

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

Green Building Advisory Council

Meeting Date: October 19, 2016

Meeting Location: DOEE, 1200 1st Street NE

Attendees: Anna Shapiro (DMPED), Carl Reveerts (EPA-retired), Marshall Duer-Balkind (DOEE), Edward Yim (DOEE), Kate Johnson (DOEE), Jay Wilson (DOEE), Akmet (DC BID) Scott Pomeroy (DC BID), MaryLynn Wilhere (DOEE), Bill Updike (DOEE), Molly Simpson (DOEE), Jess Zimbabwe (DDOT), Eugenia Gregorio (Tower Companies), Stephen Gyor (OP), Nkosi Bradley (DCHFA), Zach Dobelbower (DGS), Anica Landreneau (HOK)

Introductions – All

Main Points/Discussion:

Comprehensive Energy Plan Presentation – Marshall Duer-Balkind (*See attached PDF*)

Comprehensive Energy Plan Discussion –Edward Yim & Group

- CEP is a short term energy plan and serves as our Climate Action Plan
- Provides a clear roadmap for reducing GHG emissions 50% by 2032
- Frames buildings, energy systems & transit in context of Sustainable DC targets
- Pragmatic and visionary at the same time

Climate Ready DC Update- Kate Johnson

Smarter DC Challenge Update – Mary Lynn Wilhere

- Smarter DC Challenge Feedback & Discussion
 - Lunchtime web-ex instead of ongoing programing
 - Updating case studies
 - Pick a focus area or a sector, instead of focusing building wide
 - Facilitate space for focus groups and events to share resources

Roundtable Updates

Edward Kim:

- Discussion on Pepco substation project. DOEE staff providing feedback on proposal.
- Opportunities to link electric vehicle to parking restrictions
- Universal zone sticker for EV

Kate Johnson

- Climate Ready DC has been released
- Updates on coordinating with 100 Resilient Cities Initiative

Steve Gyor – DCOP has launched outreach for the Comprehensive Plan meeting. They will be amending the Resilience, Infrastructure and Environmental Protection elements

Anica Landreneau

- Pharmaceutical Company in Gaithersburg is constructing a net zero building and reducing energy use of their existing, campus wide net zero plan. Partnership with AIA Design and Health research consortium. Friday in Atlanta and university in FL. Signed an MOU with Delos well-ready core and shell.
- Request for follow up on Net Zero Energy home financials: US EcoLogic

Anna Shapiro – DMPED Launching [Economic Strategy](#) for the city, Tuesday morning

Jay Wilson– USGBC is hosting an NCR event

Marshall Duer-Balkind– Benchmarking Map Overview

Alexis Goggans– Currently finalizing the 2013 Green Building Report and working to re-imagine a new Green Building Report that is more user friendly. Will work with GBAC to integrate Work Plan into 2014 report.

IMT (retailer owners/tenant)

- Landlord/tenant partnership pursuing green leasing, etc. Ongoing engagement with retail office and industrial tenant board.
- ICC is having a meeting, IECC. Standard Bearer's award.

Jess Zimbabwe– NLC/ULI Rose Fellowship, land use and affordable housing. DC will be in cohort. Alexandria, Fairfax and Montgomery County

Molly Simpson:

- Upcoming Behavior, Energy & Climate Change Conference (BECC)
- Single Family Small Multifamily Working Group complete
- POWER DOWN DC Toolkits on the website
- DC HFA Meetings
- NRDC Study - Uber/Lyft – reach out to Shelley Poticha

Anna Shapiro – No updates on Poplar Point

Date for next meeting: December 7th, 2016

Location for next meeting: DOEE, 1200 1st Street NE, 5th Floor

Contact: william.updike@dc.gov



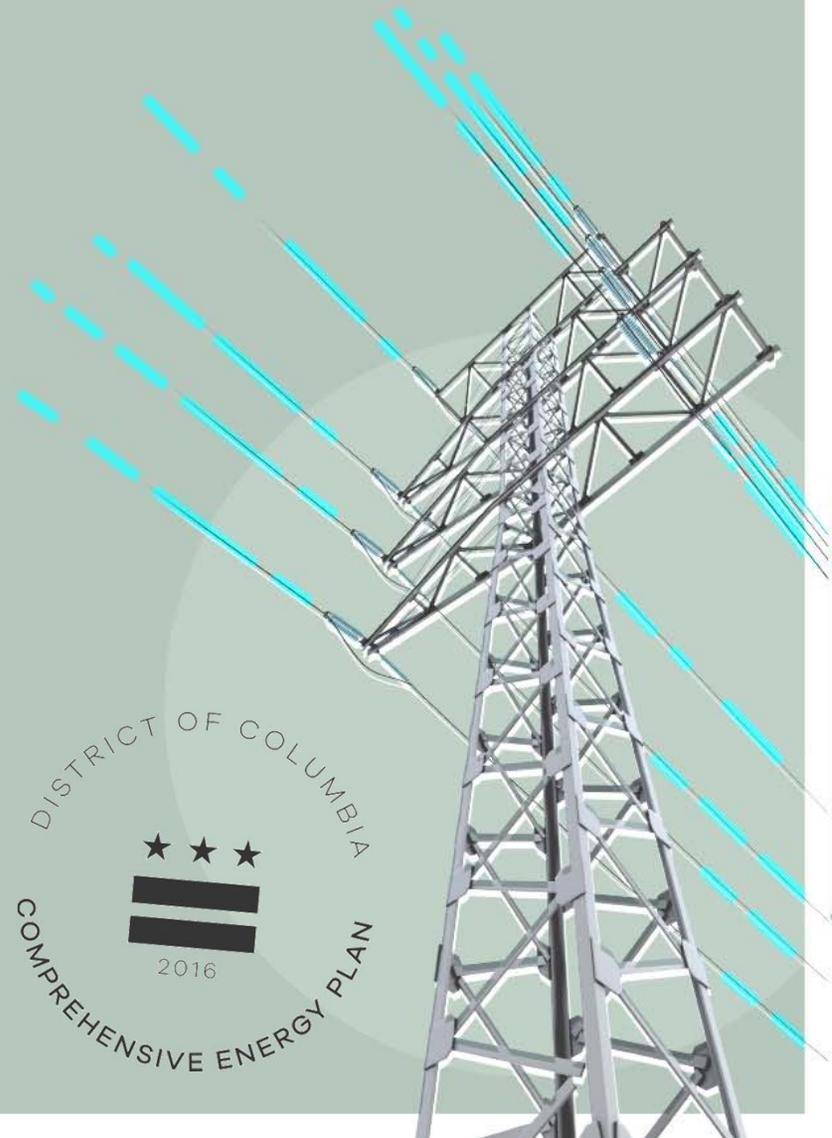
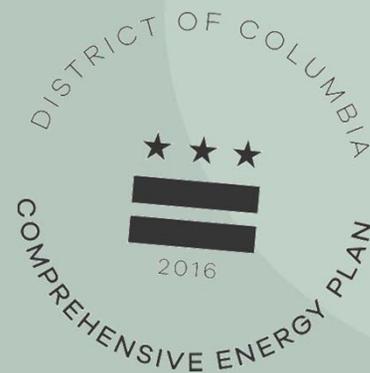
GOVERNMENT OF THE DISTRICT OF COLUMBIA

CLEAN ENERGY DC

THE DISTRICT OF COLUMBIA CLIMATE & ENERGY PLAN

PRESENTATION TO GBAC

OCTOBER 19, 2016



HOW WE GOT HERE

ABRIDGED HISTORY OF CEP

- 2007 - Last Energy Office CEP expires
- 2010 – Draft Climate Action Plan
- 2012-2014 – “EnergySmartDC” plan developed
- 2015 – Under new leadership, a decision to revise plan
- 2015-2016 – Draft New Energy Plan developed

NEW DIRECTION FOR CEP

- More Bold and Innovative
- More Accessible
- Clear Roadmap Toward at Least One Sustainable DC Energy Goal
- Iterative and Open Plan



WHO IS THE TEAM?

INTEGRAL GROUP: MEP firm with 45 net-zero projects in design or completed, and an emerging consulting practice helping governments and land holders make similarly ambitious plans to dramatically reduce greenhouse gas emissions.



INSTITUTE FOR MARKET TRANSFORMATION: NGO that is a market leader in energy efficiency policy and program research.



INTERNATIONAL LIVING FUTURE INSTITUTE: NGO that is a thought leader in the sustainability of the built Environment. They are the developers and purveyors of the Living Building Challenge



WHAT IS THE COMPREHENSIVE ENERGY PLAN?

WHAT IT IS

- Both a visionary and action-oriented plan
- A roadmap for achieving our 2032 climate & energy targets
- A series of recommendations to get started in the next 1-5 years
- Beginning of a conversation

WHAT IT IS NOT

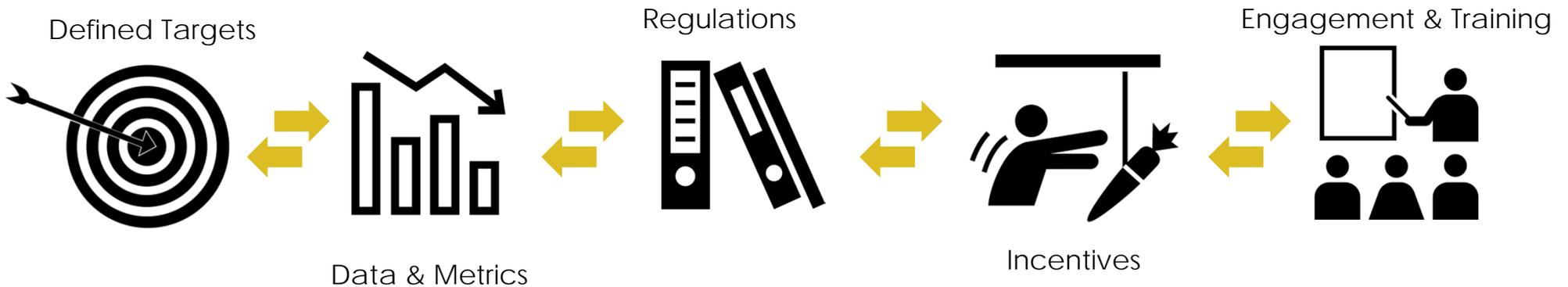
- Not a detailed business or economic plan
- Not a collection of bylaws
- Not a measure-driven engineering plan
- Not “shovel-ready”



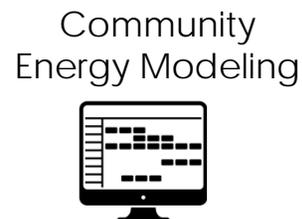
HOW TO TRANSFORM AN ENERGY SYSTEM



ACHIEVING THE DISTRICT'S 2032 GOALS REQUIRES A COMPREHENSIVE MARKET TRANSFORMATION.



CEP DEVELOPMENT PROCESS



WE ARE HERE



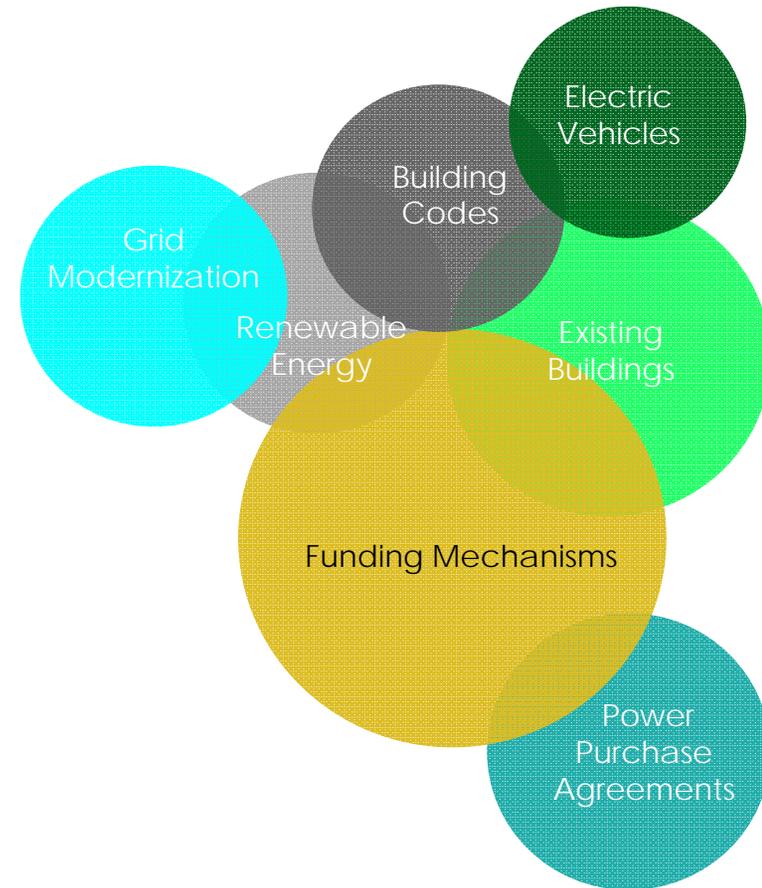
Draft Report:
53 Actions

PUTTING THE COMPREHENSIVE IN CEP

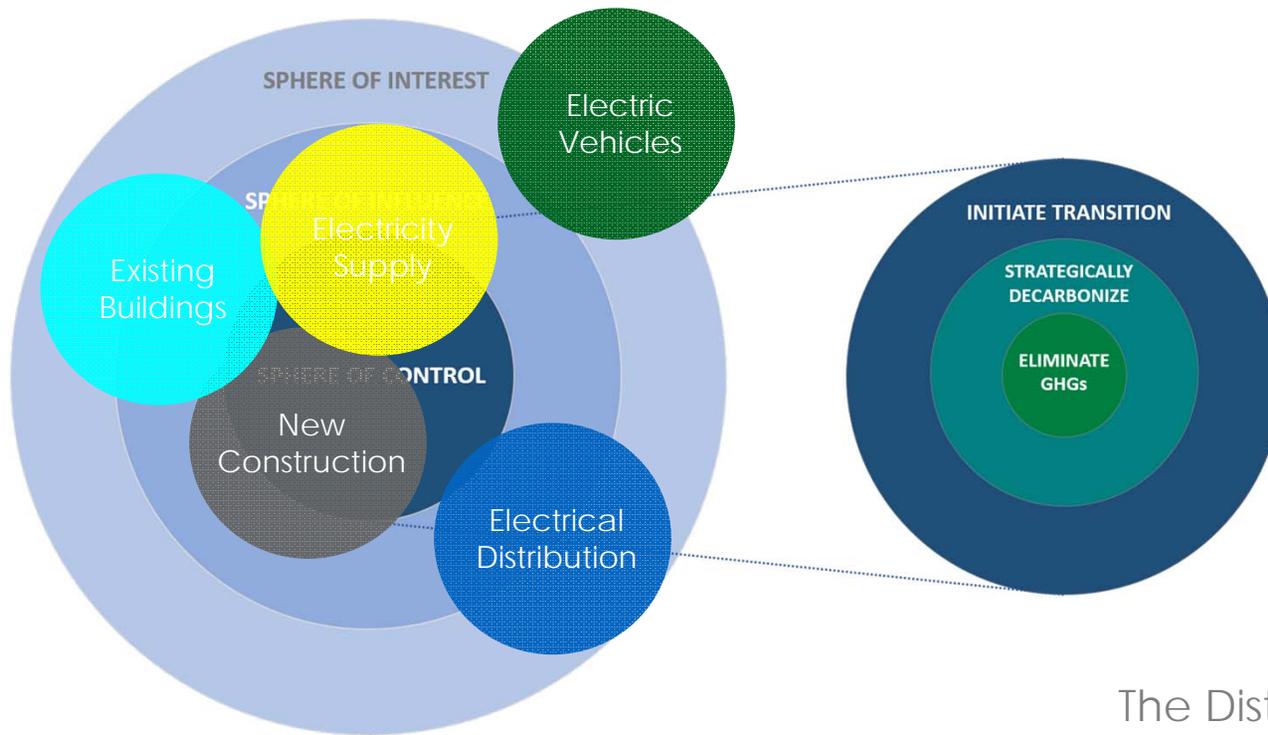


THE DRAFT CEP IS A SET OF INTERRELATED ACTIONS TO BE PHASED IN OVER TIME

- ACTIONS APPLIED OVER TIME = A **STRATEGY**
- NOT ALL ACTIONS CAN BE QUANTIFIED IN A MODEL
 - INFORMATION-BASED ENABLING ACTIONS
 - FUNDING STRATEGIES
- MANY ACTIONS ARE INTERDEPENDENT



WHAT IS THE SCOPE OF THIS PROJECT?



The District's sphere of influence over different functions and assets will determine the kinds of actions it can pursue



GHG Reduction Wedge	GHGs Reduced from 2032 BAU (tCO₂e)	Percent GHGs Reduced from Total 2032 BAU
Federal Fuel Efficiency Regulations - Corporate Average Fuel Economy (CAFE) Standard	473,000	 5.8%
Walking, Cycling and Public Transit (mode share change)	528,000	 6.4%
Electric Vehicle Adoption	34,000	 0.4%
Getting to "Net-Zero" in New Construction (New Construction Actions)	430,000	 5.2%
Energy Efficiency in Existing Buildings (Existing Buildings Actions)	544,000	 6.6%
Neighborhood-Scale Energy Systems	44,000	 0.5%
Prioritizing low carbon energy in electrical Standard Offer Service (Power Purchase Agreements for Standard Offer Service)	543,000	 6.6%
Mandating electricity suppliers to Procure Renewable Energy (Renewable Portfolio Standard)	581,000**	 7.1%
Renewable Portfolio Standard's Local Solar Requirement	87,000**	 1.2%
Total GHGs Avoided vs. 2032 BAU	3,277,000	39.8%
Total GHGs Reduced vs. 2006 Baseline	5,664,000	51%

HOW IS IT ORGANIZED?

1) BUILDINGS

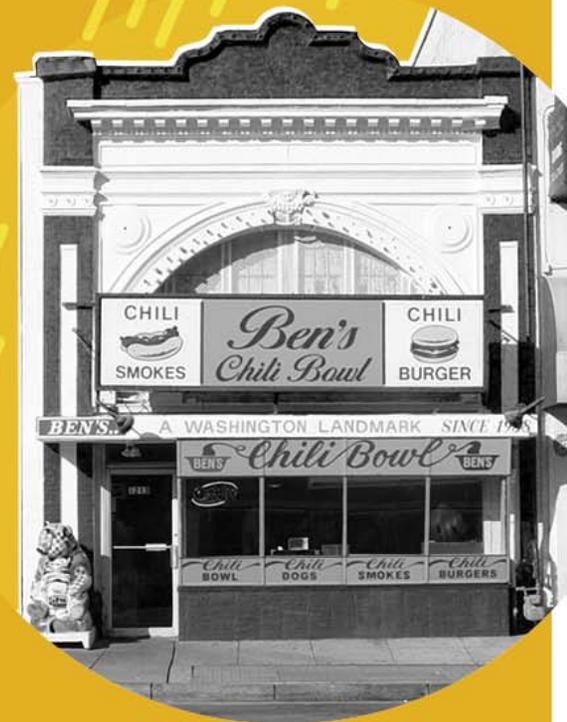
- NEW CONSTRUCTION
- EXISTING BUILDINGS
- CROSS-CUTTING BUILDING ACTIONS

2) ENERGY SYSTEMS

- CLEAN & RENEWABLE ENERGY SUPPLY
- ELECTRICITY SYSTEM MODERNIZATION

3) TRANSPORTATION

- ELECTRIC VEHICLE READINESS & ADOPTION



NEW BUILDINGS

- 1) CONTINUED TRAJECTORY TOWARDS NET-ZERO BUILDING CODES
- 2) INCENTIVE PACKAGES FOR NET-ZERO IN THE SHORT TERM
- 3) FOCUS ON CAPACITY-BUILDING EFFORTS IN COLLABORATION WITH INDUSTRY



EXISTING BUILDINGS

- 1) EXPAND DCSEU OPERATIONS
- 2) EXPAND FINANCING AND DATA SHARING
TRANSPARENCY PROGRAMS FOR EXISTING BUILDINGS
- 3) CREATE A CENTRALIZED “WHITE GLOVE” SERVICE TO
CONNECT RETROFIT PERMIT APPLICANTS WITH
RESOURCES AND PROGRAMS



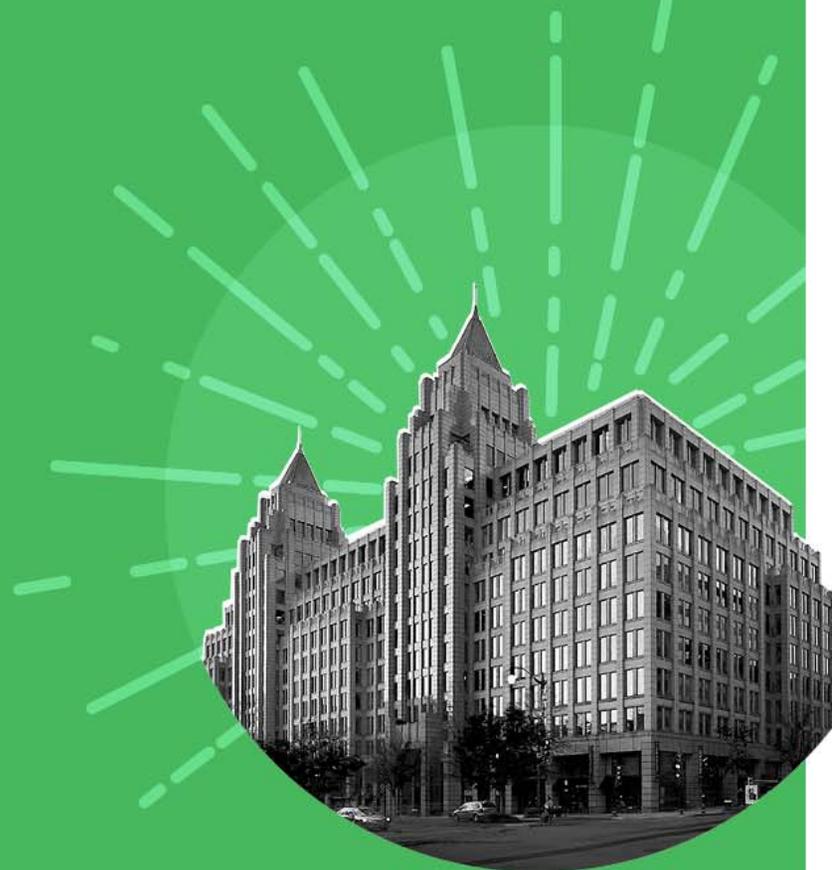
EXISTING BUILDINGS (CONTINUED)

- 4) DEVELOP AND IMPLEMENT A BUILDING ENERGY PERFORMANCE STANDARD (BEPS)
- 5) DEVELOP A VIRTUAL ENERGY AUDIT PROGRAM THAT UTILIZES SMART METER DATA
- 6) LEAD BY EXAMPLE IN DISTRICT GOVERNMENT OPERATIONS
- 7) PROVIDE INCENTIVES FOR A DISTRICT WIDE DEEP ENERGY EFFICIENCY PROGRAM



CROSS CUTTING ACTIONS

- 1) INCREASE CODE COMPLIANCE IN ALL BUILDINGS THROUGH SMART CODE ENFORCEMENT
- 2) CREATE A MID-ATLANTIC GOVERNMENT LEADERSHIP GROUP
- 3) RECOGNIZE LEADERSHIP AND DISSEMINATE KNOWLEDGE AND BEST PRACTICES



ENERGY SUPPLY

- 1) SET A 100% RPS TARGET FOR 2050
- 2) REPLACE STANDARD OFFER SERVICE WITH A LONG-TERM POWER PURCHASE AGREEMENT
- 3) SET GHG TARGETS FOR ELECTRICITY SUPPLY
- 4) DEVELOP AND IMPLEMENT A SOLAR PROLIFERATION STRATEGY
 - SOLAR READY REQUIREMENTS
 - DEVELOP A CENTRALIZED PLATFORM FOR SOLAR INFORMATION AND COMMERCE

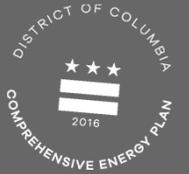


ELECTRICITY SYSTEM MODERNIZATION

- 1) DEVELOP A FRAMEWORK FOR VALUING DISTRIBUTED ENERGY RESOURCES
- 2) DEVELOP AN INTEGRATED DISTRIBUTION PLAN
- 3) CONDUCT A "GREEN TAPE" REVIEW OF LEGISLATIVE AND REGULATORY BARRIERS TO GRID MODERNIZATION
- 4) PURSUE PILOT PROJECTS



TRANSPORTATION



1) ELECTRIC VEHICLE READINESS

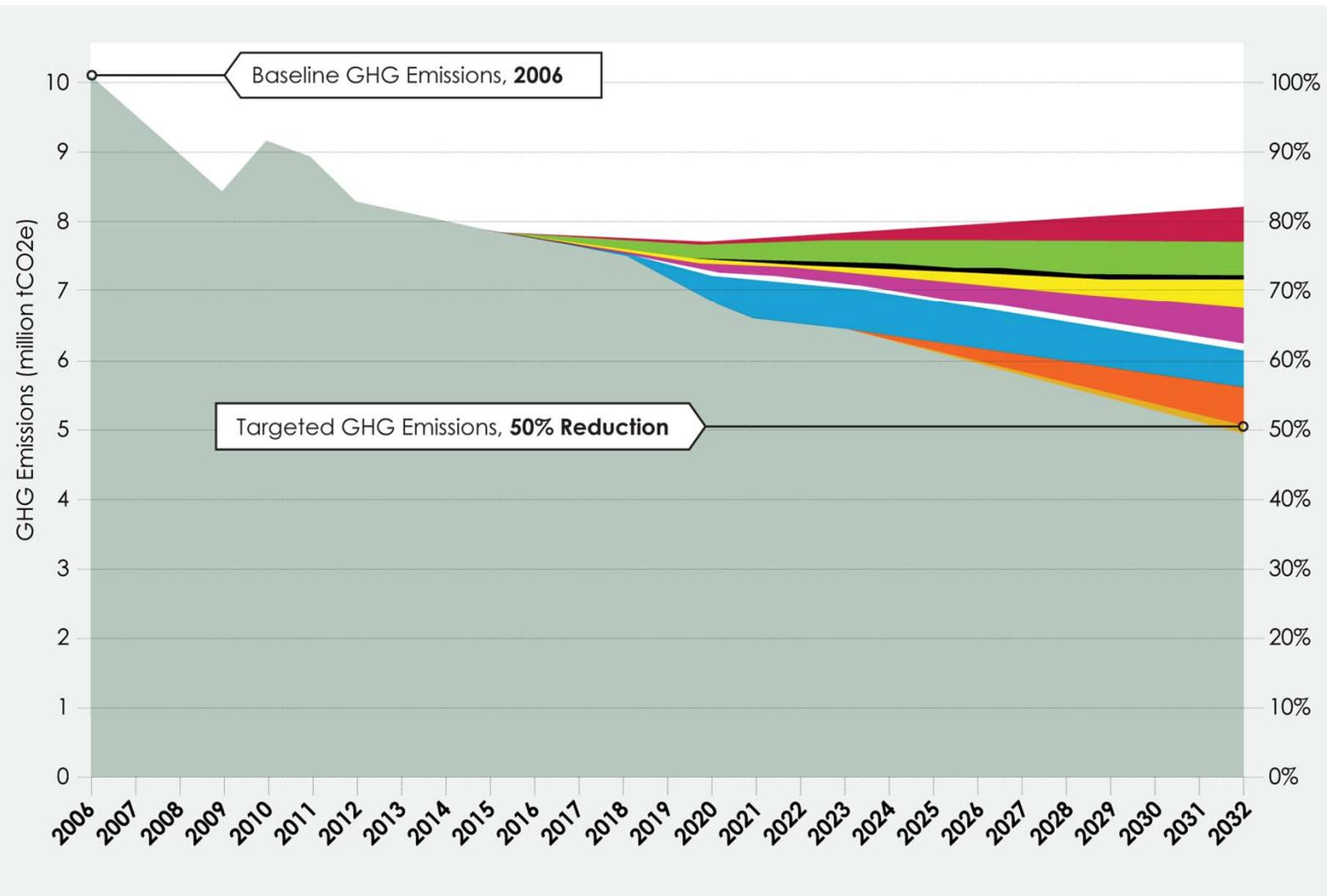
- EV READY BUILDING CODE
- EV READY PARKING LOT REQUIREMENT

2) ELECTRIC VEHICLE ADOPTION

- IMPLEMENT A EV BULK PURCHASE PROGRAM
- EV ONLY CAR SHARE FLEETS
- PROVIDE EV PURCHASE INCENTIVE

3) CONTINUE TRANSPORTATION DEMAND MANAGEMENT & MODE-SHIFTING ACTIONS





- Federal Fuel Efficiency Regulations
- Mode Share Change
- Electric Vehicle Adoption
- New Construction Actions
- Existing Building Actions
- Neighbourhood-Scale Energy
- Renewable Energy Power Purchases for Standard Offer Service Electricity
- Renewable Portfolio Standard
- RPS Local Solar Requirement
- Remaining GHG Emissions