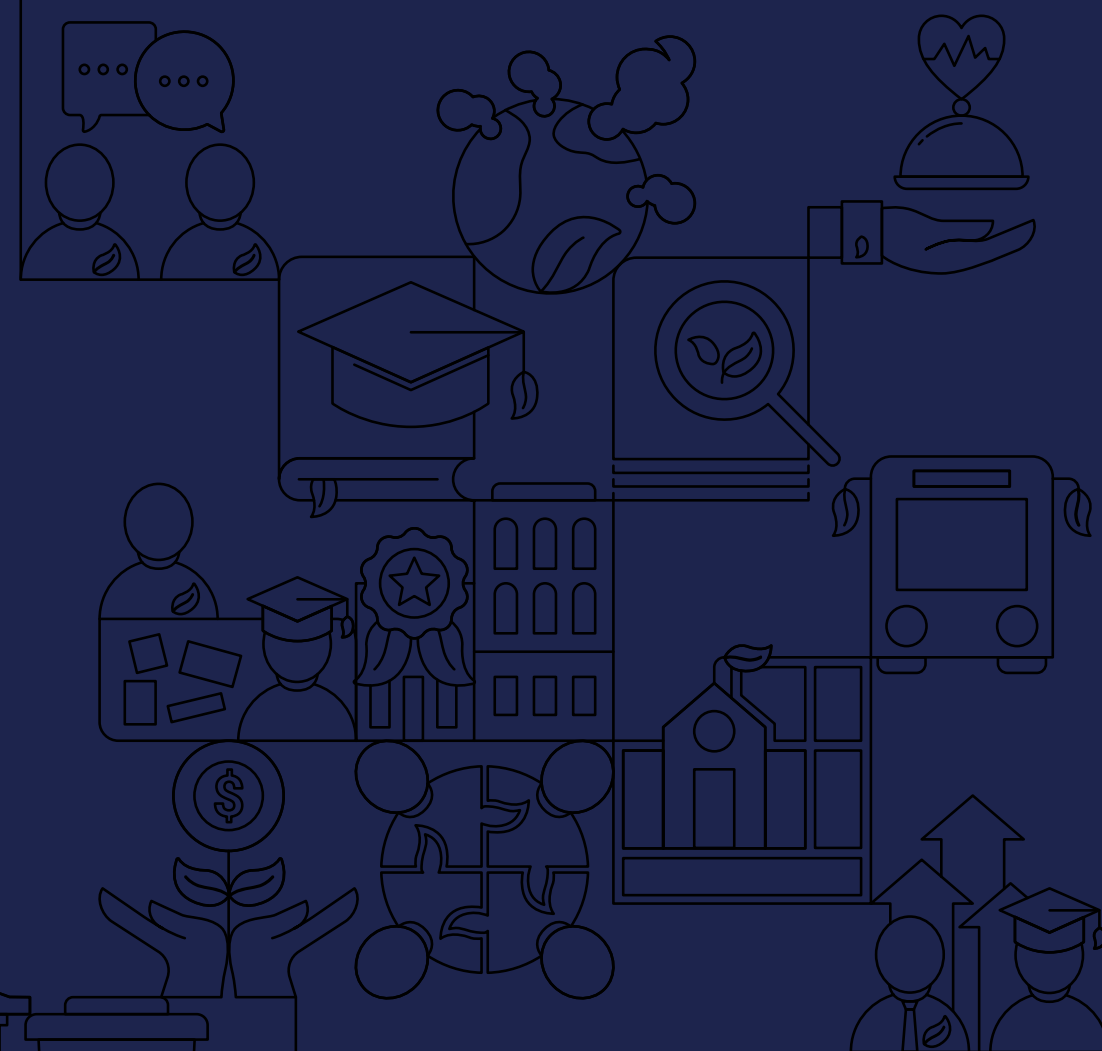


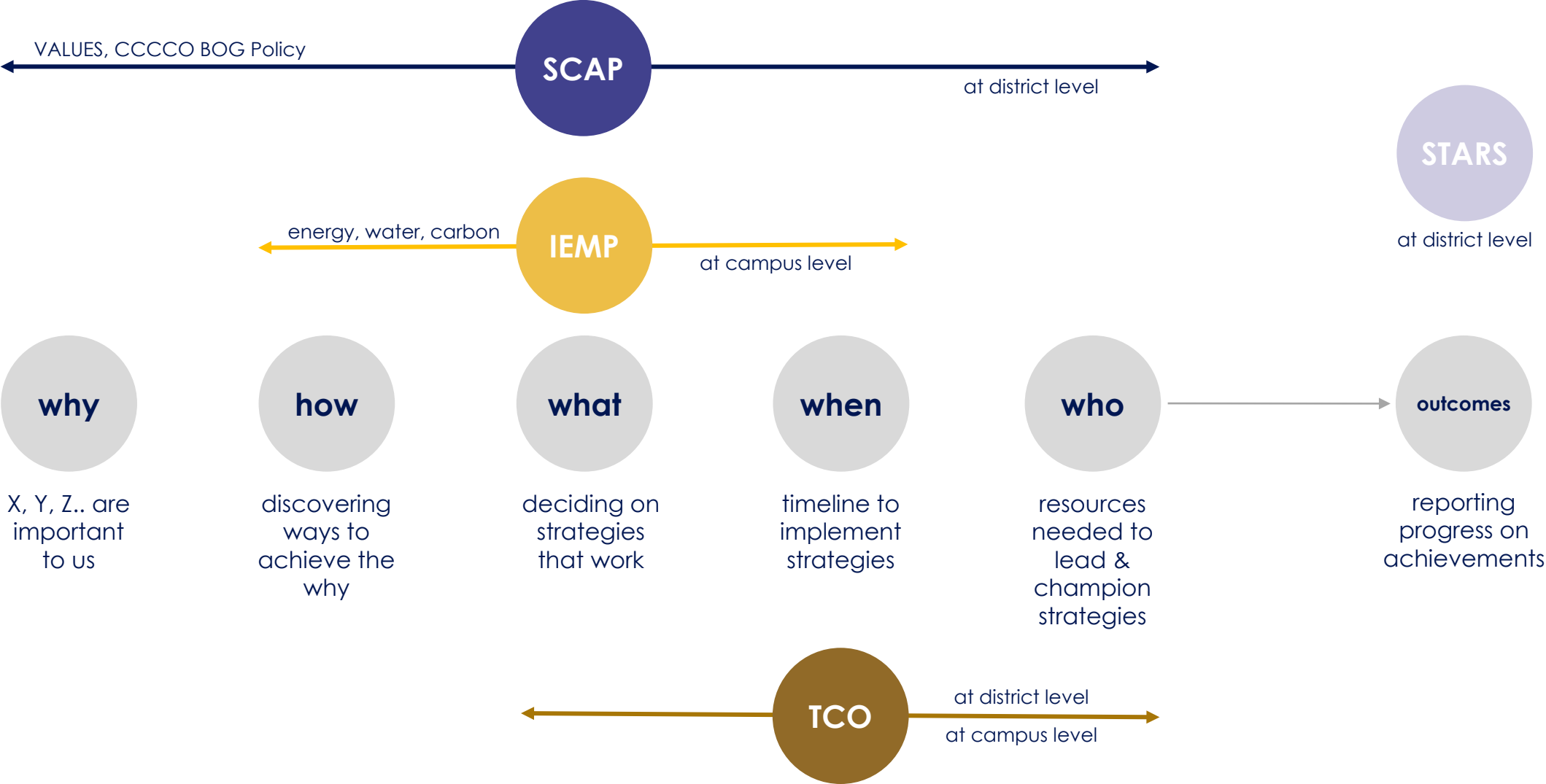
# 2021 SUSTAINABILITY AND CLIMATE ACTION PLAN



One goal of the Sustainability and Climate Action Plan is to identify ways for **environmental, social and financial sustainability** to be fostered at each campus in the district.



# Deliverables



VALUES, CCCCCO BOG Policy

**SCAP**

at district level

**STARS**

at district level

energy, water, carbon

**IEMP**

at campus level

**why**

X, Y, Z.. are important to us

**how**

discovering ways to achieve the why

**what**

deciding on strategies that work

**when**

timeline to implement strategies

**who**

resources needed to lead & champion strategies

**outcomes**

reporting progress on achievements

**TCO**

at district level

at campus level

# Our Project Schedule

	2021						2022						Project Complete May 31, 2023
	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.
TASKS	TASK 1: Project Initiation			TASK 2: Research and Analysis		TASK 3: Implementation Phase							TASK 4: Verification and Monitoring
SCAP	Project Initiation			VALUES and Vision		Prioritization and Goals		Action Plan and Implementation			Final Plan		
IEMP				Campus Building Profiles	Energy Audits	Recommend ECMs			ECMs Finalized	Dashboard	Draft Plan	Final Plan	Final Approvals
TCO				Identify Assets	Classify Assets	Decision Criteria	Funding Analysis		Costing Assets	Asset Decisions		Comprehensive Asset Plan	Final Approvals
STARS													
Committee Workshop			Kick-Off Meeting	VALUES	Listening / Deep-Dives	Baselines		Goal Setting		Action Plan	Draft Plan	Final Plan	Final Approvals
Campus Work			President's Kick-off	VALUES	Open Houses	Campus Updates	-	-	College Action Plan		Draft Plan		Final Approvals
Deliverable Due													

**We are here.**

# Tracking Our Progress

## PHASE 01: VISIONING AND VALUES

September - October

- ✓ ~~Lead Sustainability VALUES Workshop~~
- ✓ ~~Host listening tours, focus groups and open forums with campus community~~
- ✓ ~~Benchmark Energy Data for all campuses~~
- ✓ Create Campus Building Profiles

## PHASE 02: PRIORITIES AND GOALS

November - January

- ✓ Synthesize the top VALUES for the District
- ✓ Establish priorities and discuss goals for short, mid and long-term
- ✓ Develop cost models around goals

## PHASE 03: ACTION PLAN AND IMPLEMENTATION

February - April

- ✓ Document long-term vision and goals
- ✓ Identify short-term, mid-term and long-term initiatives to meet district goals.
- ✓ Develop total cost of ownership cost models for each goal, including personnel needed
- ✓ Present Draft Of Deliverables

## PHASE 04: FINAL PLAN AND APPROVALS

May - June

- ✓ Final presentation adoption and approval
- ✓ Establish training needs for key district personnel
- ✓ Visualize Monitoring Dashboard of the Plans
- ✓ Fine tune and update the dashboard

# Integrated Energy Master Plan

- a long-term strategy of achieving significant reductions in energy, water, greenhouse gas emissions.



Discovery

## Data Points

- ✓ Electricity Bills
- ✓ Gas Bills
- ✓ Water Bills
- ✓ Facility Manager Interviews
- ✓ Site Walkthrough

## Data Gaps

- Meter Assignments
- Facility Manager Verification

# Total Cost of Ownership

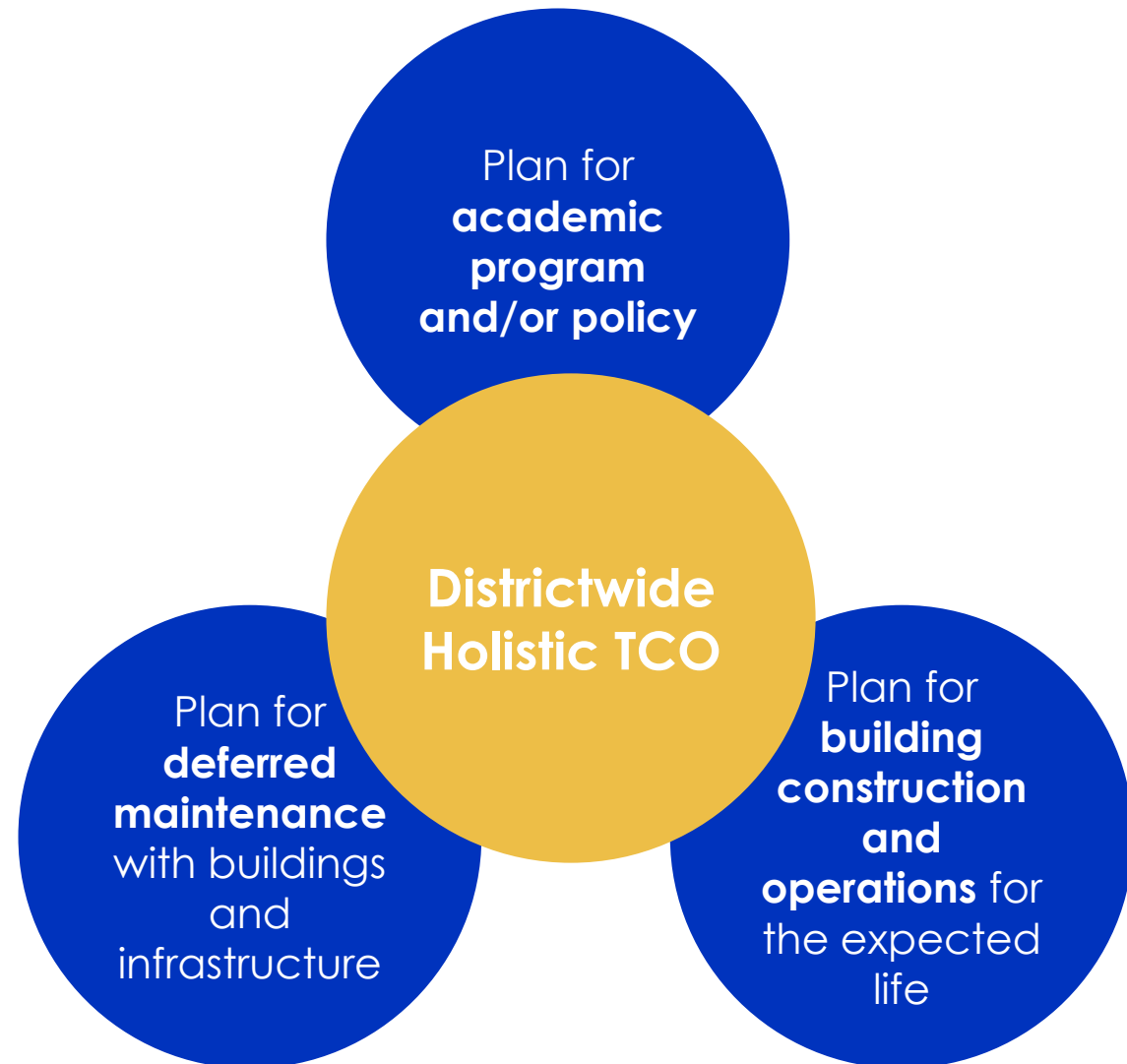
Initial Cost

+

Operational Cost

(including human resources  
and technology needed)

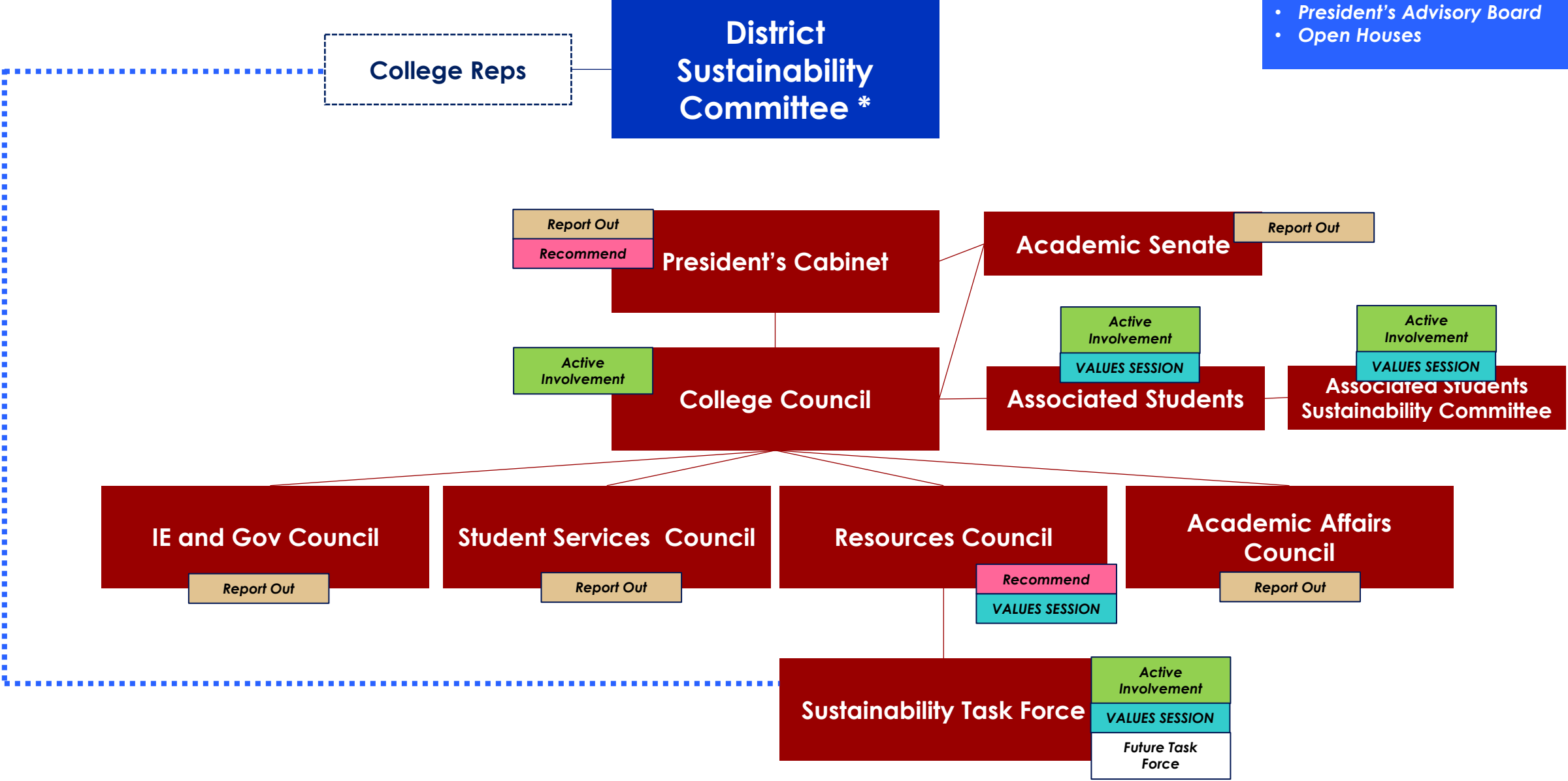
**TCO is a requirement for  
Accreditation as well as  
Bond Measures**



# Norco College: Engagement Structure

**Other Outreach and Engagement:**

- President's Advisory Board
- Open Houses





# Norco College: Engagement to Date

## KICK-OFF

### KICK-OFF MEETINGS

**President's Cabinet**  
September 1, 2021

**Campus Site Visits**  
September 14, 2021

## WORKSHOP 01

### VALUES WORKSHOPS

**Associated Students**  
September 27, 2021

**Resources Council**  
September 23, 2021

## WORKSHOP 02

### OPEN HOUSE

**Open to all Students,  
Faculty, and Staff**  
October 7, 2021

## WORKSHOP 03

### REPORT BACK AND BENCHMARKING

**Resources Council**  
November 18, 2021

**President's Cabinet**  
December 1, 2021

**College Council**  
December 8, 2021

**Sustainability Task  
Force\***  
November 30, 2021

*\* 60-min workshop*

# WORKSHOP 01: VALUES



**ACCESS + MOBILITY**

How can your project advocate and celebrate transit-oriented design, connections between transit hubs, and walkable communities?

Decarbonization:  
Transportation  
Multi-Modal  
Transportation  
Walkability and Safety



**COMMUNITY CONNECTOR**

How can your project support its surrounding community, build community partnerships, and connect residents to shared resources?

Community Access  
Community Partnerships  
Neighborhood Vitality  
Transparency:  
Decision-Making



**CULTURE + IDENTITY**

How can your project celebrate its history and cultural context to develop a strong sense of place that speaks to the identities of occupants and surrounding communities?

Beauty & Inspiration  
Historical Context of Place  
Inclusion  
Individual vs. Collective  
Placemaking  
Multi-Cultural Relevance  
Organizational  
Transformation



**OUTDOOR ENVIRONMENTAL QUALITY**

How can your project's outdoor spaces restore ecology, build community, and create a strong sense of place?

Building Ecology  
Decarbonization:  
Sequestration  
Ecosystem Services  
Public Space  
Site Ecology



**EQUITABLE DEVELOPMENT**

How can your project promote affordability, provide access to opportunity, and advocate for those in need?

Climate Justice  
Economic Development  
Programming  
Equitable Development  
Siting  
Equity  
Land Use  
Social Justice



**HEALTH + WELL-BEING**

How can intentional design features actively promote users' emotional and physical well-being and encourage them to make healthier choices?

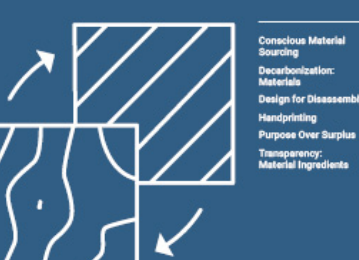
Active Spaces  
Biophilia  
Evidence-Based  
Modalities  
Nourishment  
Play



**INDOOR ENVIRONMENTAL QUALITY**

How can your project support user comfort and productivity?

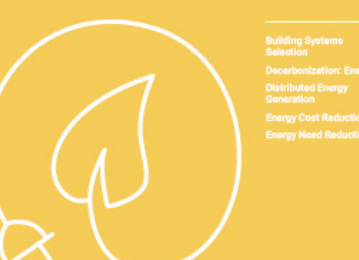
Acoustic Comfort  
Air Quality  
Thermal Comfort  
Visual Comfort



**MATERIALS IMPACT**

How do your materials choices support healthy ecology, communities, and economies?

Conscious Material  
Sourcing  
Decarbonization:  
Materials  
Design for Disassembly  
Handprinting  
Purpose Over Surplus  
Transparency:  
Material Ingredients



**ENERGY**

How can changes in energy infrastructure support your broader mission, reduce costs, and build a healthier planet?

Building Systems  
Selection  
Decarbonization: Energy  
Distributed Energy  
Generation  
Energy Cost Reduction  
Energy Need Reduction



**RESILIENCY**

How can your project help its users and community adapt to and recover from unexpected situations?


Building Resiliency  
Community Resiliency  
Economic Resiliency  
Emergency Planning  
Emotional Resiliency  
Risk Adaptation &  
Mitigation



**PROCUREMENT + OPERATIONS**

How can procurement, building operations, and management practices support your broader project goals?

Conscious Cleaning  
& Upkeep Goods &  
Supplies  
Operational Optimization  
Regulatory Partnerships  
Safety & Security  
Transparency: Building  
Performance  
Waste



**WATER**

What connections to water are important to your users and neighboring communities?

(Storm) Water  
Management  
Hydrological Balance  
Potable Water Quality  
Water Context of Place  
Water Self-Sufficiency

# WORKSHOP 01: NC Top VALUES

Norco College

## DECARBONIZATION (LEADS TO CLIMATE JUSTICE)

**CLIMATE JUSTICE**  
How can your project mitigate the effects of climate change to ensure that no single community or group of people is unjustly affected by the project's environmental burdens or benefits?

**DECARBONIZATION: ENERGY**  
How can your project utilize clean, renewable energy to reduce its carbon footprint?

**DECARBONIZATION: MATERIALS**  
How can your project utilize low-carbon, recycled, or locally sourced materials to reduce its carbon footprint?

**DECARBONIZATION: TRANSPORTATION**  
How can your project encourage or provide low-carbon transportation options for users?

**DECARBONIZATION: VEGETATION**  
How can your project utilize vegetation to reduce its carbon footprint and improve air quality?

## HEALTH AND WELLBEING

**AIR QUALITY**  
What pollutes the indoor air that occupants breathe? How can pollution be avoided or treated?

**THERMAL COMFORT**  
What environmental factors impact thermal comfort? How can your project ensure thermal comfort for all users?

**WELLNESS**  
How can your project ensure that users feel safe, healthy, and comfortable?

## BOLSTER COMMUNITY PARTNERSHIPS

**COMMUNITY PARTNERSHIPS**  
How can your project connect with local organizations, governments, businesses, and thought leaders to exchange ideas and services for mutual benefit?

**TRANSPARENCY: BUILDING PERFORMANCE**  
What aspects of building performance can be transparent and communicated to users?

## ECOSYSTEM SERVICES

**ECOSYSTEM SERVICES**  
How can natural infrastructure become a resource to mitigate flooding, filter pollutants, mitigate the heat island effect, and improve mental and physical well-being?

## RESILIENCY

**ECONOMIC RESILIENCY**  
How can your project create a supportive balance of uses and revenue sources to ensure continued economic vitality in the face of unexpected events?

## EQUITABLE & INCLUSIVE EXPERIENCE FOR ALL

**EQUITY**  
How can your project allocate services, resources, and opportunities in a just and equitable manner, and protect marginalized groups?

**INDIVIDUAL FULFILLMENT**  
How can your project support the ability of individuals to grow and achieve social, emotional, and mental well-being? How can your project help to create meaningful, rewarding experiences for users?

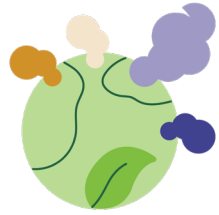
**MULTI-CULTURAL RELEVANCE**  
How can your project reflect the values, beliefs, needs, and cultures of its immediate and broader communities? How can your project explore the cultures of its users and welcoming in new perspectives?

**INCLUSION**  
How does your project look beyond its base program to provide opportunities for groups that may be marginalized? How far it create a sense of belonging for individuals of all backgrounds and abilities?

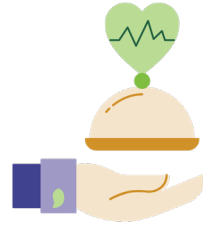
# OUR PLANNING FRAMEWORK: Organizing the VALUES (Our Why)

## Included

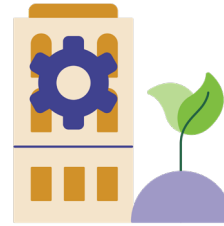
*Includes the creation of goals and metrics within the S-CAP*



Decarbonization and Climate Justice



Health and Well-being



Eco-systems / Water



Waste / Procurement



Resiliency

## Influenced

*Would be included in an update with a sustainability lens / new plan*



Academics



Engagement



Trust and Transparency

## Reinforced

*Planning and metrics already exist in other plans*



Community Partnerships



Equity and Social Justice

# WORKSHOP 02: Norco College – OPEN HOUSE!

## NORCO COLLEGE SUSTAINABILITY OPEN HOUSE

### 0 INTRODUCTION

#### WELCOME!

NORCO COLLEGE

#### SUSTAINABILITY OPEN HOUSE

Welcome, from Hussain Agah, RCCD Associate Vice Chancellor, Facilities Planning & Development

#### 2021 SUSTAINABILITY AND CLIMATE ACTION PLAN



TODAY WE WILL BE ASK YOU TO CHAT WITH US ABOUT FOUR TOPICS:

Energy Use and Decarbonization

Recycling and Waste Reduction

Water and Eco-Systems

Health and Well-being

THESE TOPICS WERE IDENTIFIED AS MOST IMPORTANT BY YOUR PEERS.

WE WILL SWITCH TOPICS AFTER 15 MINS!

PLANT SOMETHING  
REDUCE VEHICLE EMISSIONS  
SWITCH IT OUT

### 1 DECARBONIZATION AND CLIMATE JUSTICE

#### Energy Use, Decarbonization and Climate Justice 15 MINS

WHAT DO YOU THINK NORCO COLLEGE'S LARGEST ENERGY USE IS?


WHAT BARRIERS KEEP YOU FROM USING A MORE SUSTAINABLE COMMUTING OPTION?

Barriers:

Distance and location	Public transportation is not available during the time I need	Incentive/loss?
Cost of electric vehicle	dedicated bike lanes, place to store bikes	Tax breaks?
There's not a great parking lot	changing availability for electric vehicles	

WHAT ARE WAYS THAT YOU AS AN INDIVIDUAL CAN REDUCE THE AMOUNT OF ENERGY YOU USE?

Use of LED Lighting	Turn off lights and computers	Improved infrastructure	Update home electrical panel	Smart thermostat
Drive or walk to work	Remote work and classes	Use of renewable sources	Do not use my personal space heater	Use natural light when possible at home

### 2 RECYCLING AND WASTE REDUCTION

#### Recycling and Waste Reduction 15 MINS

WHAT IMPROVEMENTS WOULD YOU MAKE TO NORCO COLLEGE'S RECYCLING PROGRAM?

Identify the size of campus. Norco College System has good recycling.	More recycle bins and picked up timely	more water bottle refill stations	Set up an office for profits if we become our own recycling center.
In the office, we have paper recycling bins, however when they are not full, we throw them away just out in the trash!	Transparency if the waste materials are being recycled, we have a trash recycling system.	Green waste Biofuel systems	We can create a mulching system to possibly create a community garden.

WHAT WAYS CAN YOU BE MORE INTENTIONAL ABOUT REDUCING THE AMOUNT OF WASTE ON CAMPUS?

Reduce water bottle use by more water bottle fill stations	QR codes instead of flyers, brochures, general handouts	Reduce my paper waste by not printing unnecessarily.	Maybe have more better supplies when purchasing paper, reuse, recycle, reuse, etc. for the campus.
Use digital boards to replace paper ads/fliers	Also, having peer assistants or questionnaires for students, using google forms	Syllabus on Canvas instead of printed	Bring own dish for takeout food?

HAVE YOU TAKEN ANY COURSES THAT HAVE ADDRESSED WASTE MANAGEMENT?

It's a chapter in the Environmental Science class	How to infuse this into turning campus into a LIVING LAB?		
Other courses offer a degree program in Urban renewal and sustainability major on the SS level			

### 3 WATER AND ECO-SYSTEMS

#### Water and Eco-Systems 15 MINS

HAVE YOU TAKEN ANY COURSES / ENGAGEMENT THAT HAVE ADDRESSED WATER AND ECO-SYSTEMS?

roof top gardens, and rain water catch via Cleavis and pumps			
Native Landscape in Biology	bee keeping class =)		

WHAT ARE WAYS THAT YOU AS AN INDIVIDUAL CAN REDUCE THE AMOUNT OF WATER YOU USE?

Use water conserving shower heads or low flow toilets	Use drought friendly plants	Use xeriscaping techniques	Vegan and vegetarian food options	limit meat consumption, native landscapes	Change out lawn to rocks, etc.
Don't water the driveway	Use water saving faucets	Use the water in a garden instead of a lawn	Use xeriscaping and smart irrigation controls	Zen garden not a lawn	

WHAT SHOULD NORCO COLLEGE DO TO REDUCE THE AMOUNT OF WATER USED?

more water bottle refill stations	Rain water collection for landscape irrigation use	update irrigation system to drip system instead of sprinklers	fixing leaks	Water saving toilets
REBATES/ Grants!				

### 4 HEALTH AND WELL-BEING

#### Health and Well-being 15 MINS

WHAT ARE WAYS THAT YOU DE-STRESS ON CAMPUS TODAY? WHAT ARE IDEAS TO IMPROVE?

Tend to the Garden?	Rose Garden!!!	Informational signage	Water feature is a good distressing tool	The alternative chair, something that all day long will not be uncomfortable and all students will want to sit on.
Designated walking path with outdoor exercise stations like at some parks	Herb garden, mint and the like?	aromatherapy/ candles are good for that too!	If we want to start an Ag program, then a small farm with animals	Use the water in a garden instead of a lawn

WHAT ACTIVE SPACES DO YOU USE ON CAMPUS TO FEEL PHYSICALLY WELL?

And how it can help food insecurity	students using the shades in the amphitheater	someone mentioned adding exercise machines on a walking trail	Stairwell signage!!!	
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ARE THERE PLACES ON CAMPUS THAT YOU FIND 'COMFORTABLE'? WHAT MAKES THEM FEEL COMFY?

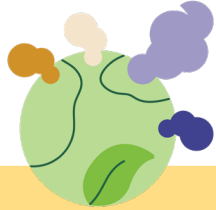
If we ever got a new library, comfy spaces would be a good addition			
---	--	--	--

Solar parking  
build with the Norco community  
Movie style Popcorn at the cafeteria  
Wind Turbines???

Offering internships to students in sustainability

Some more art in common spaces that change every few months  
at UC Davis they have hammocks

# OPEN HOUSE Takeaways



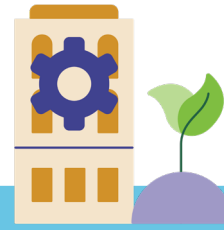
## DECARBONIZATION AND CLIMATE JUSTICE

- Public transportation is lacking or inconvenient;
- Biking can be dangerous
- Energy Efficiency within campus buildings and systems
- Provide Solar Cover and EV charging stations
- Human behavior changes impact energy use



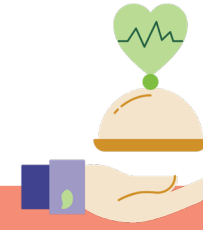
## RECYCLING AND WASTE REDUCTION

- Create a consistent recycling program
- Focus on reduction – paperless courses, less dining packaging, etc.
- Composting
- Trust in the system!



## WATER AND ECO-SYSTEMS

- Building Plumbing Systems
- Native and Drought Tolerant Planting = Less Irrigation
- Eat less meat
- Invest in recycled water infrastructure



## HEALTH AND WELL-BEING

- Formalize pathways and trails on-campus
- Use gardens on campus to promote learning, healthy eating, socializing, rejuvenation, etc.
- Social Equity and Inclusion are key links into our planning



## RESILIENCY

- Addressed in all VALUES
- Support policies and partnerships that advocate for community health
- Continue to be a resource to the community (housing, food, etc.)
- What is the cost of inaction?

# What is next for us?

Nov - Dec

Board Check in

Nov - Jan

Prioritization and Goals

Feb - April

Action Plan and Implementation

## UPCOMING MEETINGS

**DSPC**  
December 10, 2021

**CHANCELLOR'S CABINET**  
December 20, 2021

**BOARD COMMITTEE**  
January 4, 2022

PLUS... **FPDC** and **DBAC**

## TASKS

**Finalizing College Profiles**

**Establishing Benchmarks**

**Setting Goals – short-term  
and long-term**  
Where, When

**Dashboard Development  
(IEMP and TCO)**

## TASKS

**Action Planning**  
Who, What, How

**Monitoring**

**Dashboard Development  
(IEMP and TCO)**

**First Read – April 2022**

