

# Metroville Urban Rail Expansion Project - KPI Development Template

## Technical Feasibility KPIs

### KPI 1:

KPI Name: **Railway Track Installation Rate**

Definition (What it measures): Percentage of railway track installed.

Measurement Method (How data will be gathered and calculated):

source: Engineers

calculated:  $\text{(Total length of new railway track installed / Total length of new railway track to be installed)} * 100$

Rationale (Why this KPI is important): Measures the expansion of railway infrastructure

### KPI 2:

KPI Name: **Station Construction Milestones**

Definition (What it measures): Construction of new railway stations for commuters.

Measures increased railway accessibility.

Measurement Method (How data will be gathered and calculated):

source: Engineers

calculated: Count of new stations constructed in underserved areas

Rationale (Why this KPI is important): Measures the expansion of new commuter railway stations

## Environmental Sustainability KPIs

### KPI 1:

KPI Name: **Energy Consumption and Carbon Footprint Reduction**

Definition (What it measures): Measure the impact of implementing energy-saving technologies and practices

Measurement Method (How data will be gathered and calculated):

source: Engineers

calculated:  $(\text{Total energy consumption pre-implementation} - \text{Total energy consumption post-implementation}) / \text{Total energy consumption pre-implementation}$

Rationale (Why this KPI is important): Aligns with city's environmental goal to reduce carbon

## KPI 2:

KPI Name: **Percentage of renewable energy sources used**

Definition (What it measures): Usage of renewable energy to generate electricity

Measurement Method (How data will be gathered and calculated):

source: Engineers

calculated:  $(\text{Total electricity (kilowatt hours) from renewable energy sources (including wind, hydroelectric, solar, biomass, geothermal energy, ocean)} / \text{Total electricity (kilowatt hours)}) * 100$

Rationale (Why this KPI is important): Aligns with city's environmental goal to increase use of renewable energy

## Community Acceptance KPIs

### KPI 1:

KPI Name: **Railway Ridership**

Definition (What it measures): Change in railway ridership post-implementation.

Measurement Method (How data will be gathered and calculated):

source: Transit

calculated:  $((\text{Average Railway ridership post-implementation} - \text{Average Railway ridership pre-implementation}) / \text{Average railway ridership pre-implementation})$

Rationale (Why this KPI is important): Measures community acceptance of the expanded railway infrastructure

### KPI 2:

KPI Name: **Multimodal Connections**

Definition (What it measures): seamless connection of new railway lines with existing transportation systems

Measurement Method (How data will be gathered and calculated):

source: Engineers

calculate: count of multimodal connections installed

Rationale (Why this KPI is important): Documents the integration of new railway lines into existing rail lines