SUSTAINABILITY ACTION PLAN

DLRGROUP

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Holistic Viewpoint

At DLR Group, sustainability is more than just a word. It's a belief that we can do better for ourselves, the community, and the planet by thinking holistically about sustainable actions - from ecological health and resource conservation to human and community health - balancing the needs of each. Through this framework, we make connections between design choices and their resulting impacts on the people, communities, economies, resources, and ecology we serve.

Our design choices have an impact at all scales and tiers.

Commitments

DLR Group's culture is built on the core values of **commitment, creativity, environmental stewardship, integrity, ownership, sharing, teamwork, and fun.** These values guide our commitment to sustainability - as design stewards and industry leaders, we are dedicated to creating a greater sustainable impact for our people, our communities, and our planet.

As an initial signatory of the 2030 Challenge, we know what it means to sign on the dotted line and commit to finding a better way. Much like the 2030 Challenge has expanded beyond Operational Carbon, we, too, are thinking bigger and reaching further.

To hold ourselves accountable, we have committed our work to align with goals of the industry including, but not limited to the Architecture 2030 Challenge, the China Accord the A&D Material Pledge, the SE2050 Challenge, and MEP 2040*. Our sustainability action plan (SAP) illustrates a path toward achieving these commitments and other sustainable actions.

* MEP - Mechanical, Electrical, and Plumbing Systems

Design Impact

Every opportunity we have with our clients and their stakeholders, from deep engagement to building design to planning solutions, is a design intervention opportunity to meaningfully impact **behavioral awareness, resource conservation, human health, community health, and ecological future.**

Our goals highlight the focus of our work to meet our sustainability commitments.

DESIGN IMPACT AREAS DEFINED

BEHAVIORAL AWARENESS

An individual's understanding of how their own behaviors have a broader impact on their personal health and the health of other people, communities, and the environment.

RESOURCE CONSERVATION

The responsible management and protection of natural resources to provide benefit to the current generation while maintaining capacity to meet the needs of future generations.

HUMAN HEALTH

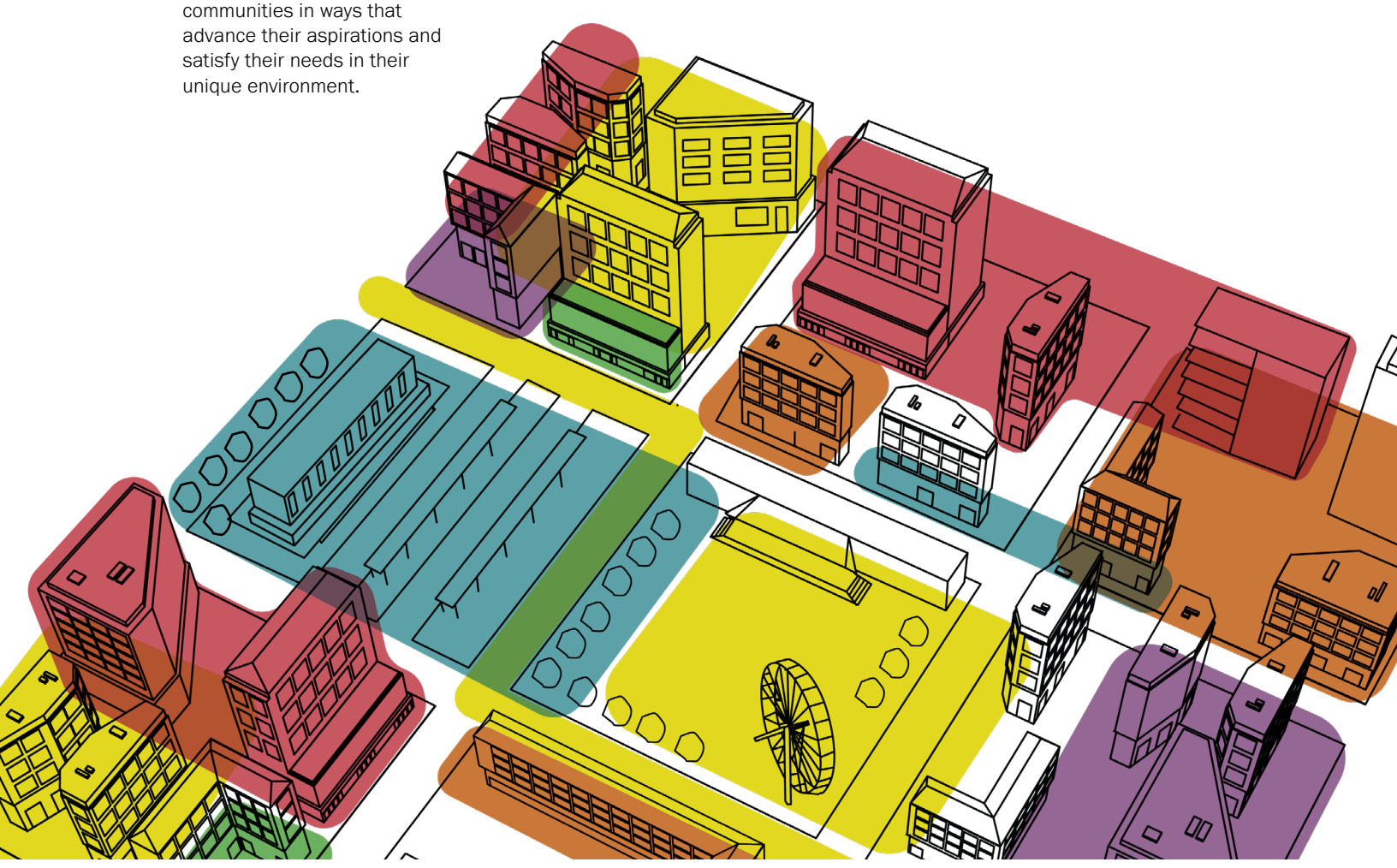
A state of complete physical, mental, and social well-being that goes beyond merely the absence of disease or infirmity.

COMMUNITY HEALTH

The availability of environmental, social, and economic resources to sustain emotional and physical well-being among communities in ways that advance their aspirations and satisfy their needs in their unique environment.

ECOLOGICAL FUTURE

The ability of ecosystems and their non-human inhabitants to maintain balance, be healthy, and thrive for generations to come.



DESIGN IMPACT AREA

Behavioral Awareness

To enact sustainable design thinking, collectively individuals can come to understand how their own behaviors have a broader impact on their personal health and the health of other, people, communities, ecosystems and the built environment.

"Awareness of the impact our behavior is important for self-improvement, emotional intelligence towards others, and understanding of our impact on the planet. Behavior and attitudes spread to those we interact with most, especially the next generation watching us as role models."

B. Sanborn, Principal | Design Research Leader

BEHAVIORAL AWARENESS GOAL 1

Empower conscious individual behaviors that support resource conservation, human health, community health, and ecological future.

Objectives

Utilize change management within our approach to design and sustainability. This allows for a culture of empowerment necessary to support the change envisioned by the clients and communities we serve.

Remove or reduce complicated steps in resource consumption strategies to simplify guidelines for users to follow.

Incorporate building performance transparency to educate users not only how buildings operations lead to the consumption, conservation and regeneration of resources.

Help connect different groups within organizations to collaborate across all stages of a building's life-cycle, from planning, to design, to construction, to facilities management.

BEHAVIORAL AWARENESS GOAL 2

Communicate "What's In It For Me" principle to individuals when it comes to sustainability.

Objectives

Connect personal context of a desired goal or change toward a future that proposes not only something different, but something better for individuals, communities and the planet.

Validate the journey towards a more sustainable future takes time for individuals, but our collective actions together will lead to big change.

DESIGN IMPACT AREA

Resource Conservation

Many resources on the planet, such as fossil fuels and water, are finite. The built environment generates nearly 40% of the annual global carbon emissions that harm the planet and its inhabitants. We must responsibly manage and protect natural resources to provide benefit to the current generation while maintaining capacity to meet the needs of future generations.

"If we can't find ways to conserve our finite natural resources, all of our efforts surrounding sustainability will ultimately fail. We must succeed at this task. Preserving the environment is our collective responsibility."

Lloyd Ramsey, Senior Principal | Global Engineering Leader

RESOURCE CONSERVATION GOAL 1

Design for decarbonization - eliminate greenhouse gas emissions.

Objectives

Reduce operational and embodied carbon in accordance with A2030 targets. Encourage clients to source energy from non-fossil fuel sources.

The goals for decarbonization include reducing embodied carbon on projects by meeting the targets of SE2050, reporting operational and embodied carbon analysis of projects via AIA Design Data Exchange (DDx) and SE2050.

Establish DLR Group's greenhouse gas emissions baseline and create an annual reporting process.

Establish methods for tracking the impact of refrigerant leakage as a greenhouse gas emission.

Through the Carbon Leadership Forum MEP 2040 challenge, elevate the opportunities for reducing embodied carbon in building systems, with an emphasis on data transparency and local sourcing.

RESOURCE CONSERVATION GOAL 2

Protect the quality of the planet’s resources including water and air.

Objectives

WATER

Research the history of water and its hydrology upstream and downstream of the immediate project context. Establish a baseline of potable and non-potable water use intensity.

Develop key performance indicators that lead to design decisions supporting Net Positive Water.

AIR QUALITY

Educate clients about the importance of optimized air quality and the role the built environment has on both outdoor and indoor air quality.

Promote continuous air quality monitoring post-occupancy.

Specify materials that eliminate volatile organic compound levels and reduce harmful redlist chemicals.

RESOURCE CONSERVATION GOAL 3

Reduce materials used to construct, maintain, and supply projects in the built environment.

Objectives

Promote a circular economy by seeking opportunities for material reuse.

Target recycled or repurposed building materials when possible.

Prioritize materials that last longer and/or require less maintenance.

Utilize an integrated design and facility management process to plan for better overall system maintenance and future replacement and refurbishment, while minimizing the scale of needed construction activities.

DESIGN IMPACT AREA

Human Health

The built environment directly impacts people's health and well-being. Our designs should support a state of complete physical, mental, and social well-being that goes beyond merely the absence of disease or infirmity. This extends to all people affected by our projects, including people that interact with, construct, and source materials for the built environment we design.

"Human health and wellbeing within a space extends beyond one single aspect of design. Psychological safety encompasses the physical environment and the social aspects of health. In this day and age it is critical that environments support all aspects of the people's health."

Audrey Koehn, Principal | Global Interiors Leader

HUMAN HEALTH GOAL 1

Select materials and building systems that promote the mental, physical, and social health and well-being of all people impacted by project work, whether occupants, operators, or those along the supply chain.

Objectives

MATERIALS

Support the health, transparency, and optimization of building systems and materials.

Document the impacts on human health and well-being along the supply chain.

INDOOR ENVIRONMENTAL QUALITY

Work with clients to establish measurable targets for each project around occupant comfort.

Optimize building systems and material selection to support indoor environmental quality - air quality, visual comfort, thermal comfort, and acoustic comfort.

Apply monitoring-based commissioning to measure post-occupancy indoor environmental quality, and to understand design impacts (e.g., sonrai IAQ by DLR Group).

HUMAN HEALTH GOAL 2

Key to human health is intentional focus on designing spaces that promote the mental well-being, emotional resiliency, and safety of building occupants.

Objectives

BIOPHILIA

Incorporate natural elements and patterns into our designs to provide important mental restoration benefits.

SAFETY AND SECURITY

Balance practical safety and security measures with opportunities for users to take individual action; this is critical to user comfort, healing, transformation, and equity.

EMOTIONAL RESILIENCY

Design spaces that foster safety, refuge, and emotional support and create healing environments that promote positive adaptation to individual challenges.

INDIVIDUAL FULFILLMENT

Design spaces that promote a sense of belonging by helping individuals recognize their own social, intellectual, and emotional values and ideals.

DESIGN IMPACT AREA

Community Health

The built environment plays a critical role in shaping equitable, lively, and resilient communities. As designers, we are stewards of the built environment; it's our responsibility to advocate for design processes and outcomes that reflect and benefit the communities in which we live, work, and design.

"Environmental stewardship of our planet starts with a commitment to the health and well-being of our own communities. Our work must create healthy spaces that allow communities to flourish and thrive."

Steve McKay, Managing Principal | Global Design Leader

COMMUNITY HEALTH GOAL 1

Create an inclusive design process enriched by community engagement to design spaces by and for communities.

Objectives

Design for cultural heritage and community identity: integrate research about site, neighborhood, and community history into every project, and engage stakeholders to understand their identity, culture, and values.

Foster civic vitality, community engagement, and pride by committing to transparent project decision-making processes that empower communities to exercise their design voice.

Target equitable design impacts. Bring environmental and climate justice to the forefront of design decisions by prioritizing access to resources, spaces, and opportunities for historically underserved groups.

COMMUNITY HEALTH GOAL 2

Advocate for the social determinants of health - the resources and support systems that individuals and communities need to be healthy in daily life.

Objectives

ACCESS AND MOBILITY

Create walkable, safe, and pedestrian friendly environments that prioritize people over vehicles.

Improve access to multi-modal transit options.

ECONOMIC STABILITY

Support local economies by making materials, procurement, labor, and client choices that contribute to local businesses and provide local economic opportunities.

COMMUNITY HEALTH GOAL 3

Champion adaptable and resilient communities through our design decisions, processes, and partnerships.

Objectives

Design resiliency hubs that can support communities during unexpected events.

Advocate for access to green infrastructure and open space in communities that need it the most.

Facilitate connections between local organizations, governments, community members, businesses and thought leaders.

DESIGN IMPACT AREA

Ecological Future

As stewards of the earth, we must design for all species in respect of context of place. The ability of ecosystems and their non-human inhabitants to maintain balance, be healthy and thrive for generations to come shall not be overlooked for the human-built environment.

"A resilient future of the built environment hinges on our symbiotic cohabitation with other species. Imagine a world where justice, equity, diversity and inclusion is not just about the human species."

Prem Sundharam, Senior Principal | Applied Research Leader

ECOLOGICAL FUTURE GOAL 1

Utilize regenerative design to support all species, improve habitat, and protect biodiversity.

Objectives

CONSERVATION

Conserve existing natural landscape, ecosystem services, and habitat on site; minimize footprint of built area when possible.

Reduce hardscape and increase pervious surfaces on site.

Educate clients about habitat restoration and work with them to set aside project area for habitat restoration. If project area is not feasible, connect clients to off-site habitat restoration exchange services.

ECOSYSTEM SERVICES

Prioritize ecosystem services over built infrastructure to mitigate heat island effect, flooding, and other climatic risks.

In climates with high rainfall, implement on-site stormwater filtration/capture systems to filter pollutants and recharge local aquifers.

WILDLIFE & BIODIVERSITY

Implement native/adapted and pollinator friendly plantings.

Integrate bird collision deterrent design strategies.

Design site lighting to increase dark skies/night sky access, improve nighttime visibility, and reduce consequences of development on wildlife.

Study impacts of given site on broader ecosystems and community, and potential of site to support broader ecology.

Increase the quantity and quality of habitat in our designs.

The Journey

DLR Group will continue to strengthen a holistic approach towards sustainability. This sustainable design journey is built on past achievements, design challenges provided by clients, and collaborations with research partners that continues to propel us towards a future full of rich, collaborative, and responsive integrated Design opportunities. Our six guiding principles allow us to persist in the journey!

1 Establish project values and success indicators

2 Practice integrated design

3 Measure the impact of our design choices

4 Walk the walk

5 Share our progress

6 Advocate for action

ELEVATE *the*
HUMAN EXPERIENCE
THROUGH DESIGN