



DRAFT Sustainability Vision, Goals and Strategy

For Seattle Public Schools

November 13, 2020



MCLENNAN DESIGN



We respectfully acknowledges the Suquamish and Duwamish peoples, who, throughout the generations, stewarded and thrived on the land where we live and work.

The Charge We have Been Given

- Celebrate success with sustainability and explore what is next
- Include new voices
- Review & analyze documents, and data looking for opportunities
- Summarize a vision and goals
- Recommend next steps





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Executive Summary

A woman with blonde hair, wearing a light blue striped shirt and dark jeans, is walking through a large wooden doorway. She is smiling and looking back over her shoulder. Three children are walking with her. On the left, a boy with brown hair, wearing a white t-shirt and a grey backpack, is walking towards the camera. In the center, a girl with dark skin and braided hair, wearing a yellow t-shirt and blue overalls, is walking towards the camera. On the right, a girl with light skin and blonde hair, wearing a white t-shirt with a small pattern and blue jeans, is walking towards the camera. The background shows a brick wall and a staircase.

“The Beautiful thing about learning is that nobody can take it away from you.” - BB King

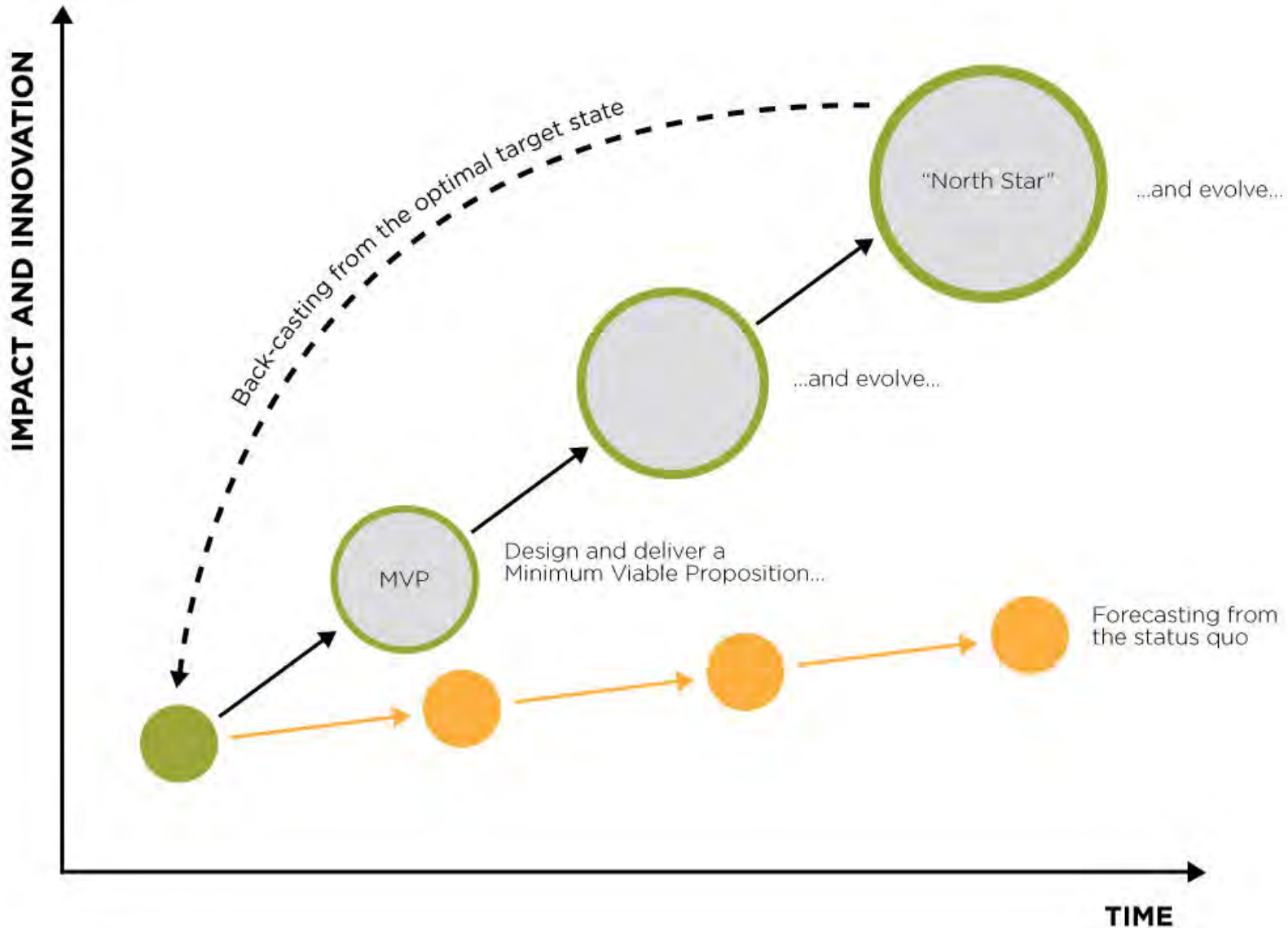
Vision

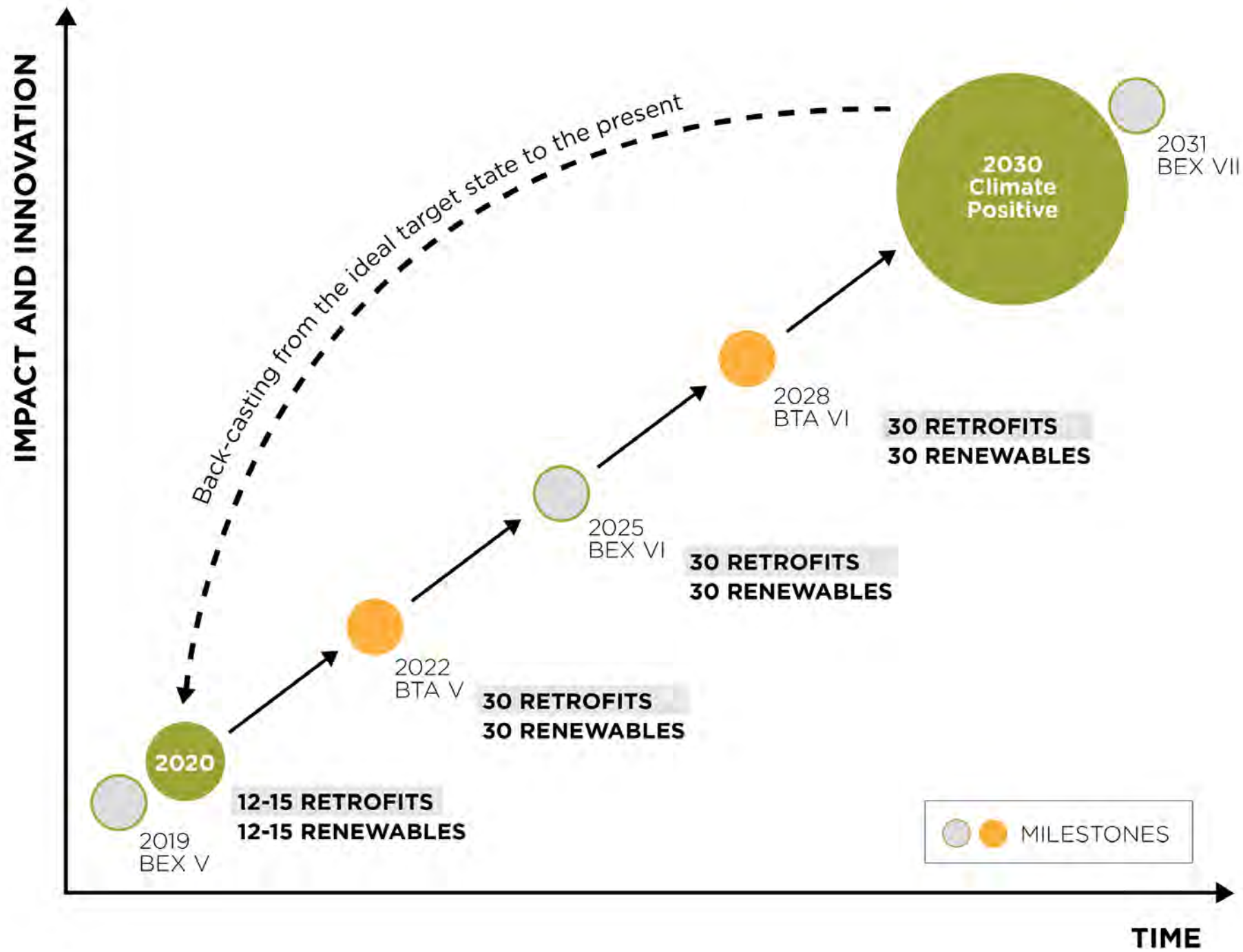
Use today's financial and human resources to provide environmental justice and health benefits equitably across our community by empowering our staff to accomplish the following:

Recommendations

- **Be a Carbon Positive District by 2040**
- **Be a Zero-Waste District by 2030**
- **Be a Responsible Water (LBC Core) District by 2040**
- **Complete benchmarking & planning**
- **Update existing policies, procedures and standards with new targets and best practices**
- **Continue to measure & liberate the data**
- **Retrofit & upgrade existing buildings on a schedule**

Back-casting vs Forecasting





IMPACT AND INNOVATION

Back-casting from the ideal target state to the present

2040
Climate
Positive

2037
BEX VIII

15 RETROFITS
15 RENEWABLES

2034
BTA VII

15 RETROFITS
15 RENEWABLES

2031
BEX VII

15 RETROFITS
15 RENEWABLES

2028
BTA VI

15 RETROFITS
15 RENEWABLES

2025
BEX VI

15 RETROFITS
15 RENEWABLES

2022
BTA V

15 RETROFITS
15 RENEWABLES

2020

10-12 RETROFITS
10-12 RENEWABLES

2019
BEX V



MILESTONES

TIME

RECOMMENDATIONS



POLICY



STAFFING



EDUCATION



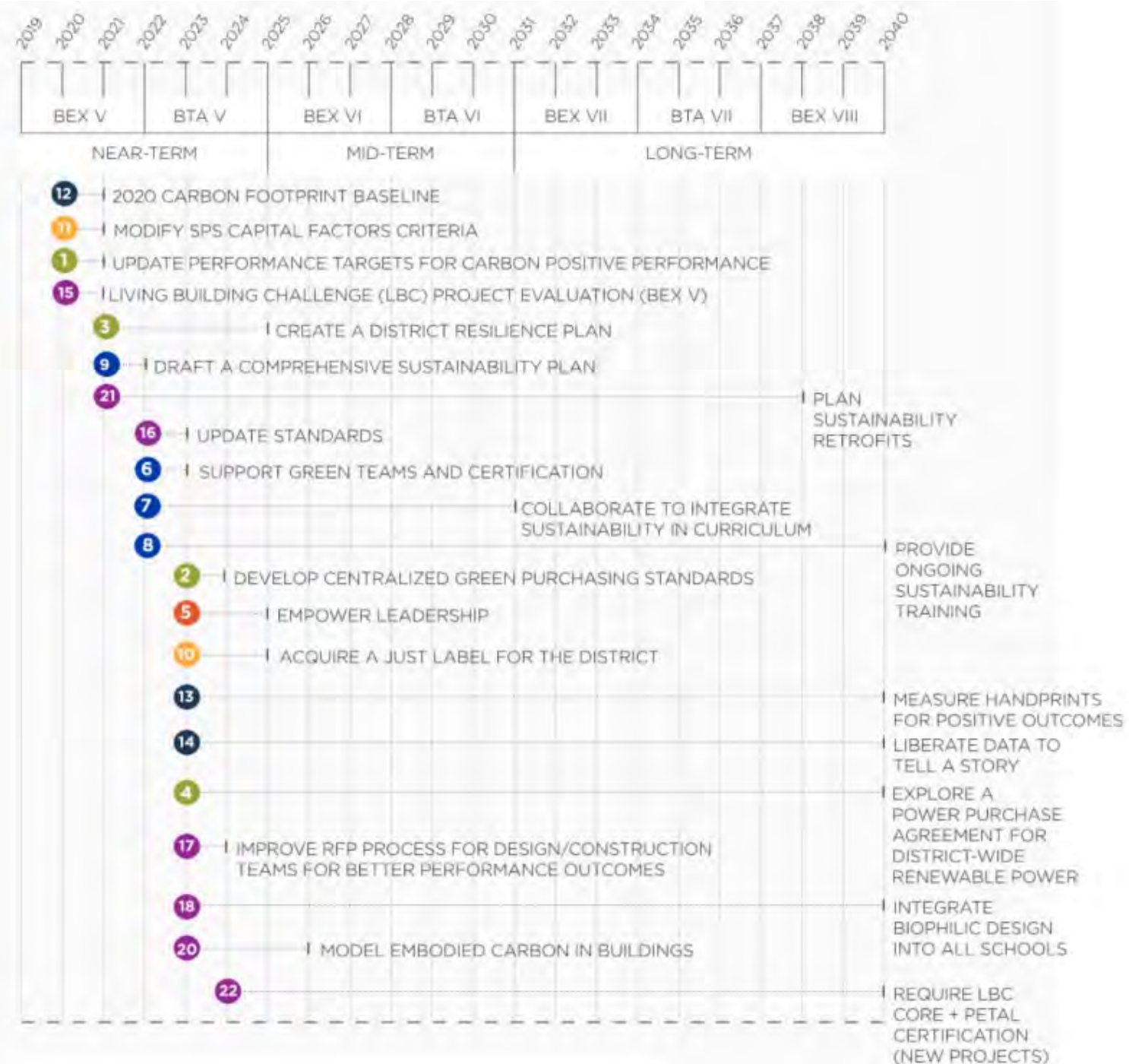
EQUITY



MEASUREMENT



BUILDINGS + SITE



Background

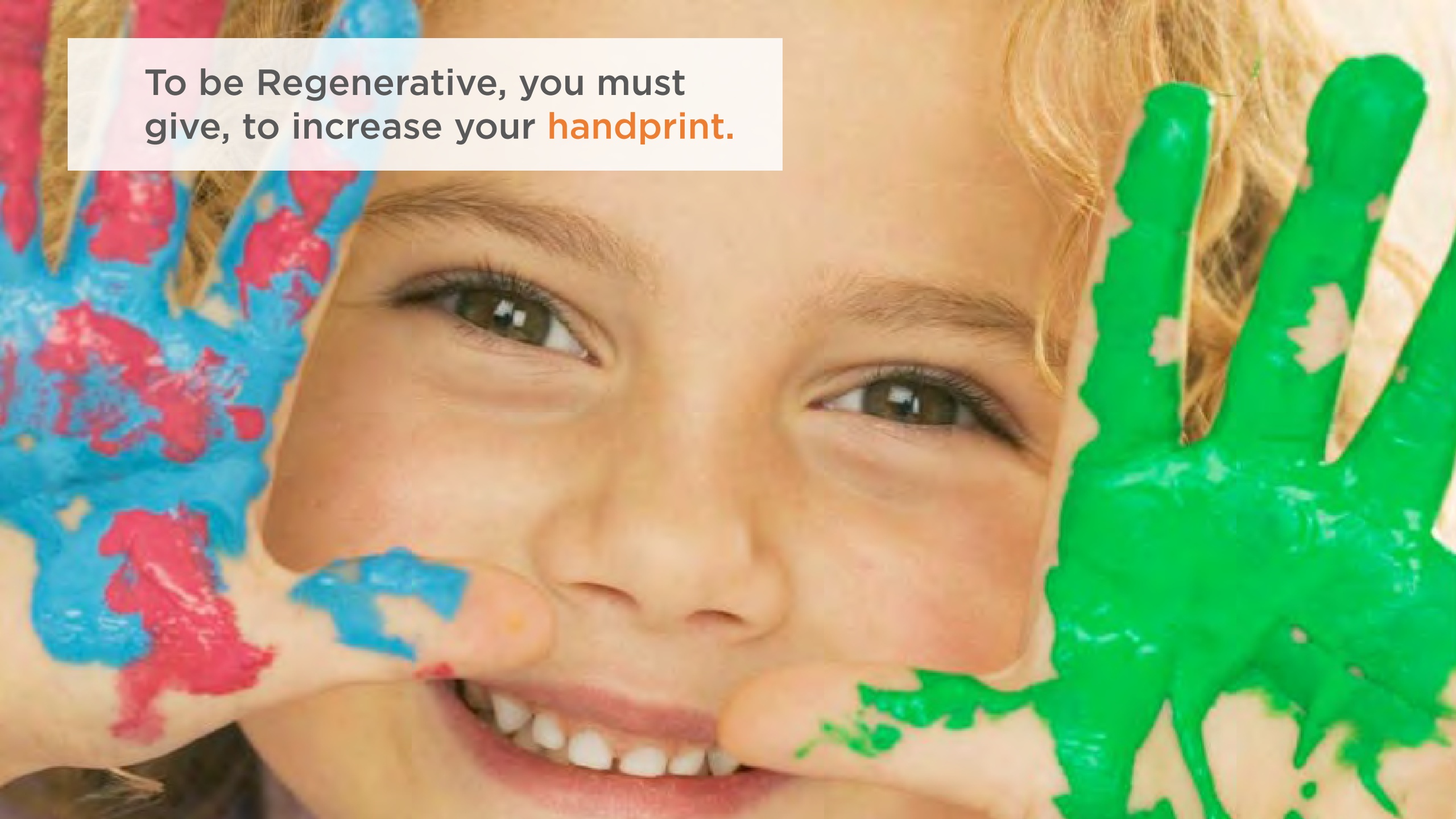
A science classroom scene. In the foreground, a male teacher with glasses and a light blue shirt stands behind a desk, leaning over to assist two students. The students, a young man and a young woman, are both looking through a microscope. The young man is pointing at a book on the desk. In the background, other students are also working at desks with microscopes. The classroom is filled with shelves of glassware and various scientific equipment.

“Our relationship with nature is more one of being than having. We are nature: we do not have nature.” - Steven Harper

A man wearing a white helmet, a white short-sleeved shirt, and khaki pants is riding a blue bicycle with a white basket on the handlebars. He is riding on a city street at dusk or dawn, with buildings and traffic lights in the background. The scene is captured in a side profile, showing the man's focused expression and the motion of the bicycle. The background is slightly blurred, emphasizing the cyclist.

Sustainability has been all about
shrinking your **footprint**.

To be Regenerative, you must
give, to increase your **handprint**.



The Path to Net Positive

Reduce your Footprint

WATER CONSERVATION & RAINWATER COLLECTION
ON-SITE EFFICIENCY MEASURES
ON-SITE RENEWABLE ENERGY PRODUCTION

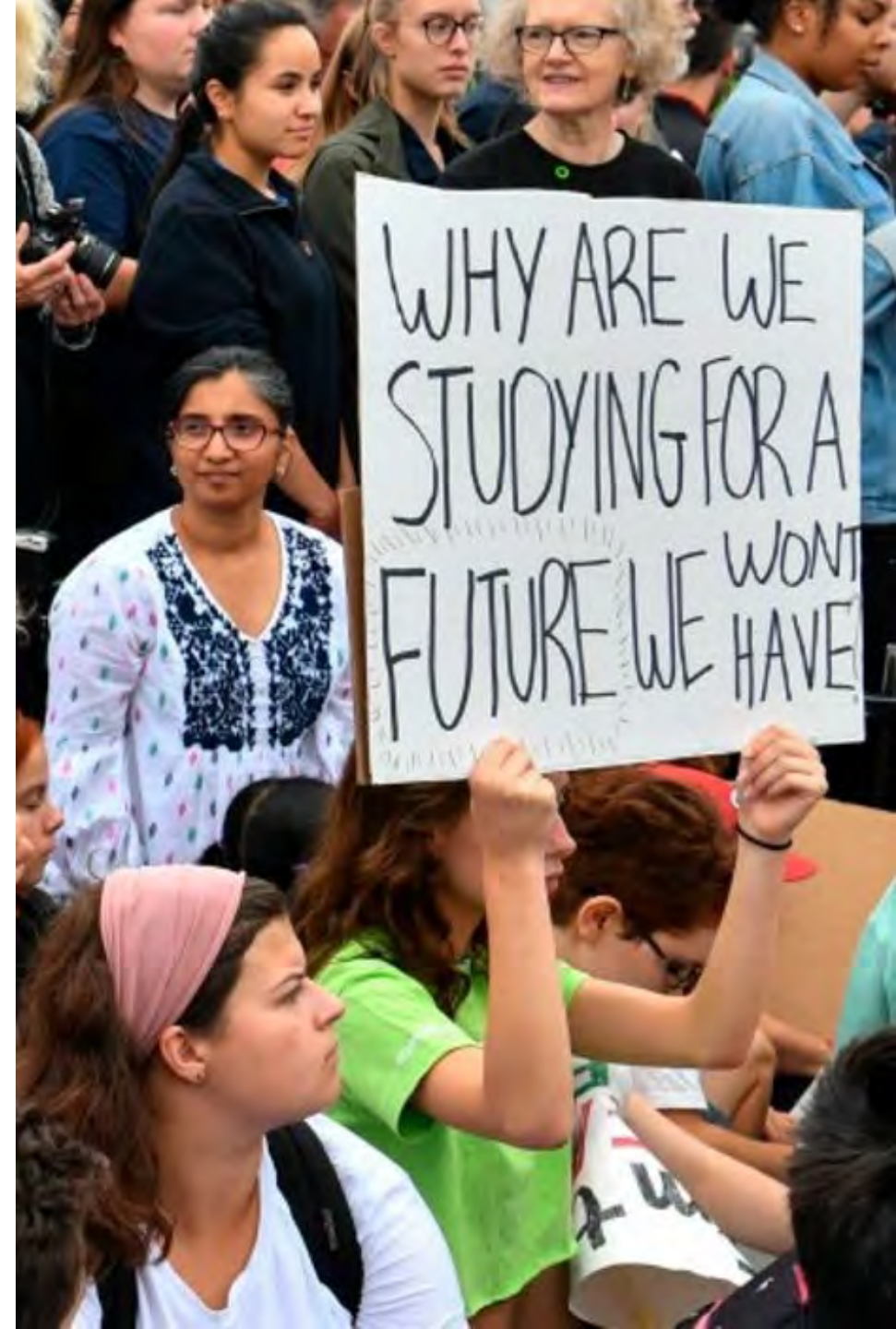
Grow your Handprint

PROCESS MORE THAN YOUR STORMWATER
PRODUCE MORE ENERGY THAN YOU NEED
IMPROVING YOUR SUPPLY CHAIN
PLANT TREES & PERMACULTURE
RESTORE HABITAT
PROVIDE NEIGHBORHOOD RESILIENCE



Why Regeneration?

- Repair damage and make things better
- Focus on community thriving
- More interesting and educational
- Mitigation is not enough!
- Students insist!



TYPICAL MARKET PRACTICE

LEED WORLD

ILFI WORLD

CODE

LEED CERTIFIED

LEED SILVER

LEED GOLD

LEED PLATINUM

LBC CORE

LBC PETAL

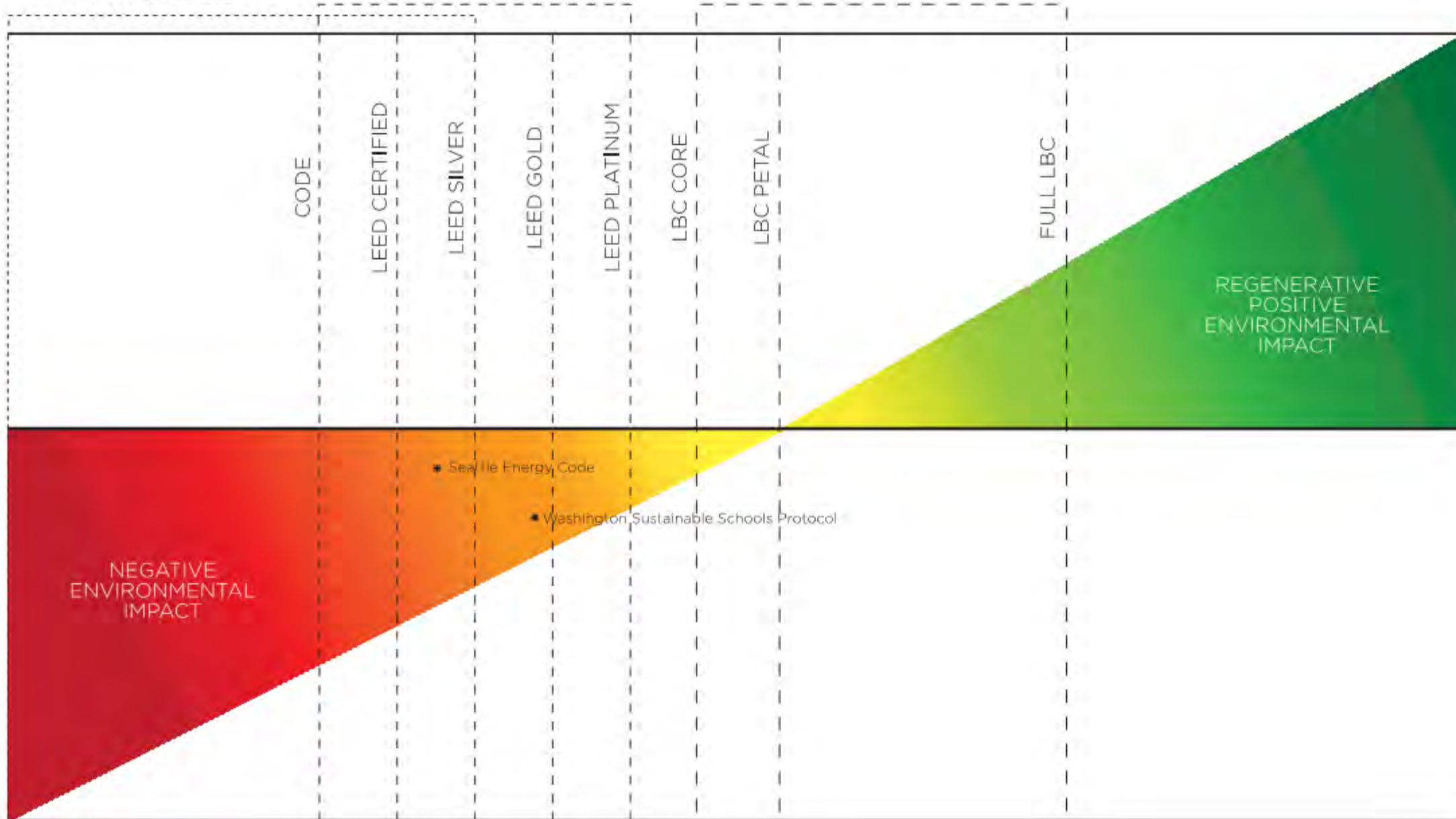
FULL LBC

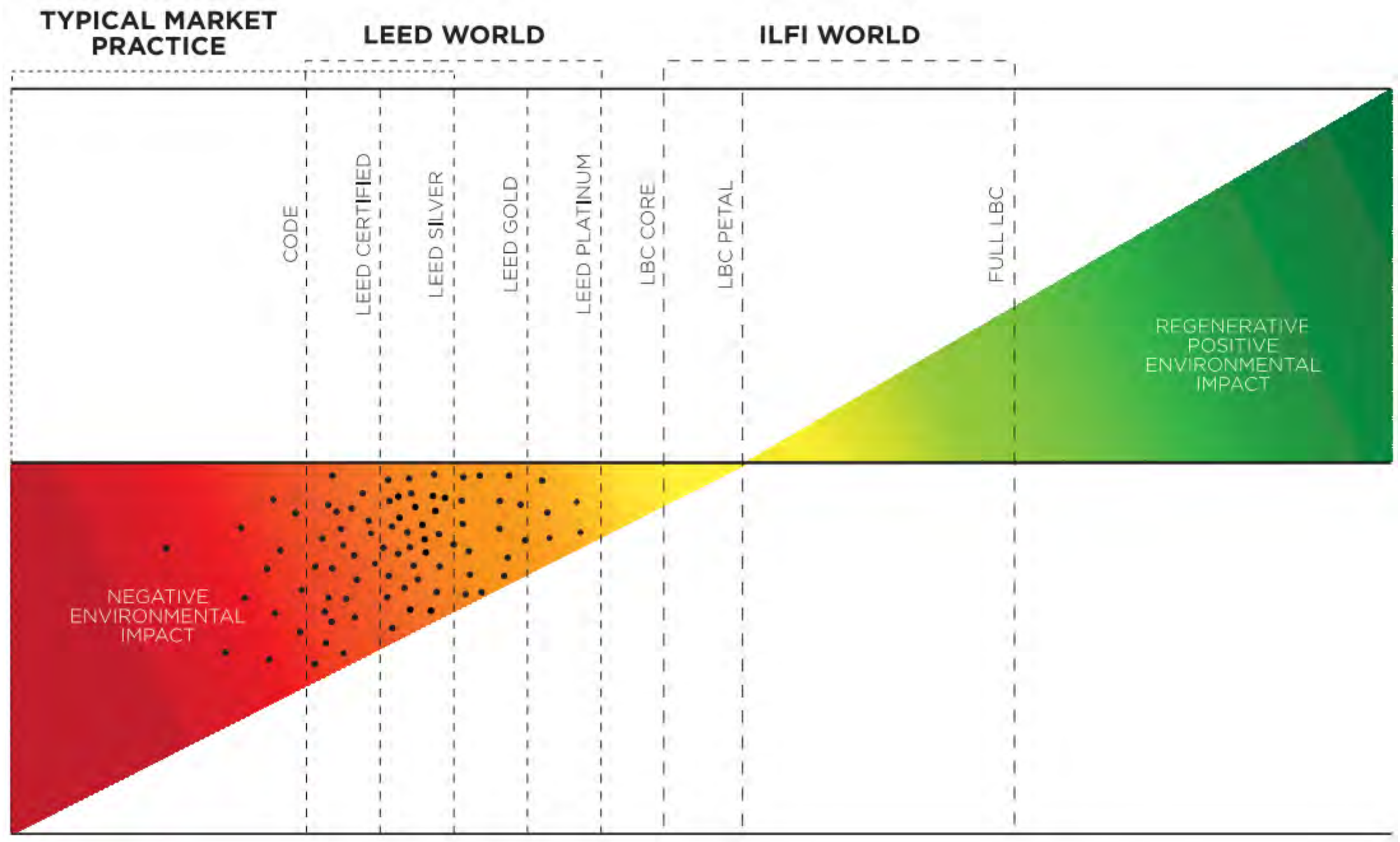
NEGATIVE
ENVIRONMENTAL
IMPACT

• Seattle Energy Code

• Washington Sustainable Schools Protocol

REGENERATIVE
POSITIVE
ENVIRONMENTAL
IMPACT

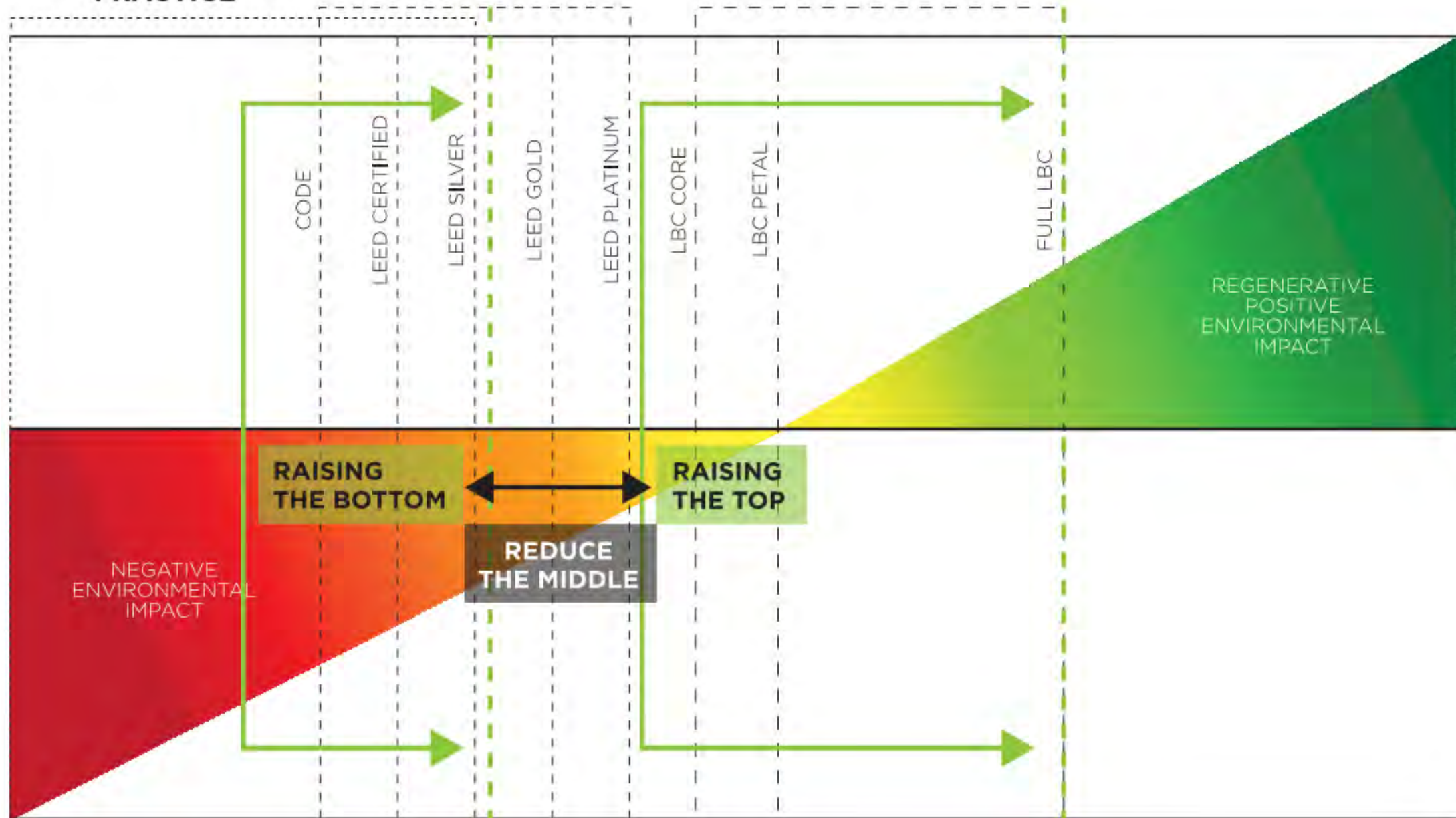


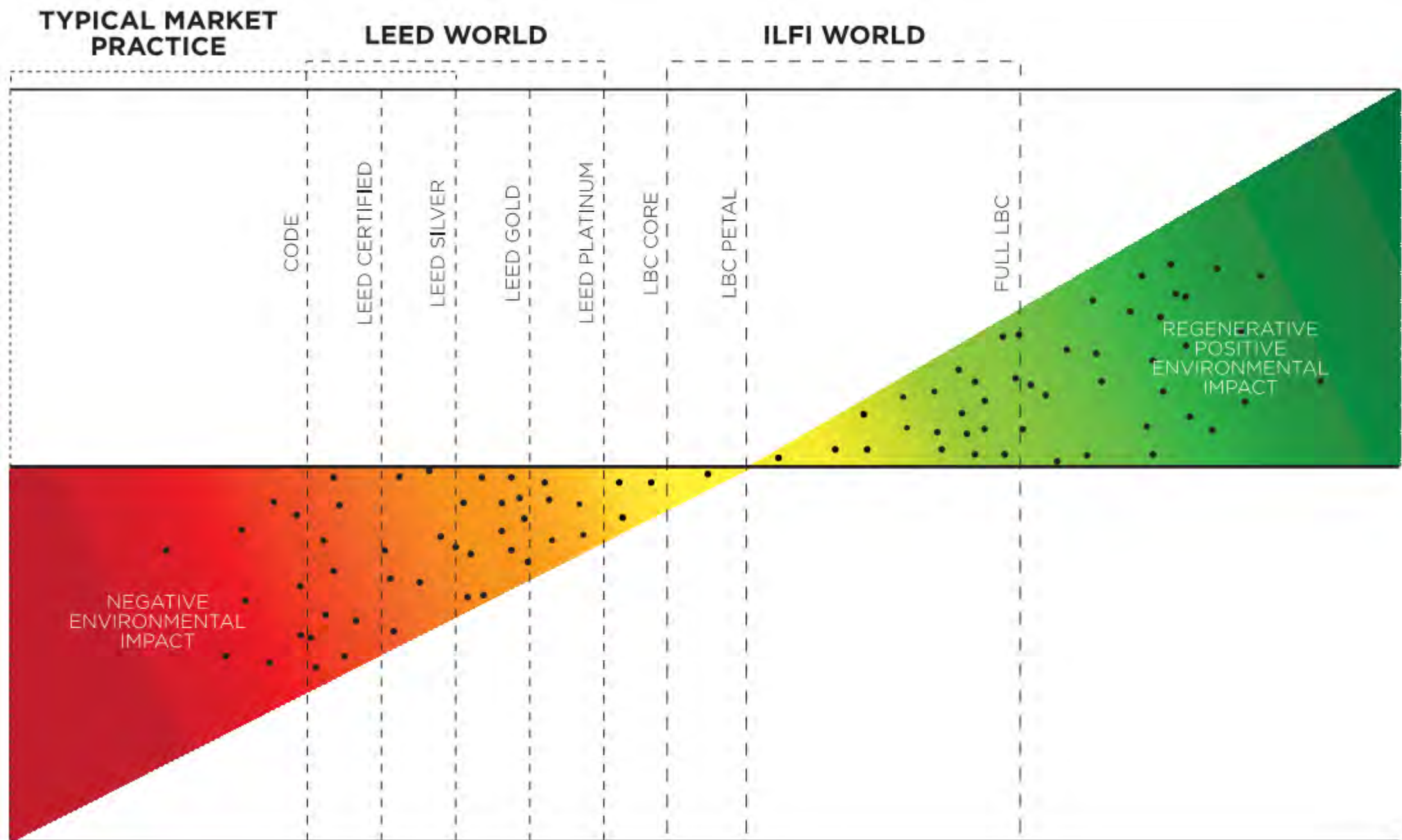


TYPICAL MARKET PRACTICE

LEED WORLD

ILFI WORLD





Overview and Engagement

A photograph of a man and a young boy in a classroom setting. The man, who is Black, is smiling broadly and holding a green cone decorated with white icing stripes and colorful sprinkles. The boy, who is white, is wearing a red sweater and looking down at the cone with interest. In the background, there are educational posters on the wall and other children in red sweaters. The overall atmosphere is warm and engaging.

“The more that you read,
the more things you will
know. The more that you
learn, the more places
you’ll go.” – Dr. Seuss

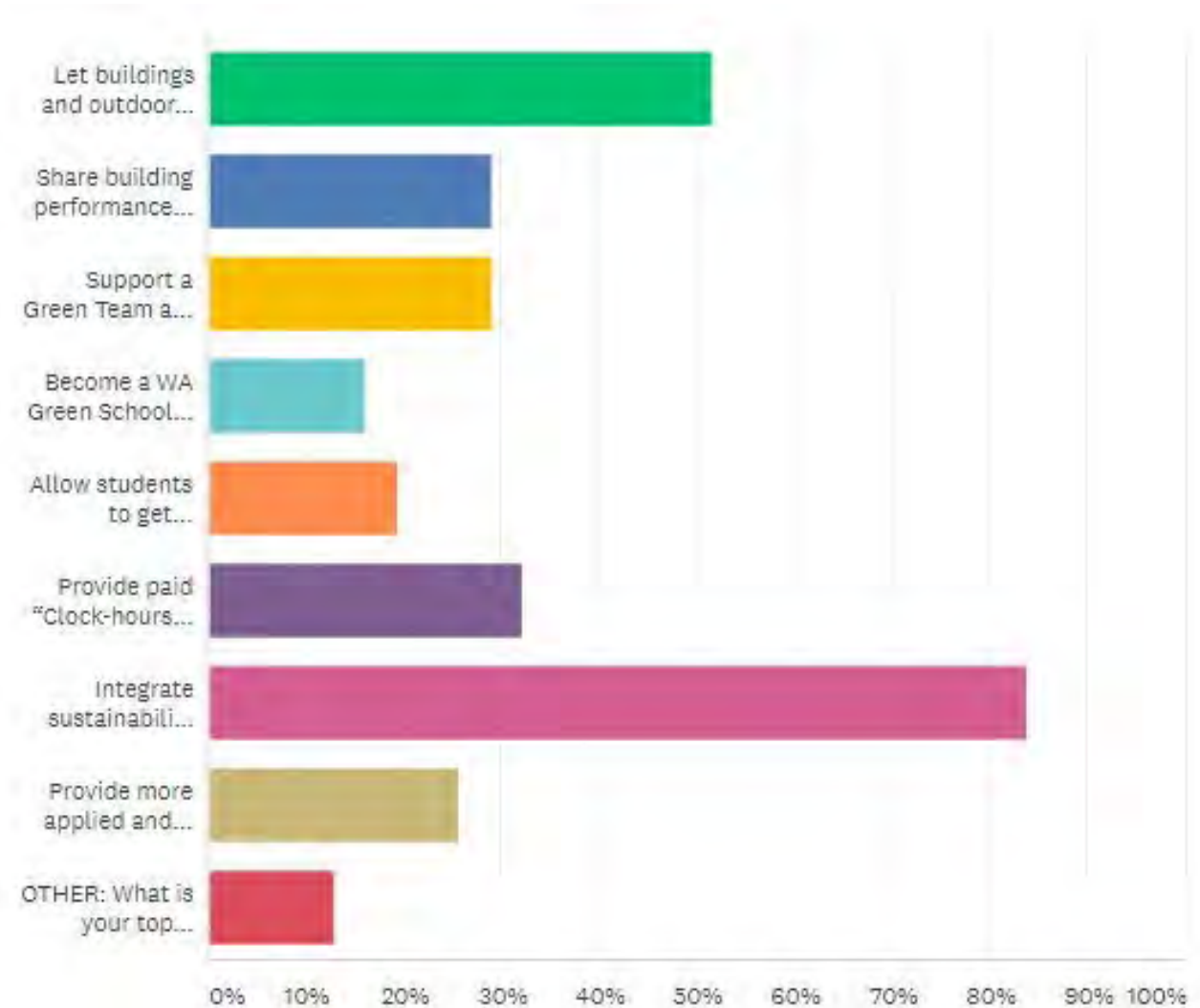
Engagement Focus Categories

- Education Systems
- Equity
- Health + Wellbeing
- Carbon Footprint (Energy, Embodied Carbon and Transportation)
- Water Systems
- Site + Living Systems
- Materials Resources
- Economic Sustainability



Survey Results

1. Integrate sustainability into the curriculum (multi-culturally)
2. Let buildings and outdoor spaces educate about sustainability
3. Provide stipends/ “Clock Hours” for teachers to lead





Educational System

- 1 Integrate sustainability into core curriculum (37)
- 2 Let buildings and outdoor spaces teach (24)
- 3 Provide advanced/applied learning opportunities (16)



Health & Wellbeing

- 1 Provide connections to outdoors (26)
- 2 Provide daylight and fresh air for all (21)
- 3 Provide fresh, healthy culturally diverse meals (17)



Equity

- 1 Target Universalism to benefit all (22)
- 2 Empower a Chief Sustainability Director (20)
- 3 Empower an Environmental Justice Director (20)
- 4 Incorporate sustainability and equity into SDAT (18)



Carbon Footprint

- 1 Prepare a system-wide carbon footprint (31)
- 2 Design with passive systems first (19)
- 3 Be carbon neutral by 2030 (18)
- 4 Demonstrate net-positive carbon on a project (18)



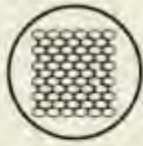
Water Systems

- 1 Reduce water consumptions across the district (22)
- 2 Achieve net-positive water for new construction (22)
- 3 Demonstrate rainwater capture at each school (18)



Site and Living Systems

- 1 Eliminate fossil fuels and petrochemicals from maintenance (26)
- 2 Develop regenerative site practices (24)
- 3 Provide natural areas at all schools (22)



Materials & Resources

- 1 Become a zero-waste district by 2030 (32)
- 2 Eliminate single-use plastics (31)
- 3 Require centralized green purchasing (22)



Economic Sustainability

- 1 Invest in preventative maintenance (37)
- 2 Include human health and carbon in financial decisions (25)
- 3 Invest capital funds in future operational savings and life-cycle cost benefits (22)

Education Garden Design Use
Collaborative Budget Wealth Support Emotional Education Between Internet Possible Understand Teaching
Change Technologies Landscapes Install Tools Habitats Celebrate Indigenous District
Money
Walling Curatorial Conduct Awareness Electric Solar Regenerative Grass Modular Field-trips
Being Growth Audit Equity Forest Enrich Planet Integrate Outdoor Freedom Currently Biophilic
Learn Recycle Programs Based Become Justice Science Over Grow Gotta-get-gardenin Access
Social Array Raise Build Passion Engage Stories Food Effort
Time Plan Make Single Work Triple Treatment Wider Control Love Garden Bus Create Within
Discussion Encourage Solutions Cultivate Fleet Neutrality Eliminate Site Waste
Student system Provide
Water De-pave Net-zero Build Change
Simple Bottom-line Little City Vehicles Inspire Low-Hanging-Fruit Opportunities Forward
Teaching Deep Facets Moving Shrink Nature Share Spaces Environmental Future Living
Biking Care Design Network Public Cisterns Life Environment Expand
Population Support Addressing Culture Develop Emphasis Empower
EV Smart Role Fresh Charging

Observations from Engagement

- Do the Math
- Order of Operations
- Educational Opportunity
- Let's Get Outside
- Equity on our Minds
- Tell our stories
- Ideas in the toolkit

Discovery



“Be the change you wish to see in the world.” – Gandhi

Document Review

- Resolutions and policies
- Case studies
- Sample RFQ's
- Washington Sustainable Schools Protocol 2018
- Standards
- Available performance data
- Green Ribbon Award



Analysis

A blurred photograph of a school hallway and staircase. In the foreground, a staircase with metal railings and a perforated metal fence is visible. Several students are walking down the stairs, some carrying backpacks. In the background, a hallway with orange walls and glass doors is shown. A student is walking through one of the doors, and other students are visible in the hallway. The overall scene is dynamic and captures the movement of students in a school environment.

“That which we persist in doing becomes easier for us to do; not that the nature of the thing itself is changed, but that our power to do is increased.”
-Ralph Waldo Emerson

Leadership – You Have It!

Leadership

- Top Down
- Bottom Up &
- Middle Out

Vision in Three Words:

- Innovation is Key
- Sustainability isn't optional
- These People Care
- Share the Stories
- Passion for Change

“When we can find each other, we are great collaborators”

“I’ve only been here a year, but everyone that I run into seems to be really committed to their work.”

“We have a lot of really smart and talented people, but they are also willing to listen to new ideas and include new voices.”

Exemplary Performance

- The Green Ribbon Award over multiple Years
- 89 out of 100 schools have been retrofitted for energy, water and waste
- Reduced energy by 17.5%
- 10 solar schools
- 64 Washington Green Schools
- Increased recycling by 19.6%
- Learning Gardens in 80% of schools
- Saved \$1.4 Million in waste and energy costs
- 8000 pounds of food diverted from the landfill and shared with the community

Potential Barriers

- Need a Director with authority and focus for sustainability & environmental justice
- Operations budget is disconnected from capital budgets
- Behavior change & education is challenging
- Data is hiding
- Must have a full carbon footprint to be able to prioritize and plan

Synthesis

“Collaboration
allows us to know
more than we are
capable of knowing
ourselves.”
–Paul Solarz



RECOMMENDATIONS



POLICY



STAFFING



EDUCATION



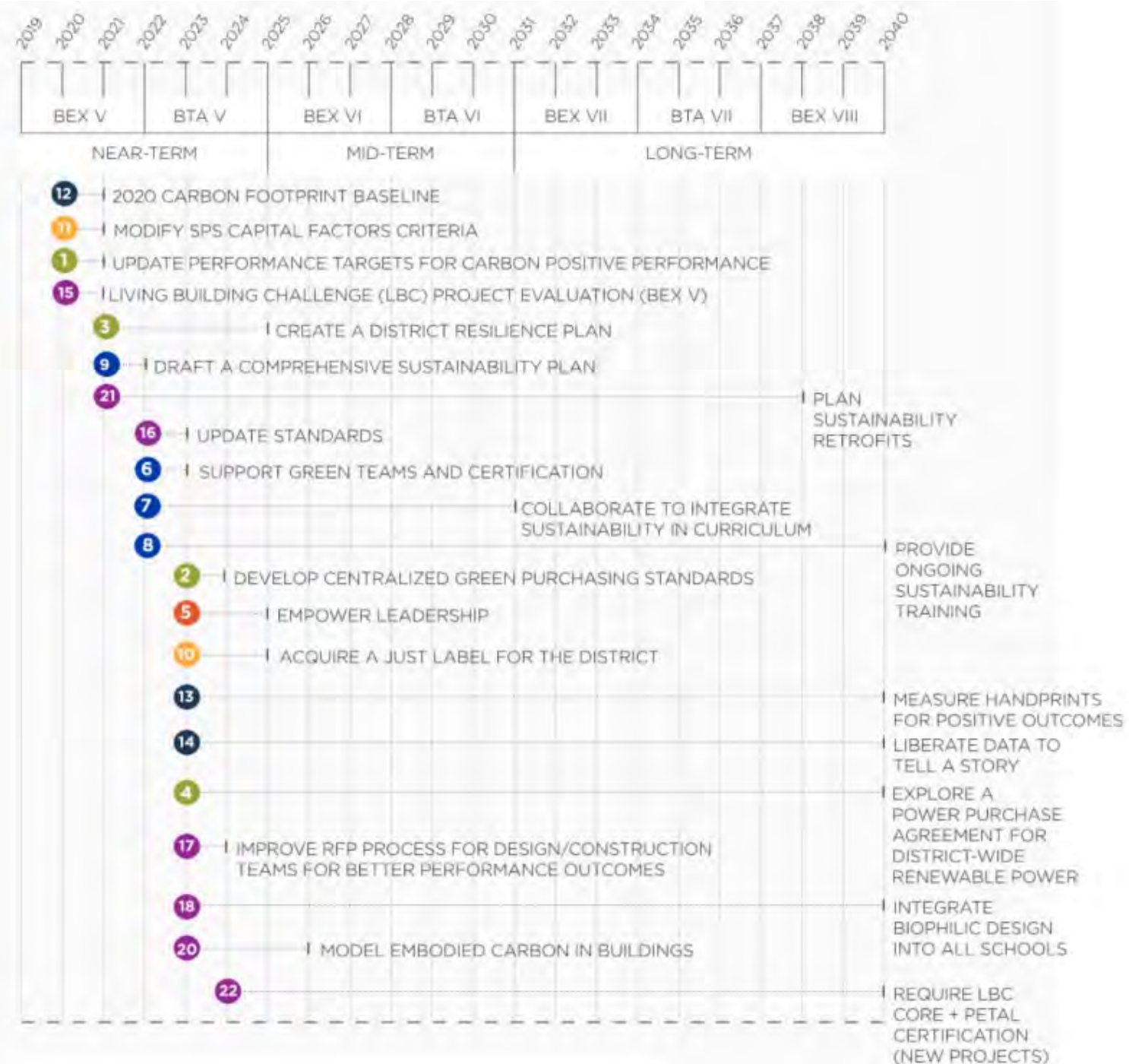
EQUITY



MEASUREMENT



BUILDINGS + SITE



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	4 EXPLORE A PURCHASE AGREEMENT FOR DISTRICT-WIDE RENEWABLE POWER	PG. 52
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Playbook

- Category
- Title
- What – Recommended Goal/Strategy
- Why is this important?
- References
- Resources Needed

5 Staffing



EMPOWER LEADERSHIP

What – Recommended Goals/Strategies:

It is recommended that the District empower two new Chief Director positions:

- Chief Sustainability Director – A position, likely connected to the Resource Conservation Group, that would work across departments to coordinate the many sustainability initiatives. This person would oversee environmental performance and objectives, align policies around the environment to actionable steps, tell the district's stories, manage resilience planning, disseminate information, convene collaborative efforts, report annual progress toward performance targets, and coordinate with Capital Projects and Planning, Food Services, Transportation and DREA to ensure that the benefits of sustainability are distributed to all students and communities.
- Chief Environmental Justice Director – A position, likely connected to DREA, that would work across departments and in collaboration with the Chief Sustainability Director to ensure that sustainability and equity are broadly held and equitably distributed across the school district – targeted first in schools that have been furthest from environmental justice knowing that improvements in the conditions in these schools will have a ripple effect benefiting the entire district. This person will work to ensure that the benefits of sustainability are tied to equity initiatives and distributed to all students and communities.
- Both the CSD & CEJD could add to the diversity of the School Design Advisory Committee to ensure that both sustainability and equity are included in school design decisions from the beginning of the planning process.

Why:

To empower the champions for sustainability and environmental justice to have the authority to convene staff across departments, these positions would assist the current directors who are currently shouldering the leadership burden in these areas. These positions would be able to build in accountability and report progress to the board. These positions would become champions, mentors, and storytellers within the district and provide institutional memory and leadership for significant changes as outlined in this report. For initiatives that are currently languishing because champions are spread too thin, it would lend extra hands and focus to those programs. These leaders can work with Curriculum and Capital Projects teams to support the integration of sustainability and environmental justice into the physical and curricular infrastructure of the district.

References:

- The Resource Conservation team acquired sample job descriptions from peer schools in San Francisco and Portland through their sustainability directors' network. They can share lessons learned from other districts.

Resources Needed:

- Salaries and benefits for two positions at the Director Level

Policy





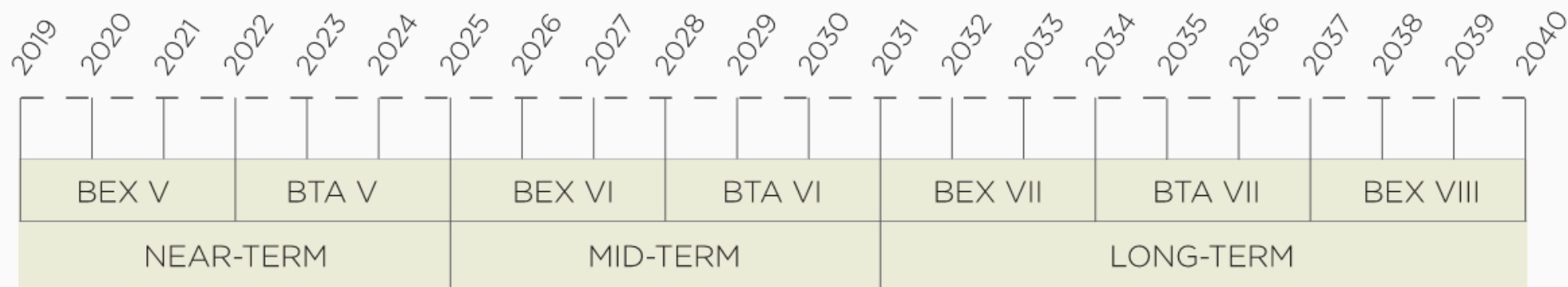
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- Carbon Positive Targets
- Green Purchasing
- District Resilience Plan
- PPA for Renewables



Policy Recommendations in Time



- ①.....| UPDATE PERFORMANCE TARGETS FOR CARBON POSITIVE PERFORMANCE
- ②.....| DEVELOP CENTRALIZED GREEN PURCHASING STANDARDS
- ③.....| CREATE A DISTRICT RESILIENCE PLAN
- ④.....| EXPLORE A POWER PURCHASE AGREEMENT FOR DISTRICT-WIDE RENEWABLE POWER

Staffing

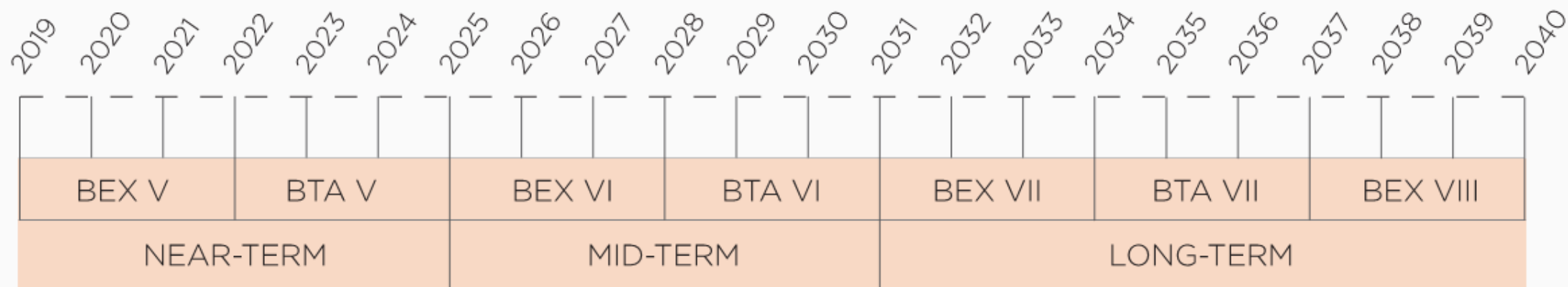




- **A Director of Sustainability**
- **A Director of Environmental Justice**
- **With focus, authority and accountability**




Staffing Recommendations in Time



⑤.....| EMPOWER LEADERSHIP

Education

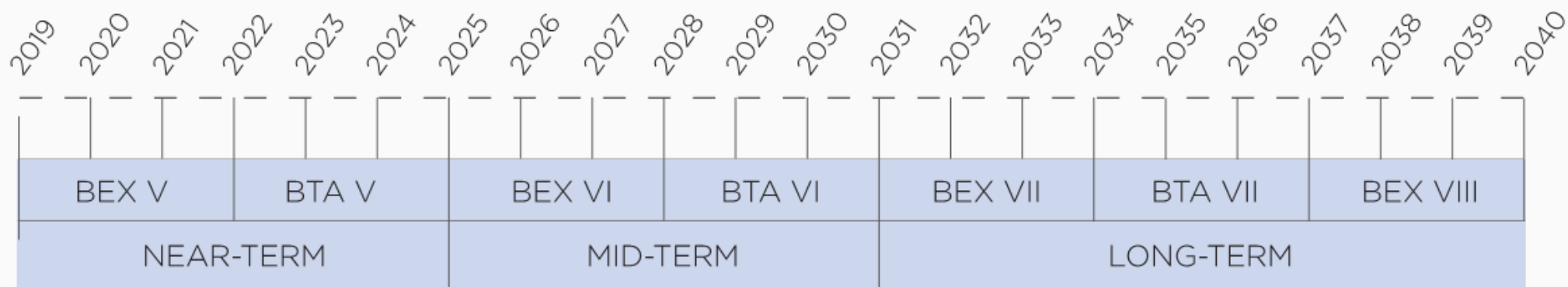


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- **Support the Green Teams already in place**
- **Collaborate with the Curriculum Advisors**
- **Ongoing training**
- **Comprehensive Sustainability Plan**



Education Recommendations in Time



⑥. | SUPPORT GREEN TEAMS AND CERTIFICATION

⑦. | COLLABORATE TO INTEGRATE SUSTAINABILITY IN CURRICULUM

⑧. | PROVIDE ONGOING SUSTAINABILITY TRAINING

⑨. | DRAFT A COMPREHENSIVE SUSTAINABILITY PLAN

Equity





Equity

10 ACQUIRE A JUST LABEL FOR THE DISTRICT

PG. 67

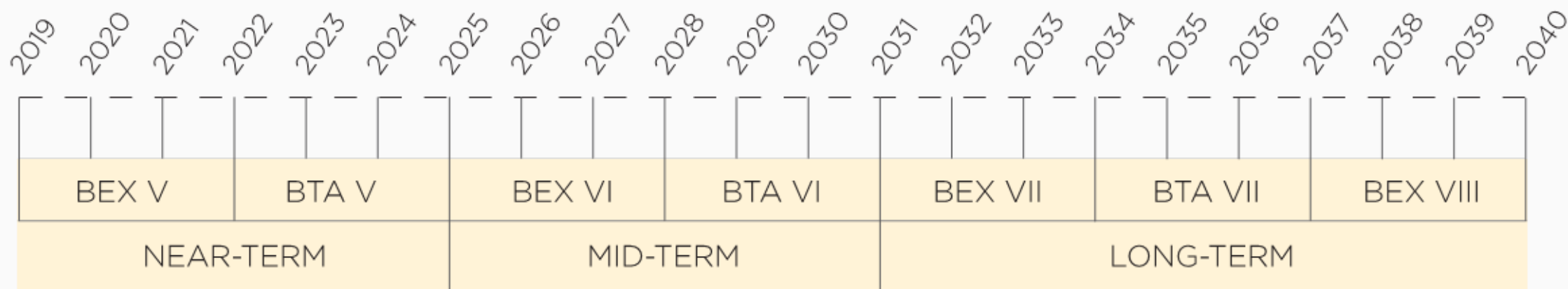
11 MODIFY SPS CAPITAL FACTORS CRITERIA

PG. 69

- **JUST Label for the District**
- **Modify the existing Capital Factors Criteria**



Equity Recommendations in Time



⑩.....| ACQUIRE A JUST LABEL FOR THE

⑪.....| MODIFY SPS CAPITAL FACTORS CRITERIA

Measurement





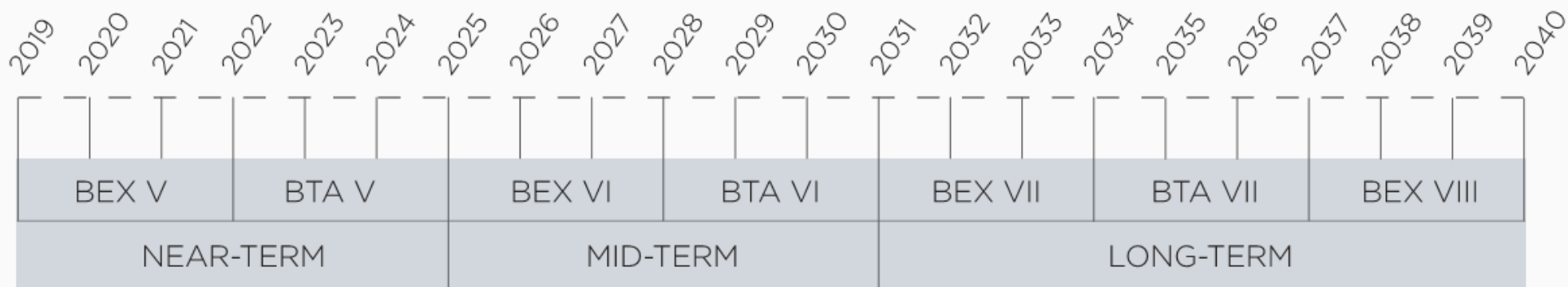
Measurement

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14	LIBERATE DATA TO TELL A STORY	PG. 78

- Carbon baseline footprint for 2020
- Measures handprints and share positive outcomes
- Liberate data – tell stories!



Measurement Recommendations in Time



⑫.....| 2020 CARBON FOOTPRINT BASELINE

⑬.....| MEASURE
HANDPRINTS
FOR POSITIVE
OUTCOMES

⑭.....| LIBERATE DATA TO
TELL A STORY

Building + Site



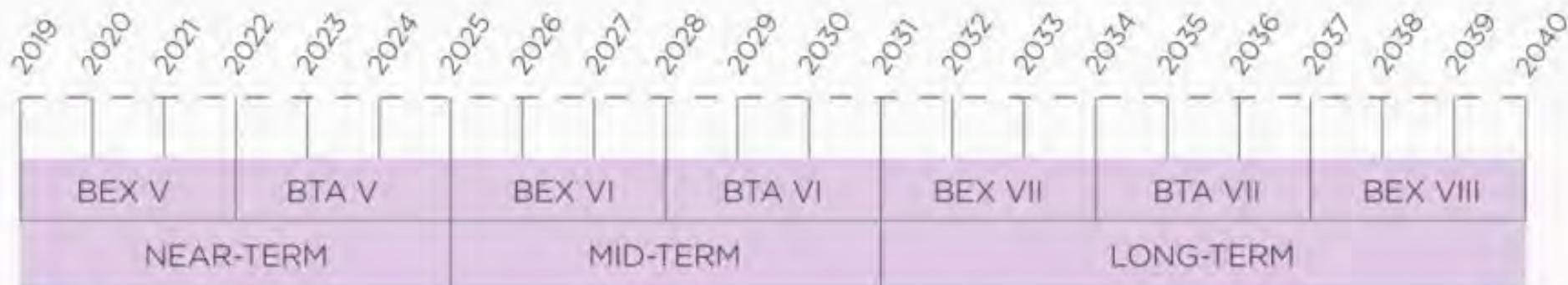


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Buildings + Site Recommendations in Time



15. — | LIVING BUILDING CHALLENGE (LBC) PROJECT EVALUATION (BEX V)

16. — | UPDATE STANDARDS

17. — | IMPROVE RFP PROCESS FOR DESIGN/CONSTRUCTION TEAMS FOR BETTER PERFORMANCE OUTCOMES

18. — | INTEGRATE BIOPHILIC DESIGN INTO ALL SCHOOLS

19. — | COMBINE STORMWATER RETROFITS WITH LIVING SCHOOL YARDS

20. — | MODEL EMBODIED CARBON IN BUILDINGS

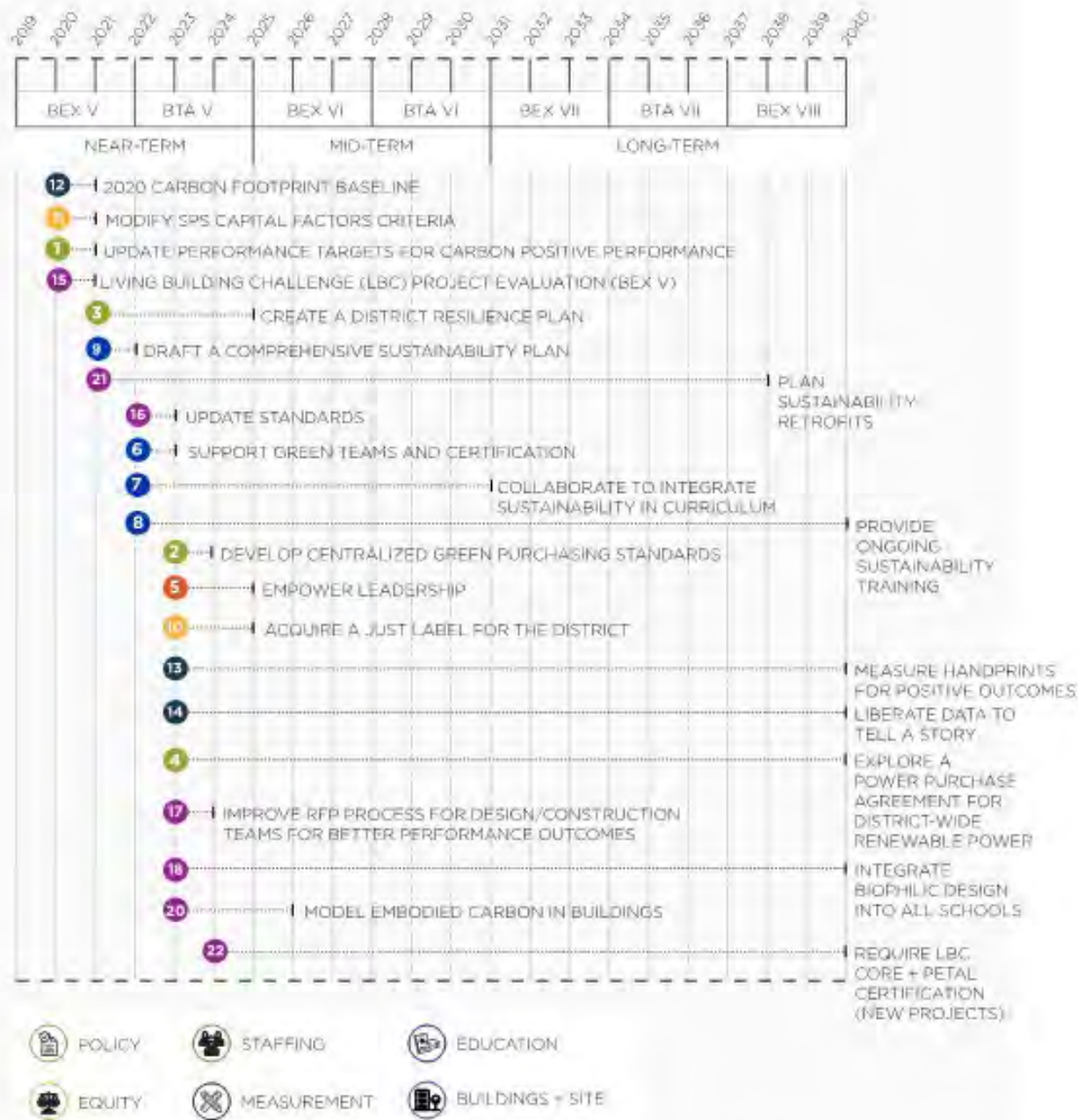
21. — | PLAN SUSTAINABILITY RETROFITS

22. — | REQUIRE LBC CORE + PETAL CERTIFICATION (NEW PROJECTS)

Next Steps

A woman with short blonde hair, wearing a white lace top with pink floral patterns, is smiling and looking to her left. She is in a library or bookstore, with bookshelves filled with books in the background. The lighting is warm and natural.

“It’s not from ourselves that we learn to be better than we are.” –Wendell Berry



Order of Operations:

- Baseline Calculations
- BEX V Evaluations
- BTA V Planning
- Start Comp. Planning
- Update Standards
- Cont. Staff Education
- Empower Leadership
- Implement Targets
- Keep Measuring
- Celebrate as you go!



Thank you!