Some things I learned along the way . . .

Indicators of Equitable Building Decarbonization
Towards Zero Carbon

Transforming Traditional Project Delivery to Achieve Equitable Building Decarbonization October 28, 2021
Alice Sung, AIA, LEED AP, BD+C, SEA
Principal, Greenbank Associates
A. LEARNING by REFLECTING in the EXPERIENCES of the PAST

THE ICEBERG MODEL: PARADIGMS OF ECONOMIC THOUGHT

The evolution of modern economy and economic thought mirrors an evolution in human consciousness - from what we call "ego-system awareness" to "eco-system awareness." Paradigms of economic thought and deeper sources of creativity and self give rise to the structures and visible events we see around us.
"The SUCCESS of an INTERVENTION depends on the INTERIOR CONDITION of the INTERVENOR."

- WILLIAM O'BRIEN, FORMER CEO of the HANOVER INSURANCE COMPANY

---

Accountability Principles

Working to unpack, dismantle, and transform oppressive systems.

https://womensearthalliance.org/
Accountability Principles

• **We strive** to build respectful relationships as the foundation of our work. Relationships are where we enact all our commitments to equity, justice and accountability, in a dynamic and evolving process. We strive to be consistent and transparent in our actions and processes, listening deeply and speaking truthfully, continually engaging feedback from our partners, and acknowledging our common humanity.

• **We acknowledge** that legacies of power structures such as race, caste and class privilege are deeply embedded in all of our lives, and we strive to identify and uproot historic patterns of oppression where they show up in our thinking, planning and actions. With compassion, we hold ourselves and each other accountable to addressing the impacts of our intersecting privileges as they play out.

• **We recognize** that communities and peoples impacted by the intersecting legacies of colonialism and an unfair capitalist growth paradigm possess experience-based, collectively-held knowledge around resisting injustice, promoting resilience, and sparking transformation. We prioritize community-based and women’s knowledge as a key source of healing and solutions for our global society. We strive to learn from this knowledge, invest in its application, and contribute to building a platform for it to be widely shared. We commit to observing proper, region-specific protocol when we engage with women leaders and groups in the course of our work. Through consultation, humility and continual learning and self-reflection, we strive to build our competency to effectively and respectfully engage in cross-cultural collaboration.

• **We commit** to authentically supporting women’s leadership, especially Indigenous women, women of color, young women, elders, low-income women, and women who represent front-line and impacted communities. To do this, we strive to support women leaders to have access to resources, information, decision-making opportunities, and communication platforms that can empower their leadership and work.

* [https://womensearthalliance.org/why-wea/accountability-principles](https://womensearthalliance.org/why-wea/accountability-principles)
Jemez Principles of Democratic Organizing

• Jemez Principles for Democratic Organizing Meeting hosted by Southwest Network for Environmental and Economic Justice (SNEEJ), Jemez, New Mexico, Dec. 1996 Activists meet on Globalization On December 6-8, 1996, forty people of color and European-American representatives met in Jemez, New Mexico, for the “Working Group Meeting on Globalization and Trade.” The Jemez meeting was hosted by the Southwest Network for Environmental and Economic Justice with the intention of hammering out common understandings between participants from different cultures, politics and organizations. The following “Jemez Principles” for democratic organizing

• From energy justice network https://www.ejnet.org/ef/jemez.pdf

#1  Be Inclusive

#2  Emphasis on Bottom up Organizing

#3  Let People Speak for Themselves

#4  Work together in Solidarity and Mutuality

#5  Build Just Relationships Among Ourselves

#6  Commitment to Self-Transformation

This and other environmental justice documents can be downloaded from: www.ejnet.org/ef/
EJ Principles of Working Together

• A note on institutional racism...

• The most significant problem facing people of color is the institutional and cultural racism which results in discrimination in access to services, goods and opportunities. Institutional racism involves policies, practices, and procedures of institutions that have a disproportionately negative effect on racial minorities' access to and quality of goods, services, and opportunities. Systemic racism is the basis of individual and institutional racism; it is the value system that is embedded in a society that supports and allows discrimination. Institutional and systemic racism establishes separate and independent barriers. Institutional racism does not have to result from human agency or intention. Thus, racial discrimination can occur in institutions even when the institution does not intend to make distinctions on the basis of race. In the context of racism, power is a necessary precondition for discrimination. Racism depends on the ability to give or withhold social benefits, facilities, services, opportunities etc., from someone who is entitled to them, and is denied on the basis of race, color or national origin. The source of power can be formal or informal, legal or illegal, and is not limited to traditional concepts of power. Intent is irrelevant; the focus is on the result of the behavior.

• http://www.energyjustice.net/files/ej/ej.pdf
Environmental Justice / Environmental Racism

Definitions:

Environmental equity: Poison people equally
Environmental justice: Stop poisoning people, period.

Environmental racism is the disproportionate impact of environmental hazards on people of color. Environmental justice is the movement's response to environmental racism. Environmental equity is not environmental justice. "Environmental equity" is the government's response to the demands of the environmental justice movement. Government agencies, like the EPA, have been coopting the movement by redefining environmental justice as "fair treatment and meaningful involvement," something they consistently fail to accomplish, but which also falls far short of the environmental justice vision. The environmental justice movement isn't seeking to simply redistribute environmental harms, but to abolish them.

www.ejnet.org

The 17 Principles of Environmental Justice

1. Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.

2. Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

3. Environmental Justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.

4. Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.

5. Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

The 17 Principles of Environmental Justice

6. **Environmental Justice** demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.

7. **Environmental Justice** demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.

8. **Environmental Justice** affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.

9. **Environmental Justice** protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.


---

The 17 Principles of Environmental Justice


11. **Environmental Justice** must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12. **Environmental Justice** affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.

13. **Environmental Justice** calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

The 17 Principles of Environmental Justice

14. Environmental Justice opposes the destructive operations of multi-national corporations.

15. Environmental Justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16. Environmental Justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

17. Environmental Justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.


The LANDBACK movement

“Land Back movement is about building collective power and collective liberation and building a world that works for everybody”

https://globalsolidaritylocalaction.sites.haverford.edu/what-does-land-restitution-mean/
Opening questions:

1. Who is/are the Indigenous nation(s) and or tribes that have lived and do live in the areas where you are working? Note: This might be different, as often times Indigenous people have been forcibly displaced by the US or Canadian government or for other reasons are living on land that is not their traditional homelands.

2. What Indigenous groups are currently present in that area? This can include tribal governments, traditional leadership, organizations, American Indian Movement (AIM) chapters, Indian Centers, land trusts, organizing groups and more.

3. Do you or people you organize with have relationships with Indigenous communities, organizers or leaders? What work have you done or can you do to build relationships?

4. What are local Indigenous people in that community or region working on? Is your organization directly supporting this work? Or have you asked if there are ways that support would be welcome?

5. -7. + Thinking strategies, resources and representation

Shuumi Land Tax

The Shuumi Land Tax is a voluntary annual contribution that non-Indigenous people living on the Confederated Villages of Lisjan’s territory can make to support the critical work of the Sogorea Te’ Land Trust.

The Shuumi Land Tax directly supports Sogorea Te’s work of rematriation, returning Indigenous land to Indigenous people, establishing a cemetery to reinter stolen Ohlone ancestral remains and building urban gardens, community centers, and ceremonial spaces so current and future generations of Indigenous people can thrive in the Bay Area. Shuumi means gift in the Ohlone language Chochenyo.

- [https://sogoreate-landtrust.org/shuumi-land-tax/](https://sogoreate-landtrust.org/shuumi-land-tax/)
Some things to think about . . .
Equity in Building Electrification Guidance-Policymakers

- **Greenlining Institute**
  
  **EQUITABLE BUILDING ELECTRIFICATION: A FRAMEWORK FOR POWERING RESILIENT COMMUNITIES**
  
  - Step 1: Assess the Communities' Needs.
  - Step 3: Develop Metrics and a Plan for Tracking.
  - Step 4: Ensure Funding and Program Leveraging.
  - Step 5: Improve Outcomes.


Equity in Sustainable Buildings Guidance-Policymakers

- **Urban Sustainability Directors Network (USDN)**
  
  **Equity and Buildings: A Practice Framework for Local Government Decision Makers**
  
  - Trainings, Workshops, Resources
  - Equity in Buildings - Principles of Practice (12)
    1. Make impacted communities central...
    2. Build stronger policies by actively centering equity
    3. Understand the people (the “who”) of buildings
    4. Collaborate across departments...address equity
    5. Address root causes
    6. Prioritize reparations over reducing additional harm for deeper healing and better outcomes

Equity in Sustainable Buildings Guidance-Community

• NAACP Centering Equity in Sustainable Buildings Sector (NAACP CESBS)

GUIDELINES FOR EQUITABLE COMMUNITY INVOLVEMENT IN BUILDING & DEVELOPMENT PROJECTS AND POLICIES

• FOR COMMUNITY MEMBERS
• FOR DESIGN COMMUNITY (IN DEVELOPMENT)
• WORKSHOPS, MEETINGS, TOWN HALLS
• TRAININGS, RESOURCES


“Sustainability without equity is sustaining inequity.”

Tamara Toles O’Laughlin,
NAACP Centering Equity in the Sustainable Building Sector (CESBS) Initiative Launch Summit
Towards A NEW MODEL for a healthy, zero carbon, sustainable-regenerative future for ALL of us

Business as Usual For-Profit Economy

Hierarchical, Exclusive
Lack of Transparency
Oppressive, “Othering”, Failure to Build Trust
All Talk, No Walk

Extractive
Equity & Value

Lack of Transparency
Failure to Build Trust
All Talk, No Walk

Equitable Resourcing

Shared Community Benefits

Just Transition
Environmental & Climate Justice
Visions for Federal Buildings

NAACP Town Hall with the U.S. General Services Administration

NOMA and the AIA Large Firm Roundtable Strengthen Ties to Combat Racism in Architecture

Statement:

Banish racism
Reach out to those who are grieving
Advocate for the disinherit
Vote in every American election
Engage each human that you meet as you would want to be engaged
AIA Framework for Design Excellence:
Design for Equitable Communities

Focus topics
- Extend our reach beyond projects.
- Social justice, equity, diversity, and inclusion
- Community engagement and gathering
- Community resilience
- Mobility and access

• What is the project’s greater reach? How could this project contribute to creating a diverse, accessible, walkable, just, and human-scaled community?
• Who might this project be forgetting? How can the design process and outcome remove barriers and promote inclusion and social equity, particularly with respect to vulnerable communities?
• What opportunities exist in this project to include, engage, and promote human connection?
• How can the design support health and resilience for the community during times of need or during emergencies?

https://www.aia.org/showcases/6082410-design-for-equitable-communities

COTE Top Ten Awards
M2: Design for Equitable Communities

METRICS Mandatory
• Walk score
• Bike score
• Transit score
• Number of parking spaces
• Number of parking spaces required by local zoning code
• Percent reduction in parking spaces by code
• Number of covered and secure bike parking spaces
Encouraged ...etc.

Currently being updated

https://www.aia.org/awards/7301-aia-cote-top-ten-award
Human activity is warming our climate to dangerous levels, and carbon is the primary culprit. Buildings contribute about 40% of that carbon. The harm that results affects us all but doesn’t impact us all equally. As authors of that environment, architects are crucial to addressing and mitigating the damage.

This campaign is a call to action. AIA, the largest design organization in the world, is asking architects, design professionals, civic leaders, and the public in every community to join our efforts. Help us transform the day-to-day practice of architecture to achieve a zero-carbon, resilient, healthy, just, and equitable built environment.

https://blueprintforbetter.org/about-the-campaign/
Equitable Development Frameworks

An introduction & comparison for architects


Some things to think about . . .

2. From your perspective, what are the attributes of an "equitable building" or "project delivery"? (List 3-6+)

Go to the Session Padlet:
https://padlet.com/kathrynwright2/arj0edptgdqf95q
### Living Building Challenge EQUITY PETAL

- **15. Human Scale and Humane Places**
- **16. Universal Access to Nature and Place**
- **17. Equitable Investment**
- **18. JUST Organizations**

[https://living-future.org/lbc/equity-petal/#petal-intent](https://living-future.org/lbc/equity-petal/#petal-intent)

### USGBC LEED for Social Equity Credits

- **Social Equity within the Project Team:** This credit encourages a project’s owners, financiers, architects, engineers and contractors to incorporate social equity into their daily activities. They can do this by paying prevailing wages to construction workers; providing workforce development; or by demonstrating corporate social responsibility through B-Corporation certification or through the creation of Corporate Sustainability Reports that address the social components of their businesses.

- **Social Equity within the Community:** This credit encourages a project team to address identified needs and disparities in the community surrounding the project. It outlines a process of engagement with community stakeholders that focuses on vulnerable populations to understand these needs, and also allows certification through established frameworks such as the SEED Evaluator or Enterprise Green Communities.

- **Social Equity within the Supply Chain:** This credit encourages social equity for those involved in the production of materials and products for our buildings, from raw materials extraction through final assembly. It rewards the establishment of supplier assessments, or scorecards, as well as the creation of Supplier Codes of Conduct that address basic human rights.

[https://www.usgbc.org/resources/leed-project-team-checklist-social-impact](https://www.usgbc.org/resources/leed-project-team-checklist-social-impact)
SEED Network

To advance the right of every person to live in a socially, economically, and environmentally healthy community.

SEED Principles
1. Advocate with those who have a limited voice in public life
2. Build structures for inclusion that engage stakeholders and allow communities to make decisions
3. Promote social equality through discourse that reflects a range of values and social identities
4. Generate ideas that grow from place and build local capacity
5. Design to help conserve resources and minimize waste

• Training, SEED Certification, SEED Evaluator, Certified Consulting firms
• LEED for Social Equity compliance path

Pathways to Equity
A Design Leadership Experience for Social Equity

Pathways to Equity is a program committed to centering equity and racial justice in architecture and design practices. Our goal is to create transformative learning experiences, shifting the field towards anti-racism and equitable outcomes.

• Workshops, trainings, courses consultations, P2E Fellowship
• 2020 Recipient of the NOMA, NAACP, SEED Award for Justice, Equity, Diversity and Inclusion in Design West Oakland Environmental Indicators Project (WOEIP)

https://www.pathwaystoequity.org
Some things to think about . . .

3. What kind of metrics demonstrate both equity & sustainability towards zero carbon buildings? Are you using these metrics in your projects?

Go to the Session Padlet:
https://padlet.com/kathrynwright2/arj0edptgdqf95q

EPA EJ Screen

- EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. EJSCREEN users choose a geographic area; the tool then provides demographic and environmental information for that area.

EJSCREEN includes:
- 11 environmental indicators
- 6 demographic indicators
- 11 EJ indexes

https://www.epa.gov/ejscreen
Autocase EJ/Equity Dashboard Tool - in development

- Autocase – in partnership with Stantec, HOK, Jacobs, Quinn Evans, and the LFRT – plans to develop a free online environmental justice tool to help support more equitable decisions in the built environment.
- Early Phase 1 development of an interactive best-practices project portal to include:
  - Best practices guidance for design teams to follow to address multiple EJ themes on a project, with the ability to upload documentation to record & store their actions
  - A ‘Resources’ page that provides links to data tools like EPA EJ Screen and others
  - A ‘Connect’ page that will act as a way for design teams to find and pair with organizations/local experts
- For more information, see: https://autocase.com/equity/

Getting Insight Into Inequality: How Cities are Investing in Social Equity Indicators

Indicators give policymakers essential insight into their current status and trends over time when it comes to issues of social, environmental, and economic concern. Since the early 20th century, indicators have become increasingly central to government decision-making processes. As inequality has moved to the center of the public discussion, government officials, scholars, and advocates have started to develop indicators that reflect both the level of inequality and whether things are improving.

Health: Social and economic inequality is inextricably tied to unequal health outcomes: being poor, or having grown up poor, is associated with lower life expectancy, higher infant mortality, and a number of health problems. Health inequalities in the US are among the highest in the world—people in households earning less than $22,500 annually report less than good health three times more often than those making $47,000 or more. And vast disparities can be found within a single city. To address these and other concerns, there is an urgent need for urban-level health equity indicators. Some cities, like Chicago, collect diverse data on residents’ health, but without organizing indicators according to issues of equity. In 2012, the City of Richmond in California put together a “Health Equity Report Card,” summarizing social and economic but also health equity indicators, from the rate of child immunization to the proportion of residents lacking health insurance. As Coburn and Cohen argue, the process of developing health indicators can be as valuable to improving governance as the indicators themselves: identifying and creating indicators allows stakeholders to debate what counts as a health issue, determine who is counted as an expert, and negotiate data transparency.

https://news.harvard.edu/gazette/story/2015/05/getting-insight-inequality-how-cities-are-investing-social-equity
While some indicators focus on cost and quality of life for those in the bottom half of the income distribution, other measures highlight the large gaps between the poor and the rich. For a comparative perspective, the Geographic Information System company Esri developed a mapping application called Wealth Divides, which maps both median household income and the density of households earning more than $200,000 and less than $25,000 across tracts.

“Gentrification indicators are thus a crucial measure of divergent fortunes for owners and renters.”

“Gentrification: One of the most visible manifestations of urban inequality is gentrification. As neighborhoods change, the rich benefit from more luxurious amenities and rising home values, while middle and working class renters experience increasing cost of living and, often, eviction. A recent report from Generation Rent showed that the arrival of a high-end Waitrose supermarket was attended by a 25-50 percent increase in evictions.”

Some things to think about . . .

4. What kinds of guidance, tools, or programs are already available to support evaluating equity metrics? And what sort of Environmental Justice & Equity Tool do you wish existed?
What do I/YOU/WE need to explore in order to begin to co-create a NEW SYSTEMS MODEL, w/ A JUST TRANSITION of “how” to intervene in the built environment based on EQUITABLE building decarbonization, that results in healthy, zero carbon, green-regenerative buildings and community scale resilience beginning with those most impacted and historically harmed?

Thank you for listening
Continue the conversation
Go to the Session Padlet:

https://padlet.com/kathrynwright2/arj0edptgdfq59

Contact:
Alice Sung AIA, LEED AP, BD+C, SEA
Principal, Greenbank Associates
EMAIL: asung1@gmail.com
What are the Indicators of *Equitable* Building Decarbonization?

- Typical Green Building Project/ Building Performance Indicators alone?
  For Example: Location to minimize VMT, Energy (ZNE/pEUI), Water, Indoor Env. Quality, Carbon (ZNC/Zero Carbon), Embodied Carbon/Building Re-use,

- AND/OR or OR?

- Who is directly involved in Project Delivery?

- Who shared decision-making power & is provided capacity + resources to do so?

- What are the completed project’s benefits: environmental/climate, economic, social, health, wealth re-distribution?

- Who, what community enjoys these projects benefits? Are they short or long-term?

- How can environmental justice and equity in the built environment/or building decarbonization be scaled for those most impacted?

- More?—Fill in the Blanks

Some things to think about . . .

5. If you are interested in receiving a follow-up survey, & Resource list, please click the linked image below Question #5 on the Session Padlet @:

https://padlet.com/kathrynwright2/arj0edptgdqf95q
Thank you for listening
Continue the conversation
Go to the Session
Padlet:

https://padlet.com/kathyrynwright2/arj0edptgdfq95q

Questions?

Contact:
Alice Sung AIA, LEED AP, BD+C, SEA
Principal, Greenbank Associates
EMAIL: asung1@gmail.com