High-performance buildings - Identifying Gaps

In order to enable and incentivize the construction and occupancy of more high-performance buildings, we need to account for all the forces acting in the market.

At minimum, we need the appropriate technology and procedures as well as the workmanship that would, together, result in increased performance. Our assessment of performance should account for both energy-efficiency as well as durability. If we had to rip out high-performing buildings every 10 years and build new ones, it would be counterproductive. Durability is characterized by longevity, serviceability and long-term suitability.

For example, a window replacement that requires destruction of the building envelope or structural framing is less serviceable than a window replacement that can be done with no disruption to other key building elements. Similarly, a focus on single-family homes in an urban environment that aims to increase high-density housing would be less suitable to long-term urban planning.

For us to get closer to our goals, we need to account for all the different pieces of the puzzle in a systemic manner. Existing gaps can better be identified this way.

One immediate concern is the patchwork of information out there which are disaggregated and scattered. Would we benefit from an effort to aggregate and centralize best practices?

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$ Workmanship

$ New & improved material/tech

New & improved procedures

Serviceability

Suitability

Durability

Energy efficiency

Policy, regulation and requirements

Centralized (or aggregated) repository for all relevant information/applications/forms/codes/standards

HIGH PERFORMANCE BUILDINGS

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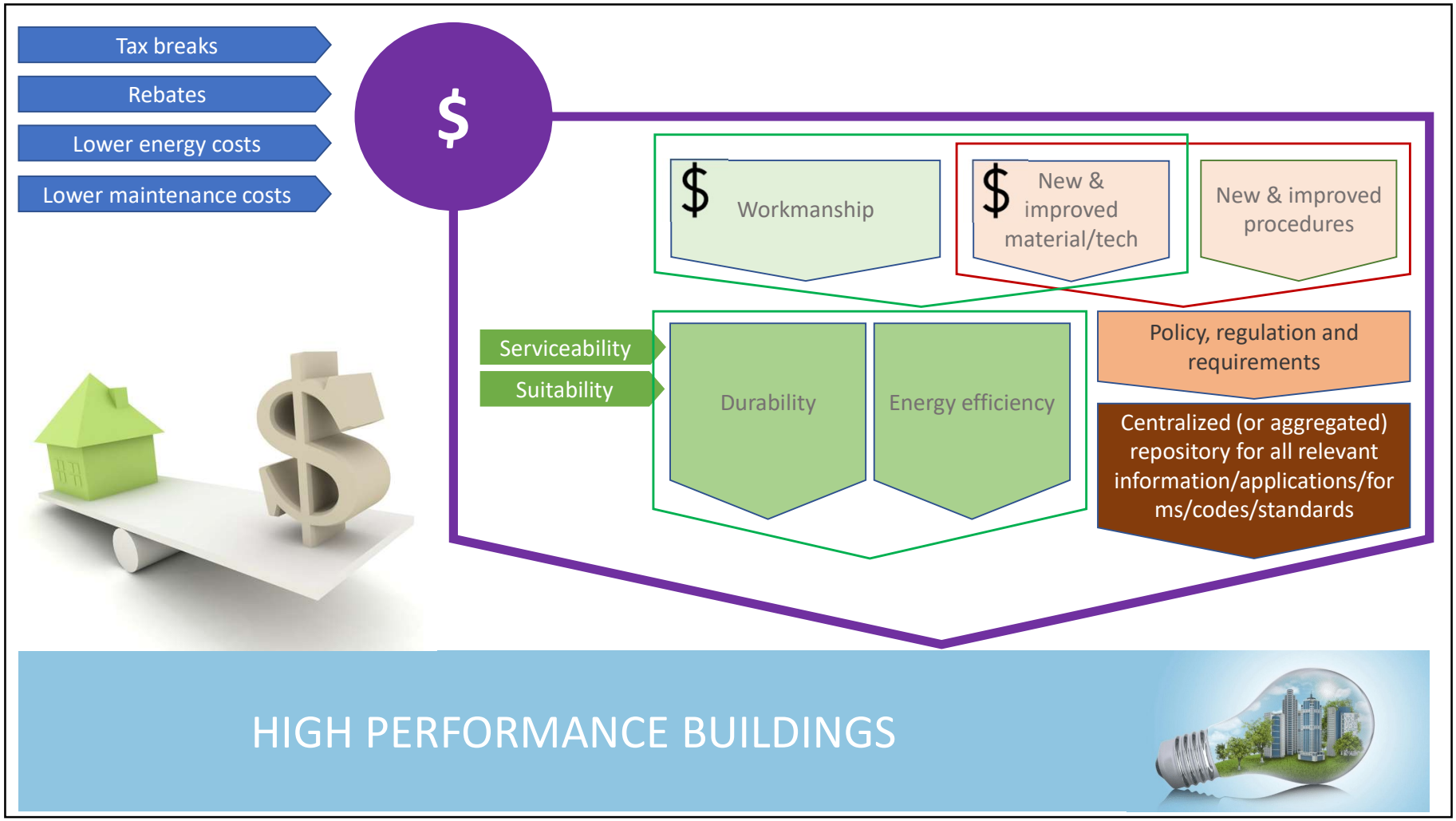
Tax breaks
Rebates
Lower energy costs
Lower maintenance costs
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$ Workmanship
$ New & improved material/tech
New & improved procedures
Serviceability
Suitability
Durability
Energy efficiency
Policy, regulation and requirements
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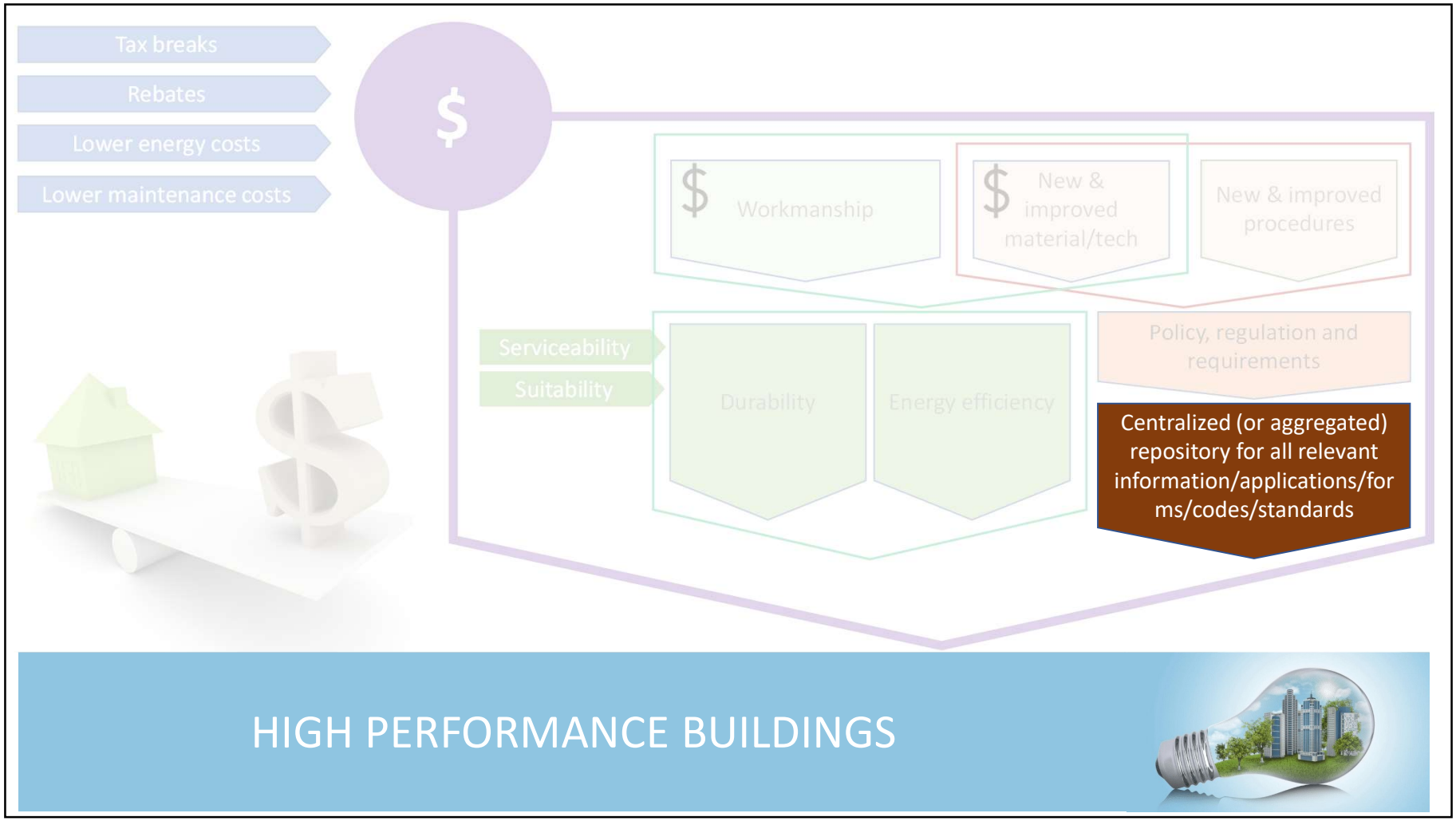
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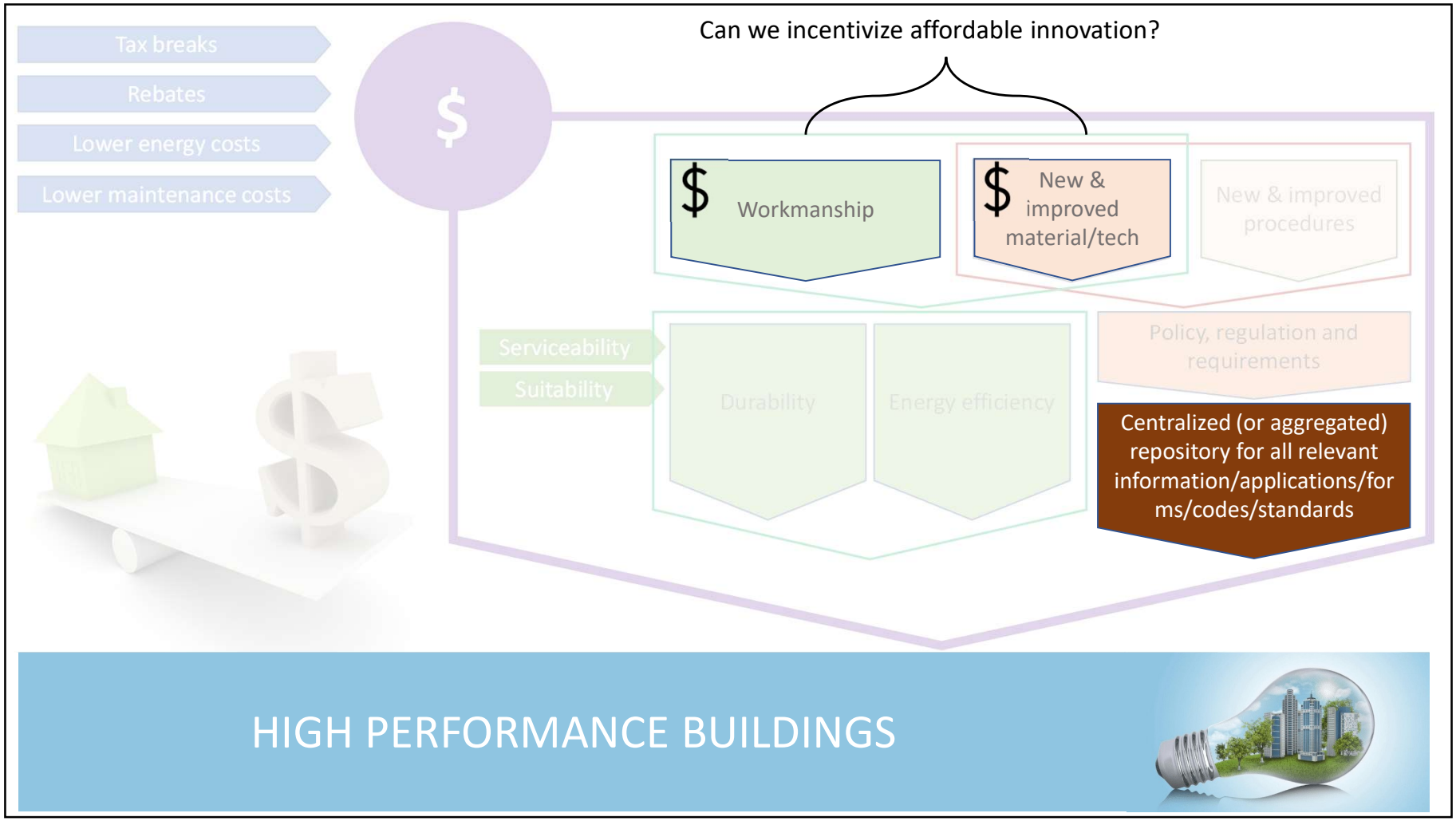
Tax breaks
Rebates
Lower energy costs
Lower maintenance costs
$
Can we incentivize affordable innovation?
$ Workmanship
$ New & improved material/tech
New & improved procedures
Serviceability
Suitability
Durability
Energy efficiency
Policy, regulation and requirements
Centralized (or aggregated) repository for all relevant information/applications/forms/codes/standards
HIGH PERFORMANCE BUILDINGS