during construction is reused as rammed-earth walls. ⑤ On-site bioenergy systems which convert food waste into biogas, generating electricity and heat for sustainable building operations.

DEMOLITION DESIGN VALUE ENHANCEMENT

Creative Value Addition: Sustaining and Enhancing the Life of Architecture

For Takenaka Corporation, value enhancement goes beyond conventional maintenance or equipment renewal—it represents a creative transformation that significantly enhances a building's worth while enabling its continued use. Through detailed analysis of existing buildings—including location, age, floor configuration, and height—Takenaka proposes the optimal combination of strategies such as refurbishment and modernization, environmental upgrades, functional reconfiguration, heritage utilization, and conversion. By integrating these approaches, each element reinforces the others, resulting in a substantial increase in both asset value and profitability.



With Takenaka Corporation's technology and design expertise, we unlock the full potential of each building—enhancing asset value, improving profitability, and supporting our clients' contributions to the environment!

Circular Friend
Takuji Hoshi
Takenaka Corporation,
FIM Headquarters,
Value-Up Promotion Team

OPERATION TECHNOLOGY DEVELOPMENT

Generating Energy from Food Waste



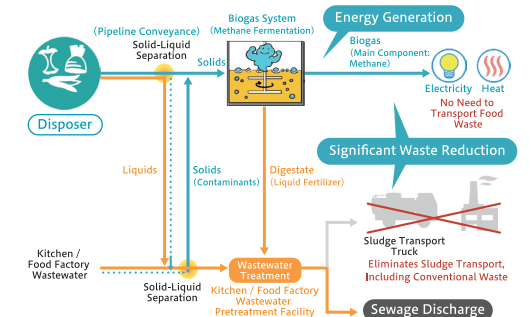
View of the installed biogas system

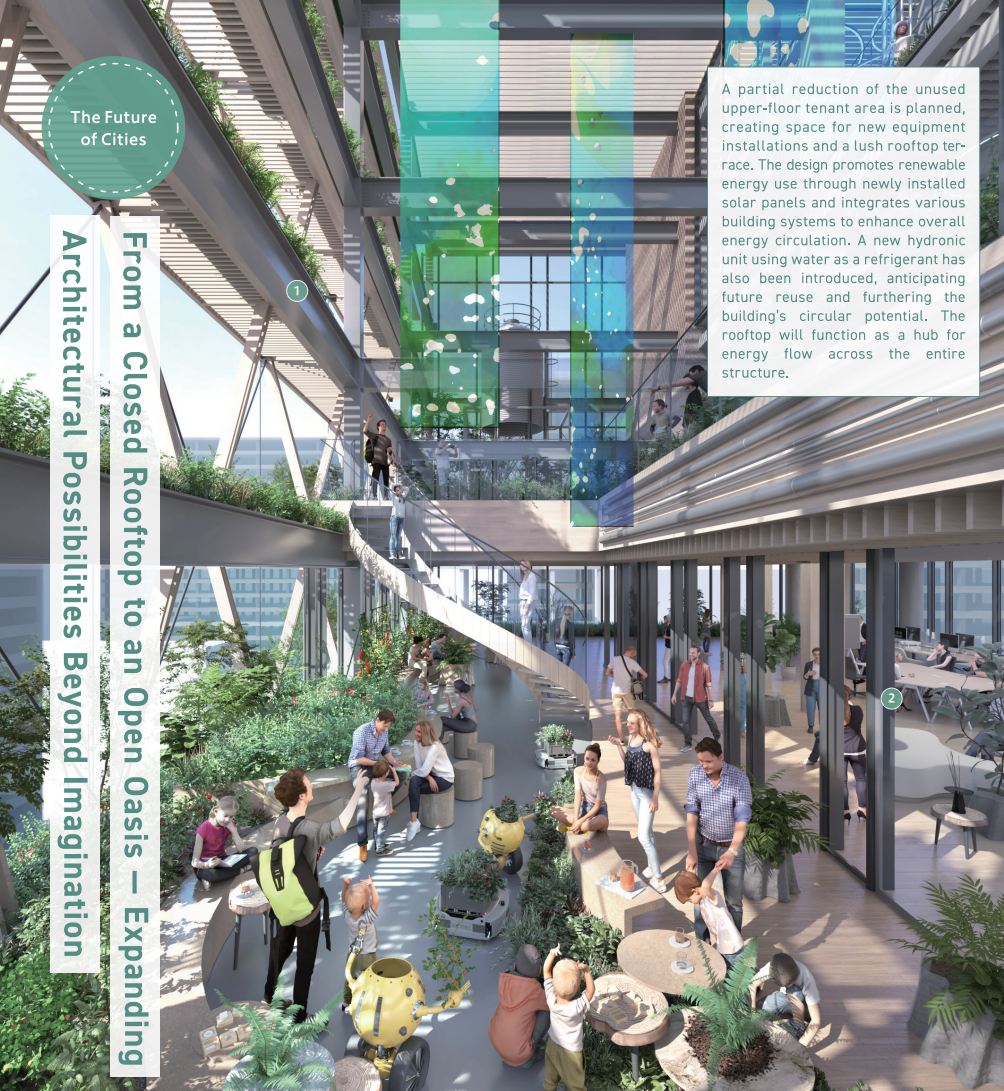


Circular Friend
Masashi Funakawa
Takenaka Corporation, Engineering Division,
Environmental Symbiosis & Energy Division,
Environmental Symbiosis

Meta-Farm Development Phase

Meta-Farm is a building-integrated resource circulation system that generates biogas from food waste and organic matter contained in kitchen wastewater. By combining methane fermentation with wastewater treatment, the system significantly reduces sludge generation, transportation costs, and CO₂ emissions associated with food waste and sludge disposal. The surplus energy produced can also be utilized within the facility, achieving both CO₂ reduction and cost efficiency.





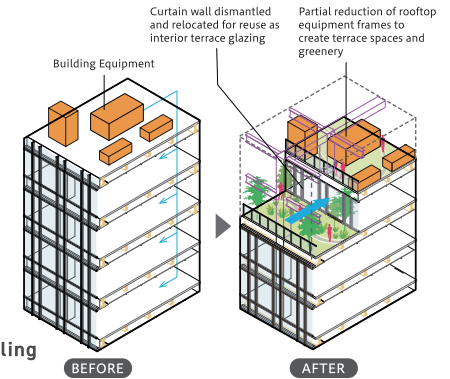
A partial reduction of the unused upper-floor tenant area is planned, creating space for new equipment installations and a lush rooftop terrace. The design promotes renewable energy use through newly installed solar panels and integrates various building systems to enhance overall energy circulation. A new hydronic unit using water as a refrigerant has also been introduced, anticipating future reuse and furthering the building's circular potential. The rooftop will function as a hub for energy flow across the entire structure.

① Reduce portions of the rooftop equipment base to create terrace and green spaces.
② Relocate the aluminum curtain wall (ACW) previously used on the exterior facade to the interior, reusing it as new window sashes.

DEMOLITION DESIGN VALUE ENHANCEMENT
TECHNOLOGY DEVELOPMENT MAINTENANCE & OPERATION

Carefully Dismantling and Reusing Materials from Existing Buildings to Create New Value

We create new value from what has already been built. For example, by reusing existing curtain walls — while preserving their wind resistance, water tightness, and aesthetic qualities — we adapt them to meet contemporary needs. This includes enhancing insulation performance, solar shading, and ease of maintenance, ensuring that materials continue to serve with renewed purpose in the next generation of architecture.



Removing glass panels from a demolition site.

Horizontal Glass Recycling

Development Phase

Glass is a material that can be recycled almost infinitely. To address climate change and realize a circular economy, we are promoting initiatives for horizontal recycling of window glass — returning used glass to its original quality for reuse in new architectural applications.

We are collaborating with partners across both the upstream and downstream industries to explore and advance initiatives for horizontal glass recycling.



Circular Friend
Naoya Kobayashi
AGC Inc., Architectural Glass,
Asia Company
Sustainable Business Infrastructure
Development Group, Manager,
Architectural Glass Recycling Lead



Examining the dismantling procedure of aluminum sashes in an existing building.

Horizontal Aluminum Sash Recycling

Development Phase

We are promoting demonstration projects for horizontal recycling of aluminum components recovered from demolition, aiming to build a recycling system for aluminum building materials through collaboration between the construction (upstream) and recycling (downstream) industries.

We are conducting demonstration experiments to recover aluminum from building demolition sites.



Circular Friend
Maiko Iwasaki
Takenaka Corporation,
Sales Division,
Strategic Planning Department
Sales Strategy & DX



Circular Friend
Rina Matsunaga
Sankyo Tateyama, Inc.,
Sankyo Aluminum Company,
Business Management Department,
Business Planning Division,
Business Development Section

We aim to realize Circular Design Build through close collaboration among manufacturers, building owners, and internal teams.

PROCUREMENT TECHNOLOGY DEVELOPMENT PLANNING

Upcycling Construction Waste

Upcycling Development Phase

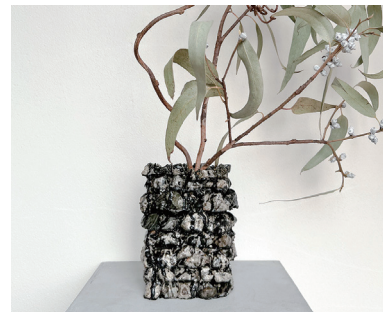
We are developing a business that upcycles construction waste generated from demolition and new construction projects into new building materials, everyday goods, and products used within our company.

Through upcycling into daily-use items, we aim to enrich people's lives — extending the value created on construction sites into society at large.

We are exploring sales and leasing models for upcycled products as we move toward full-scale commercialization.



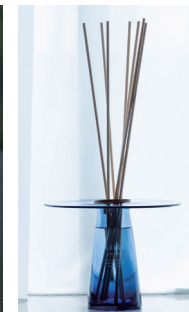
Circular Friend
Yuko Arai
Takenaka Corporation,
Urban Development



Vases made from recycled concrete aggregate



Coasters made from recycled concrete aggregate



Fragrance sticks crafted from wood offcuts



Accessories crafted from wood offcuts

To the Next Place, to the Next Person – A New Scheme Envisioning the “Second Life” of Building Materials

The transition from a recycling economy to a circular economy requires new systems that promote the reuse of building materials, enable easy access to circular materials, and support upcycling – the process of enhancing value through reuse. To achieve what was once considered impossible within the construction industry, we are taking deliberate steps to build these systems, one initiative at a time.

TECHNOLOGY DEVELOPMENT MAINTENANCE & OPERATION PLANNING PROCUREMENT

B2B Building Materials Reuse Platform

Archi-Hub Development Phase

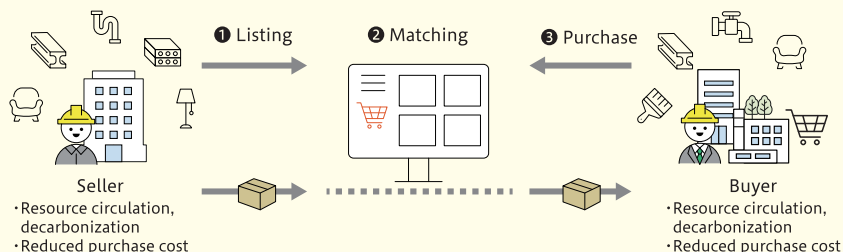
We have launched Archi-Hub, a BtoB platform for reusing building materials and furniture – connecting items no longer needed in one project to the next architectural development, rather than discarding them. The platform is currently in its development phase, with plans for future expansion to broaden its circular network across the industry.



Circular Friend
Kohei Fujii
Takenaka Corporation, Technical Division,
New Business Technology
Development

We're seeing a steady increase in building owners who wish to both provide and make use of reused materials.

How Archi-Hub Works



BEFORE



AFTER

We repurposed glass shades from chandeliers at a demolition site to create new wall-mounted light fixtures.



Circular Friend
Yuki Takehiro
Takenaka Corporation,
Tokyo Main Office,
Interior Design



Reusing tile carpets originally destined for disposal in a new construction project

We utilized 90% reused tile carpets throughout the entire building.



Circular Friend
Tsutomu Takeda
Takenaka Corporation,
Hokkaido Branch,
Production Control
Division

TECHNOLOGY DEVELOPMENT MAINTENANCE & OPERATION PLANNING PROCUREMENT

Developing an Open Search System for Circular and Low-Carbon Building Materials

Material Bank® Japan Development Phase

Using CTIs (Circular Transition Indicator), a potentially global standard for measuring circularity, we quantitatively visualize the circular performance of building materials. By listing these materials on the Material Bank® platform, we are creating a system that allows any registered user to freely access and explore circular and low-carbon materials.

It's incredibly exciting and inspiring to promote circularity across organizations and with diverse stakeholders!

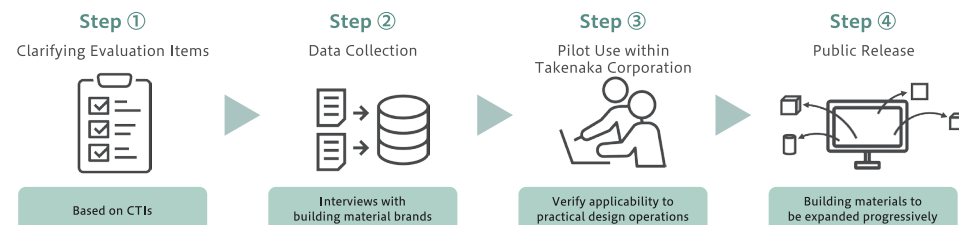


Circular Friend
Genki Unno
Takenaka Corporation,
Tokyo Main Office, Design Division,
Environmental Engineering



Circular Friend
Takeshi Kajii
DesignFuture Japan Inc.,
CEO

Through our collaboration on establishing and implementing circularity evaluation standards, we are making significant progress forward.



TECHNOLOGY DEVELOPMENT MAINTENANCE & OPERATION PROCUREMENT

On-site Waste Separation and Upcycling System Using Plastic-to-Oil Technology

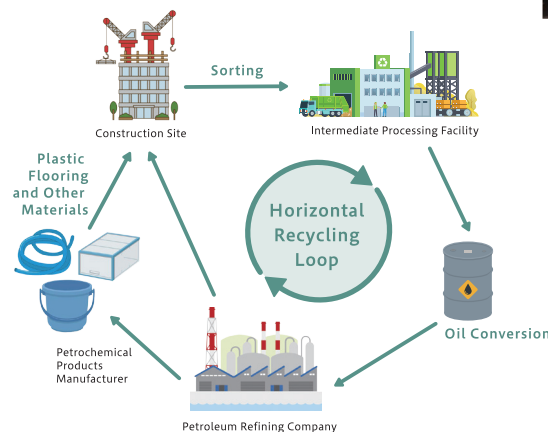
Waste Plastic-to-Oil Technology Development Phase

In collaboration with Chemical Recycling Japan Co., Ltd., Takenaka Corporation is working to recycle used plastics from construction sites.

By applying chemical recycling technology that converts waste plastics into oil, we are conducting demonstration experiments to regenerate resources – producing oil from plastics separated on-site and reusing it as raw material for products such as plastic flooring.



Displaying photos of plastics suitable for oil conversion in the sorting yard to guide proper separation and collection.



Circular Friend
Hideto Takasaki
Takenaka Corporation,
Safety & Environmental Division

We are beginning to apply Circular Design-Build principles to plastic building materials.



Circular Friend
Yoshihiko Okamura
Chemical
Recycling Japan Co., Ltd.,
President & CEO

We are collaborating in the development of circular building materials using plastic-to-oil chemical recycling technology.