

ENERGY TRANSITION

HOW KEOLIS CAN HELP NAVIGATE THE ALTERNATIVE ENERGIES PATHWAY

Around the globe, public transit agencies (PTAs) are rethinking ways of providing service to passengers and the larger community. Reconsiderations include:



THE CLIMATE FOR ALTERNATIVE ENERGIES



Over the last decade, social and governmental organizations have joined forces to bring more awareness to the global climate crisis, focusing on greenhouse gases caused by the use of fossil fuels.

Regulatory agencies have begun placing **decarbonization targets** on PTAs in order to reduce tailpipe emissions and requiring reductions in CO₂ emissions with a **goal of carbon-neutral operations**.



It is necessary for transit agencies with fleets powered by gasoline and diesel to **transition to alternative energies**.



Keolis supports and is able to provide expertise and lessons learned to move forward!

NAVIGATING THE ALTERNATIVE ENERGIES PATHWAY



The implementation of alternative energy programs, including every facet of an agency's operations, can have **long-term fiscal impacts**.



Navigating federal, state, and local environmental **regulation** is important and necessary.

PRACTICAL ELEMENTS TO CONSIDER



ENERGY CHOICE AND OPERATIONAL RANGE



PASSENGER SERVICE AND SATISFACTION



FLEET UPGRADES AND CONVERSIONS



ENERGY SUPPLY CHAIN AND PROCUREMENT

MAKING THE MOVE

CAREFUL STEPS ARE NEEDED



analysis and selection of **energy choice**



design and specification of **new energy system**



procurement
construction
start-up
maintenance contracts

HOW WILL YOU FUND YOUR TRANSITION?



LEGISLATION HAS BEEN PASSED TO FUND PUBLIC TRANSIT AND PROVIDE FINANCIAL INCENTIVES FOR ALTERNATIVE ENERGIES.

IT'S A GREAT TIME TO CONSIDER MAKING THE MOVE!



The 2021 American Infrastructure Investment and Jobs Act, also known as **The Bipartisan Infrastructure Law** provides **\$12.5B FOR EV CHARGING STATIONS** and purchase of electric and hybrid school buses, funds available through 2026 via the Federal Transportation Administration.



WHICH ALTERNATIVE ENERGY WILL YOU CHOOSE AND HOW WILL IT AFFECT YOUR PTA?

Upgrading a fleet will involve:

- the entire agency
- local leadership
- agency stakeholders

Additional capital expenditures may be required:

- biofuel (HVO 100) refueling infrastructure
- electric recharging facilities
- hydrogen production and refueling (and any combination thereof)



Maintenance and fueling facilities may need to be redesigned and constructed.

WE'LL NEED TO RECONFIGURE AND PROVIDE UPKEEP ON VEHICLES NO LONGER UTILIZING FOSSIL FUEL PRODUCTS, INVOLVING THESE TOPICS:



EV STATIONS



RECYCLING BATTERIES



CNG OR BIOFUELS DISTRIBUTION



HYDROGEN SUPPLY



PARTS WAREHOUSE



MAINTENANCE AREAS

[All While Still Providing Excellent Customer Service Without Disruption]



This Is Where Keolis Can Help

KEOLIS: ALTERNATIVE ENERGIES CENTER OF EXCELLENCE

THE KEOLIS CENTER OF EXCELLENCE CAN HELP GUIDE OUR PTA'S CLIENTS AND PARTNERS THROUGH THE MAZE OF THE ENERGY TRANSITION PROCESS.

OUR PRIMARY GOAL



TO ENSURE THAT OUR PUBLIC TRANSIT AGENCY CLIENTS AND PARTNERS ARE ARMED WITH INFORMATION.

OUR CREDENTIALS

1 OPERATIONAL EXPERIENCE

Keolis manages approximately **5,000** (2021 FIGURE) **alternative energy vehicles** [electric, NGV and bioNGV, hydrogen, biodiesel, hybrid]

Keolis operates in hundreds of municipalities.

2 DATA COLLECTION

Keolis maintains **FEEDBACK on PTAs worldwide**

- local pollutants
- active operations
- related safety constraints
- total cost of ownership

3 KNOWLEDGE BASE

Regional and local regulations across the globe



OUR SUCCESSES

GREENSBORO, NORTH CAROLINA

modernized bus operations, deploying **ALL-ELECTRIC PROTERRA BUSES**
16 ROUTES
3.8 MILLION passenger trips annually



POMONA, CALIFORNIA

working to complete the deployment of **33 HYDROGEN FUEL-CELL BUSES**



SOUTH OF FRANCE

deployment of **120 EV BUSES AND COACHES SINCE 2022**
built **2 DEPOTS WITH CHARGING INFRASTRUCTURES** for **7 SITES**



Our Team of Experts Can Provide Guidance and Support for Every Aspect of the Transition

LET US HELP YOU NAVIGATE THE PATHWAY TOWARD A CLEANER, MORE SUSTAINABLE FUTURE FOR YOUR AGENCY AND YOUR COMMUNITY

