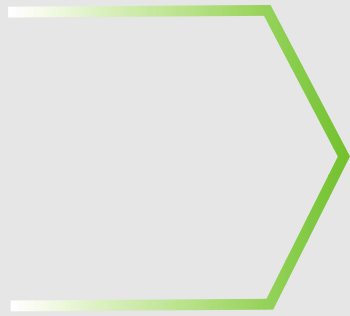


**THE COMPOSITES INDUSTRY**

**MEETS THE**

**INFLATION REDUCTION ACT**



## **Inflation Reduction Act of 2022**

SEC. 60503. USE OF LOW-CARBON MATERIALS. (a) APPROPRIATION.—...there is appropriated ... \$2,150,000,000 ... to acquire and install materials and products for use in the construction or alteration of buildings under the jurisdiction, custody, and control of the General Services Administration that have substantially lower levels of embodied greenhouse gas emissions associated with all relevant stages of production, use, and disposal as compared to estimated industry averages of similar materials or products, as determined by the Administrator of the Environmental Protection Agency.



## **Inflation Reduction Act of 2022**

SEC. 60506. LOW-CARBON TRANSPORTATION MATERIALS GRANTS. ...there is appropriated... \$2,000,000,000 ... to the Administrator [of the FHWA] to reimburse or provide incentives to eligible recipients for the use, in projects, of construction materials and products that have substantially lower levels of embodied greenhouse gas emissions associated with all relevant stages of production, use, and disposal as compared to estimated industry averages of similar materials or products, as determined by the Administrator of the Environmental Protection Agency...

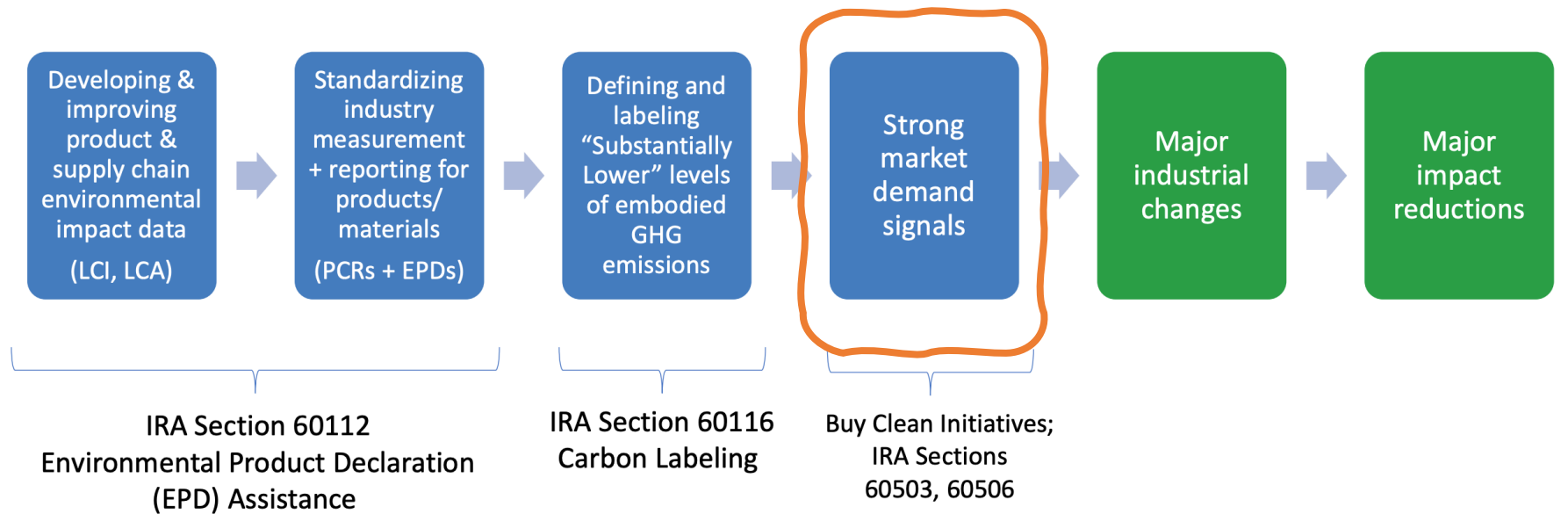


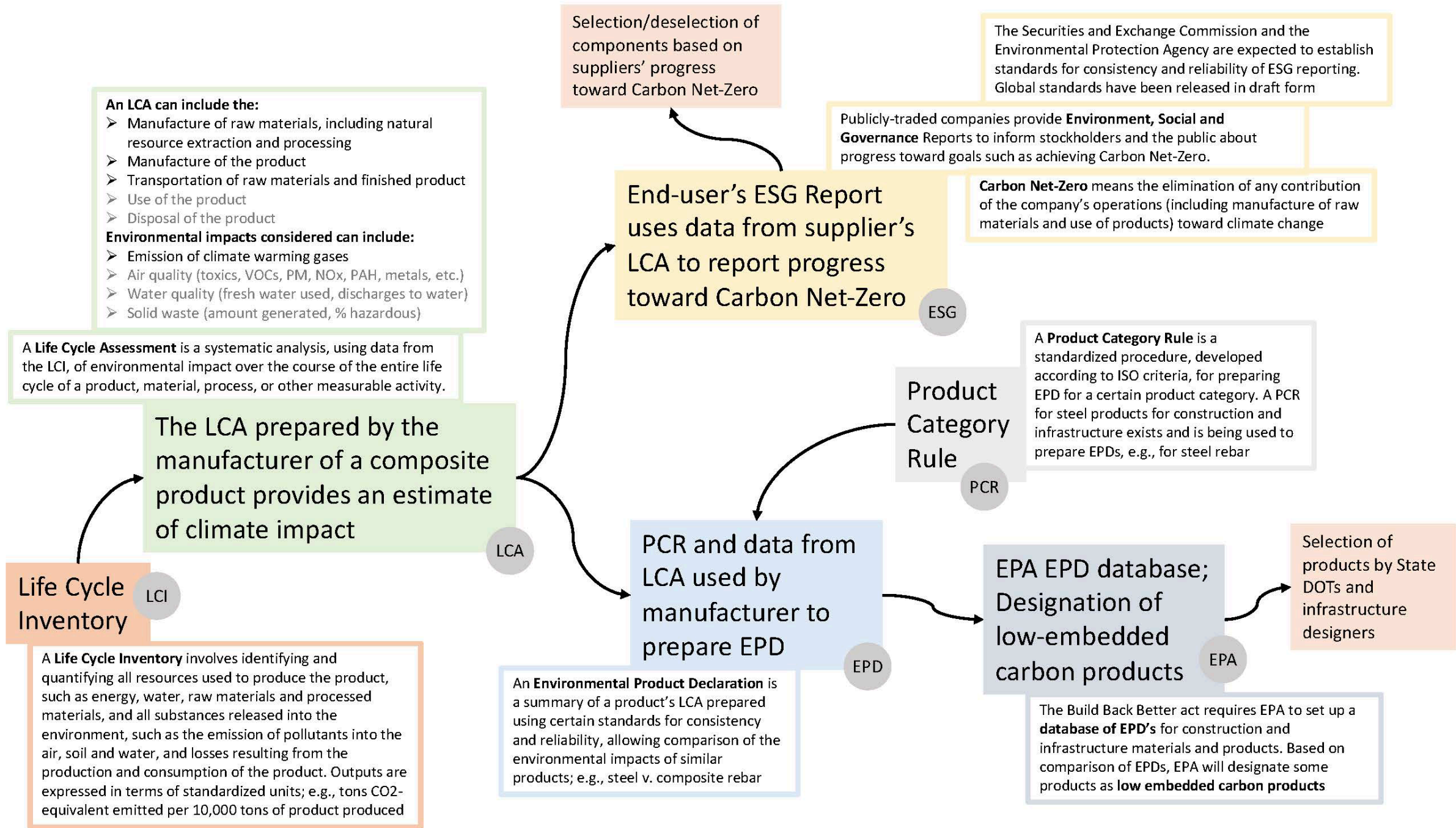
## **Inflation Reduction Act of 2022**

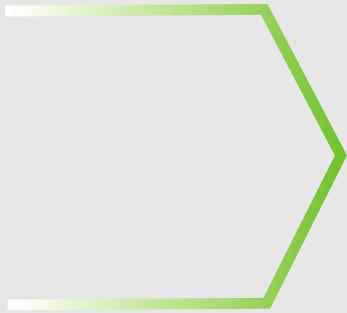
Under Sects. 60112 and 60116, EPA is appropriated \$350,000,000 to establish programs under which Environmental Product Declarations and EPA-awarded product labels are used to communicate, for products eligible for funds under Sects. 60503 and 60506, the levels of embodied greenhouse gas emissions associated with all relevant stages of production, use, and disposal, as compared to estimated industry averages of similar materials or products.



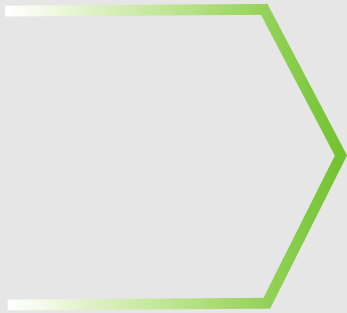
# High-Level Theory of Change





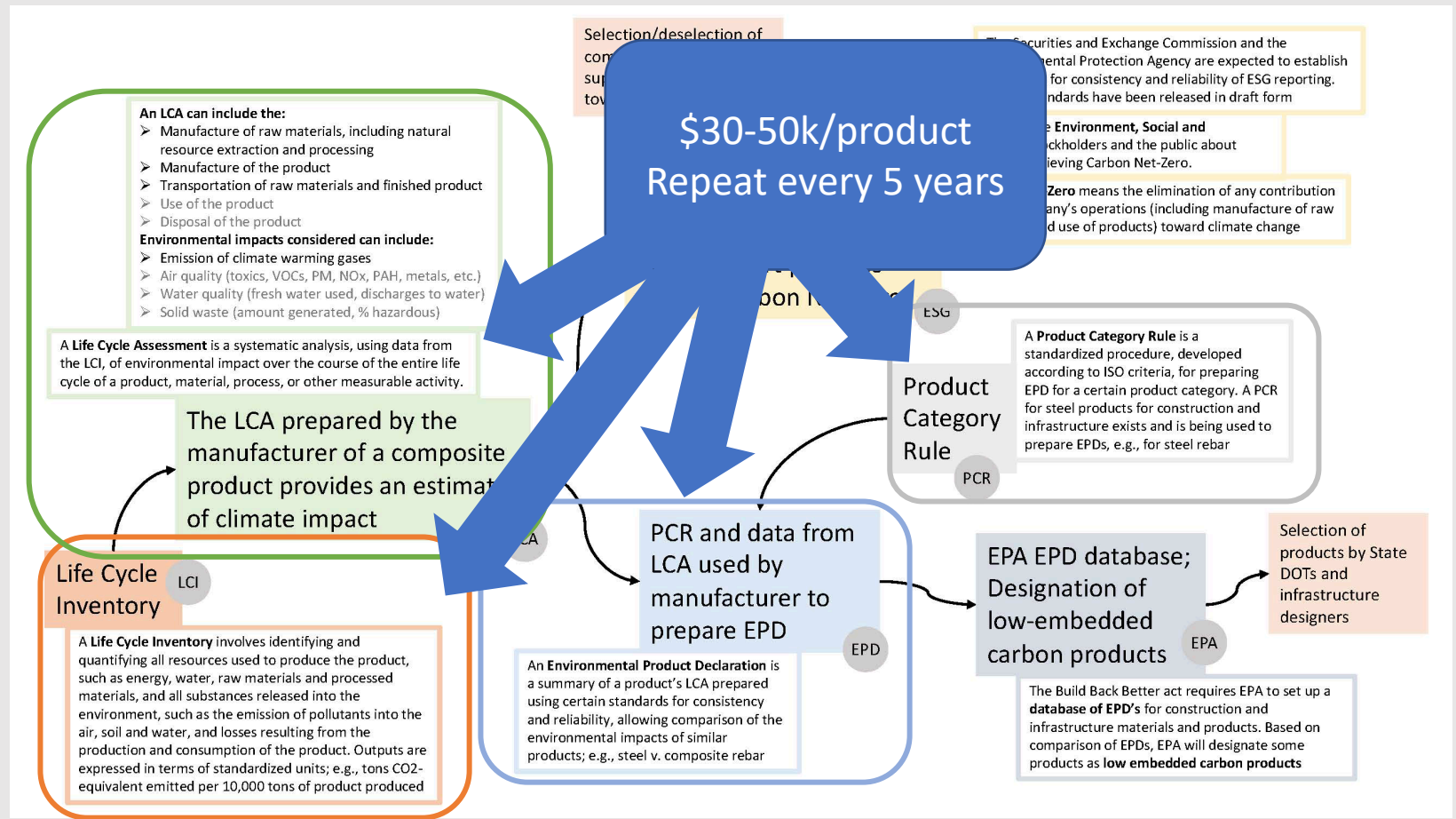


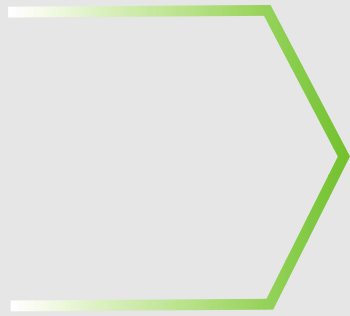
Construction works assessment information															
Construction works life cycle information within the system boundary											Optional supplementary information beyond the system boundary				
A1 - A3 PRODUCTION Stage <i>(Mandatory)</i>			A4 -A5 CONSTRUCTION Stage		B1 - B7 USE Stage					C1 - C4 END-OF-LIFE Stage				D	
A1	A2	A3	A4	A5	B1	B2	B3	B4 <sup>a</sup>	B5	C1	C2	C3	C4		
Extraction and upstream production	Transport to factory	Manufacturing	Transport to site	Installation	Use	Maintenance (incl. production, transport and disposal of necessary materials)	Repair (incl. production, transport and disposal of necessary materials)	Replacement (incl. production, transport and disposal of necessary materials)	Refurbishment (incl. production, transport and disposal of necessary materials)	De-construction / Demolition	Transport to waste processing or disposal	Waste processing	Disposal of waste	Potential net benefits from reuse, recycling and/or energy recovery beyond the system boundary	
			<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>	<i>Scenario</i>		<i>Scenario</i>
					B6 Operational energy use										
					B7 Operational water use										
					<i>Scenario</i>										



<b>Materials</b>	<b>Manufacturing processes</b>	<b>Construction &amp; infrastructure products</b>	
<b>Fiber</b> <ul style="list-style-type: none"><li>- Glass</li><li>- Carbon</li><li>- Basalt</li><li>- Aramid</li></ul>	Open molding	Tanks	Drainage channels
	Filament winding	Pipe	Siding
	Pultrusion	Rebar	Columns
<b>Resin</b> <ul style="list-style-type: none"><li>- Vinyl ester</li><li>- Epoxy</li><li>- Polyurethane</li><li>- Unsaturated polyester</li><li>- Thermoplastic</li></ul>	RTM, Infusion	Panels	Piles
		Girders	Poles
	Casting – in-place or fabricated	External concrete strengthening	Utility poles & crossarms
		Grating	ADA tiles (crosswalks)
<b>Fillers</b> <ul style="list-style-type: none"><li>- ATH</li><li>- Calcium sulfate</li><li>- Calcium carbonate</li><li>- Sand</li><li>- Talc</li></ul>	Compression molding	Utility vaults	Railings
		Bridge decks	Concrete forms
	Continuous panel	Fascia/Cladding	
		Manhole covers	
		Cured in place pipe	







ACMA will –

- Acquire the capability to help composites manufacturers prepare LCAs and EPDs
- Identify the best functional units for comparison with other materials
- Communicate effectively with material specifiers and policymakers regarding the use-phase benefits of composite products
- Advocate that funds available under the IRA be awarded based on comparative full lifecycle assessment
- Advocate in favor of a small-business friendly approach to developing EPDs
- Advocate that EPA provide ACMA with grants to fund our EPD programs