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# Prince William County

GHG Forecasts and Reduction Scenario Options

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# Agenda

- Introductions
- GHG Inventory
- Emissions Forecasts
- GHG Reduction Scenario Review
- Discussion Questions

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# Introductions

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## GHG Technical Team

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**Joshua Lathan**  
**GHG Technical Lead**



**Vanessa Goh**  
**Senior GHG Analyst**

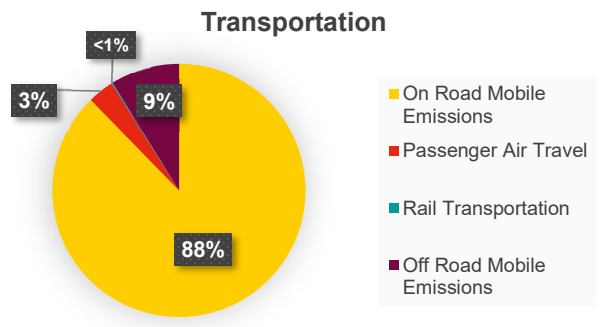
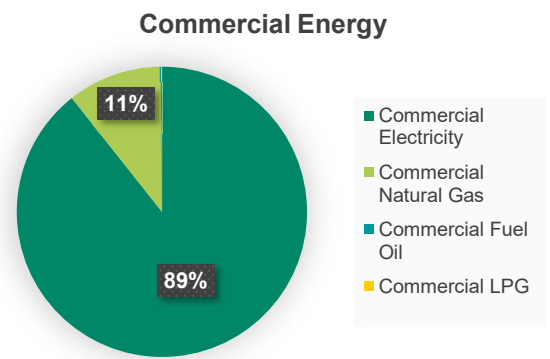
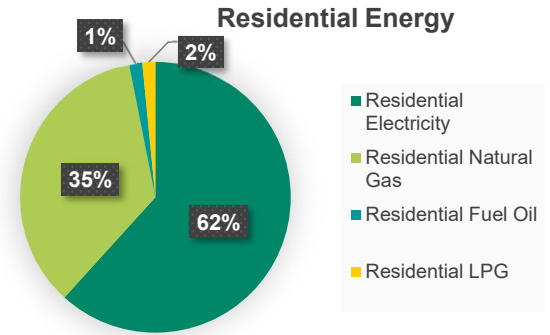
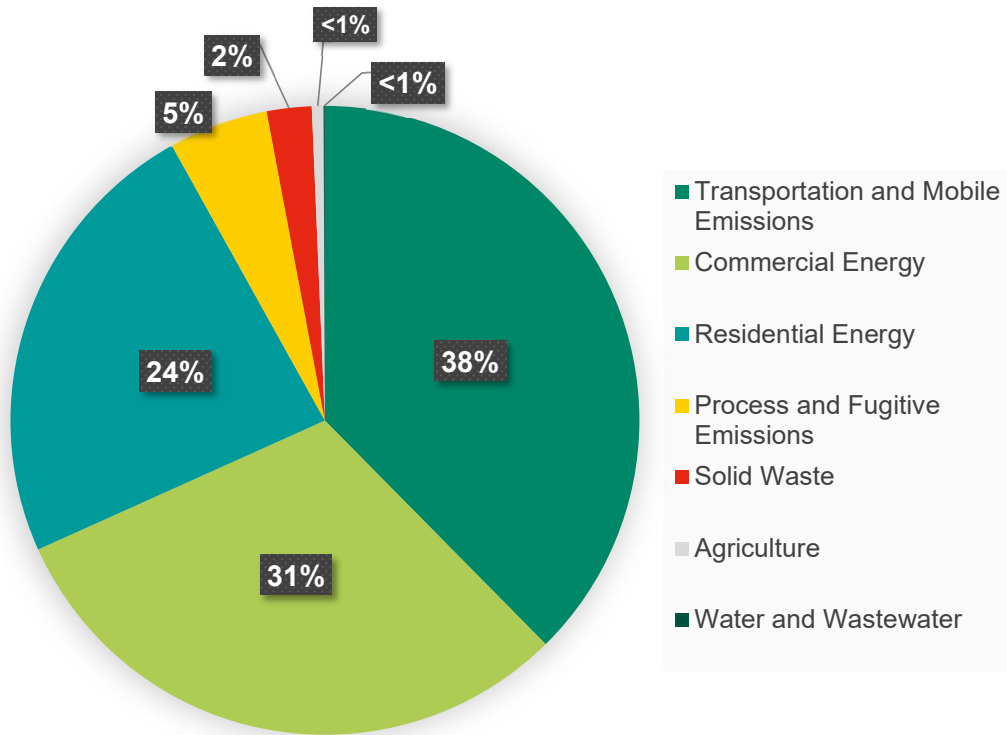


**Kathia Caceres**  
**GHG Analyst**

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# 2018 GHG Inventory

# 2018 GHG Emissions Inventory

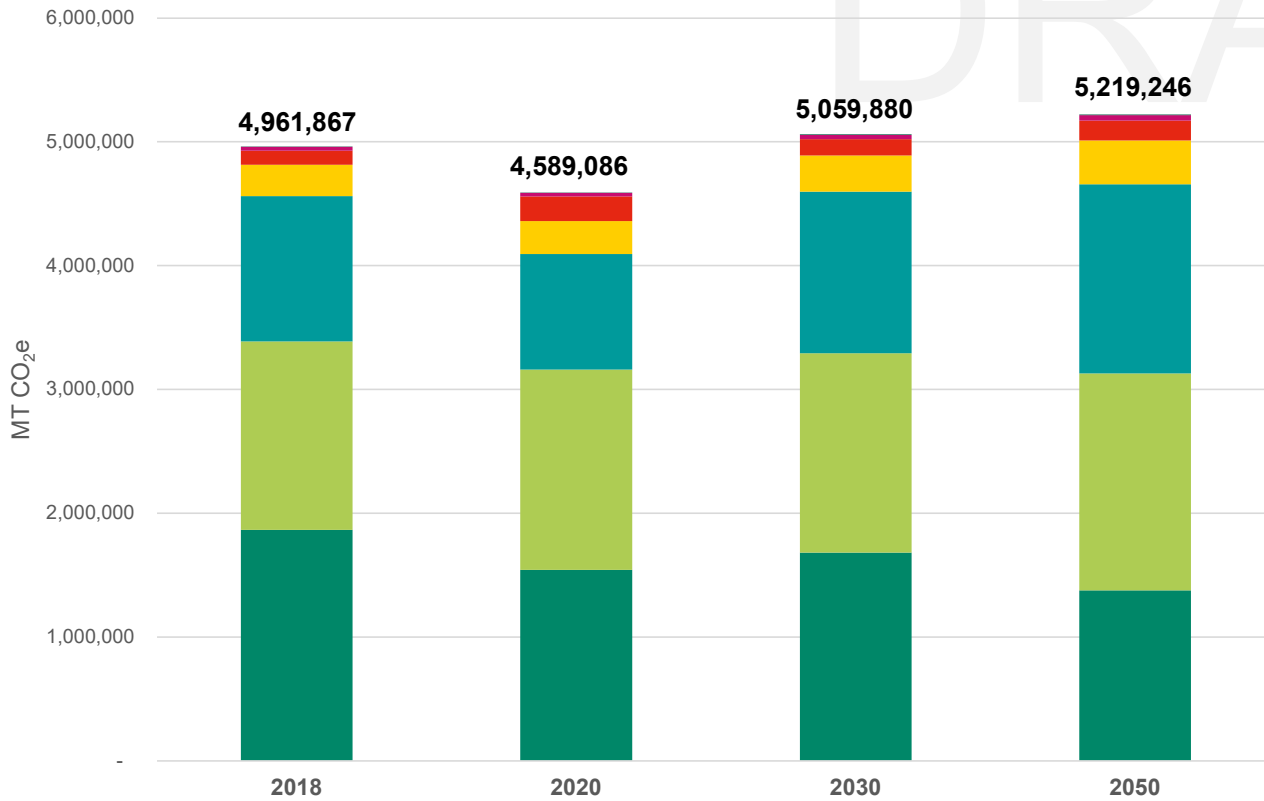


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# Emissions Forecasts

# Forecasts

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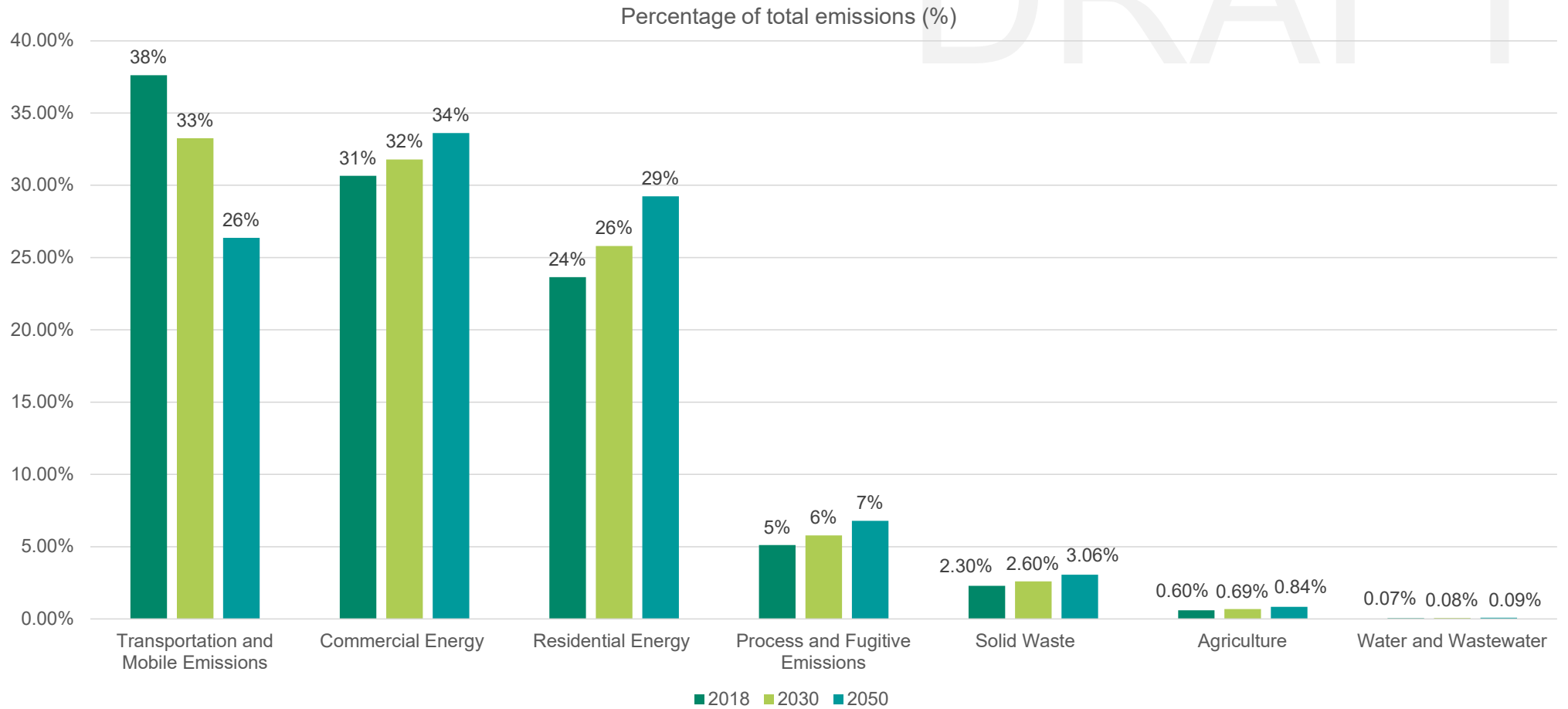


- Transportation and Mobile Emissions
- Commercial Energy
- Residential Energy
- Process and Fugitive Emissions
- Solid Waste
- Agriculture
- Water and Wastewater



# Forecasts

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# GHG Reduction Scenario Review

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# GHG Reduction Scenarios

## Scenario 1: 100% Clean Grid

- 100% clean electricity

## Scenario 2: RPS Grid + Buildings + Transportation

- Moderate amount of renewable electricity (per RPS 2030 target) + existing nuclear
- About half of passenger and medium-duty vehicles are ZEV
- All commercial and residential space heating systems are electric
- All residential hot water heating are electric

## Scenario 3: RPS Grid + Buildings + Transportation + Waste + Other

- Moderate amount of renewable electricity (per RPS 2030 target) + existing nuclear
- About half amount of HVAC systems are highly efficient and/or electric
- All high-efficiency lighting and appliances
- About half HFCs replaced with zero GWP alternatives
- About half passenger and medium-duty vehicles are ZEV
- Small amount of mode shift from passenger vehicles to active/public transport
- Less than half use of SAF in air travel
- Less than half ZEV off-road equipment
- Most waste diverted
- About half reduction in livestock

 National/Regional Actions (All Sectors)	 Solid Waste
 Private Building Energy	 Wastewater
 Municipal Building & Public Lighting	 Transportation
 Electricity Generation	
 Baseline Forecast	 Target Trajectory

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## Questions

### 1. GHG Reduction Scenarios

- Is there a preferred GHG reduction scenario that we should use for plan development based on the options presented?

### 2. Gaps and Opportunities

- In which sectors is the County limited in its authority to act?
- In which sectors do you think the County is already maximizing its efforts to reduce emissions?
- In which sectors does the County have the largest opportunity to enact mitigation policies?

### 3. Renewable Portfolio Standard

- Is Northern Virginia Electric Cooperative a Phase I or Phase II Utility per the RPS regulations? I.e., does it need to adhere to the 100% renewable power RPS by 2045 or 2050?

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**Thank you!**