



Instructions

The Goal:

The goal of this game is to work towards building a 2050 energy roadmap and to start visualizing Sitka's energy future. Throughout this game you will be implementing electrification goals and adding new generation as needed to meet your goals. The game works in 8 turns, each signifying a 3-year period. For each period you will have to chance to target electrification goals to design your ideal roadmap for Sitka's energy future. Each of these goals require generation, so along the way you will have to add more generation to the grid, but when you add it is up to you! You are the engineer, architect and policy maker in this exercise. Your only limits are the time and generation needed to accomplish your goals! Along the way there will be events to respond to, to simulate real world changes that are experienced in the community. Good luck and have fun!

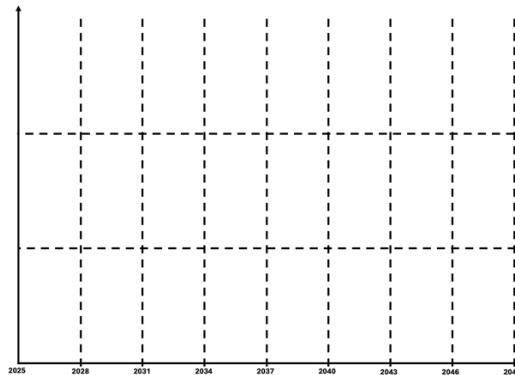
Step Up

To get started everyone needs the following:

- 1 Energy Roadmap
- 19 Goal Cards
- 13 Generation/Efficiency Cards
- 5 Blank Cards
- 6 Existing Generation Tokens
- 25 Renewable Tokens
- 15 Diesel Tokens
- 8 Event Cards

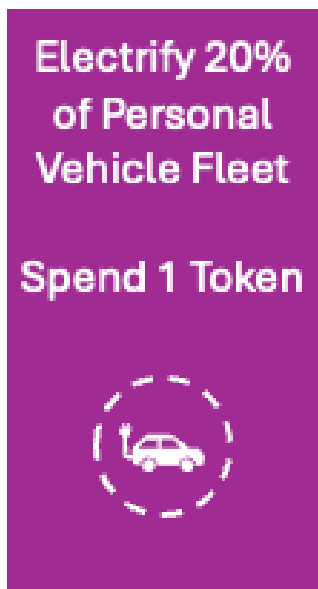
Energy Roadmap

The Energy Roadmap is the timeline on which you will build your energy future on throughout the game.



Goal Cards

The Goal Cards outline the possible electrification goals in this game. Each goal requires a certain amount of generation tokens and turns to complete. The required generation tokens are printed on the card and the width of the card determines the number of turns required. For some goals there are multiple of the same goal card, this is for goals that can be accomplished in smaller non-consecutive periods. For example, there are 5 Electrify Personal Vehicle Fleet cards. This is to show how some goals can be accomplished incrementally in small pieces. The fractions in the cards are aligned with the current state in Sitka, for example there are a lot of houses with electric heat already so there are fewer cards for Electrifying Residential Heat. Below is a table of all the cards, make sure you have the correct amount of each.



Goal	Count
Build a Commercial Composting Facility	2
Build New Energy Efficient Housing	1
Cruise Port Electrification	1
Electrify 10% of Residential Heating	2
Electrify 20% of Personal Vehicle Fleet	5
Electrify 50% of Commercial and Industrial Heat	2
Electrify 50% of Tour Buses	2
Electrify Public Transportation	1

Install Large Scale Hydroponic Garden	3
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Generation/Efficiency Cards

These cards will be played on the Energy Roadmap to create more generation needed to implement more goal cards. Different generation cards require different amounts of turns and you receive a different number of tokens. Cards that require more turns, generate more tokens. In addition to generation building, there are cards for housing efficiency which also generate tokens. Below a card which shows how many of each card you start with.



Generation/Efficiency Card	Count
Build Renewables – Generate 1 Token	5
Build Renewables – Generate 3 Tokens	4
Build Renewables – Generate 15 Token	1
Home Efficiency – Generate 2 Tokens	3

Existing Generation Tokens

To begin, you will be given 6 yellow tokens. These tokens represent the existing generation in Sitka available for new electrification goals. This generation comes from Hydropower on the Green and Blue Lakes. These are the only renewable energy tokens you will have to implement electrification goals until you build more on your energy roadmap.



Renewable Tokens

If you need more renewable energy to implement electrification goals, you will need renewable tokens. These green tokens are what is generated after playing build renewables or home efficiency on your energy roadmap.



Diesel Tokens

In additional to the 6 yellow existing generation tokens, you will start with 15 red diesel tokens. These tokens represent existing diesel capacity in Sitka. These tokens can be used the same as a

yellow existing token or a green renewable token, but they represent diesel generation. They can be played at any time and do not require a turn to generate like green tokens.



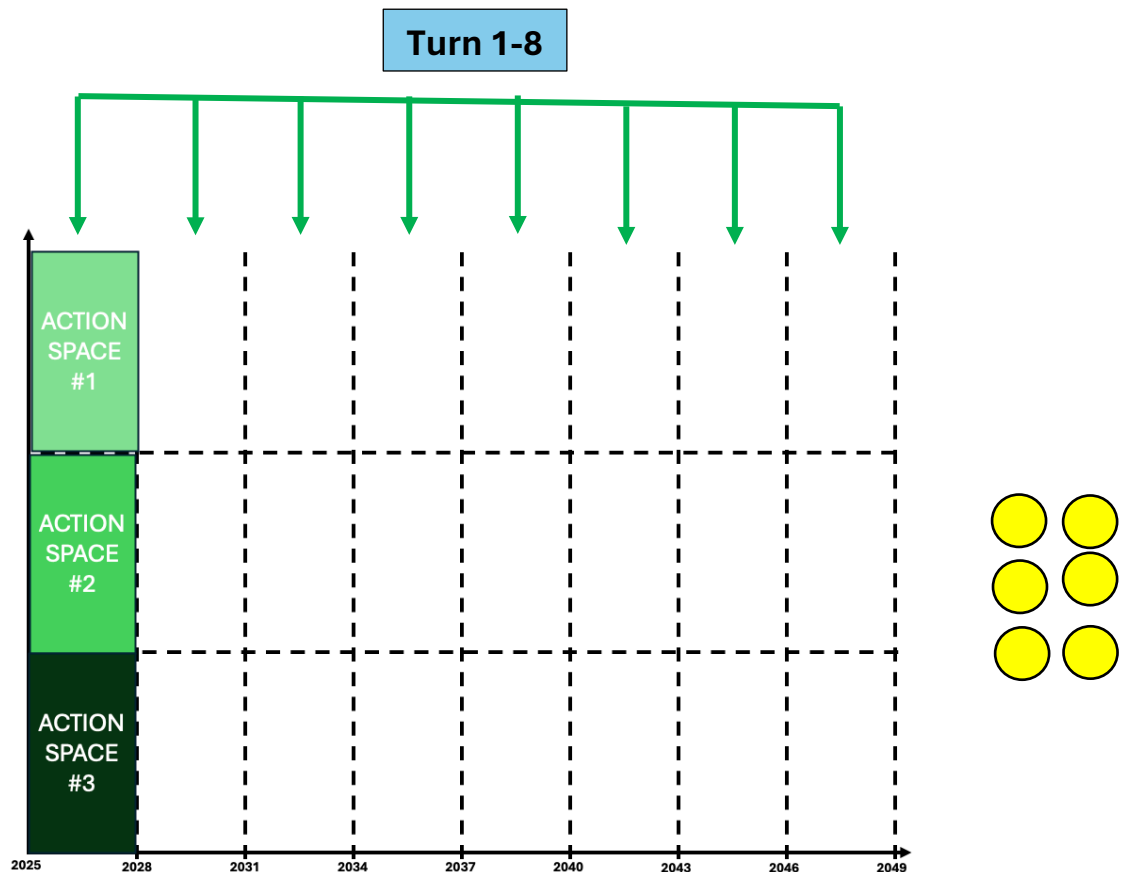
Event Cards

In this game, there are 8 Event Cards, each detailing a specific scenario or situation that you have to address. Following each turn, an Event Card is played. Some of these events will test your ability to adapt to changes, rewarding you with bonus points if you successfully navigate them. Other events offer new technology opportunities or set new objectives. It is important to note that you are not obligated to pursue every opportunity introduced by the Event Cards. An Event Card is a core game component that outlines distinct situations or tasks for players to address and decide upon.

Playing the Game:

Part 1 - Actions

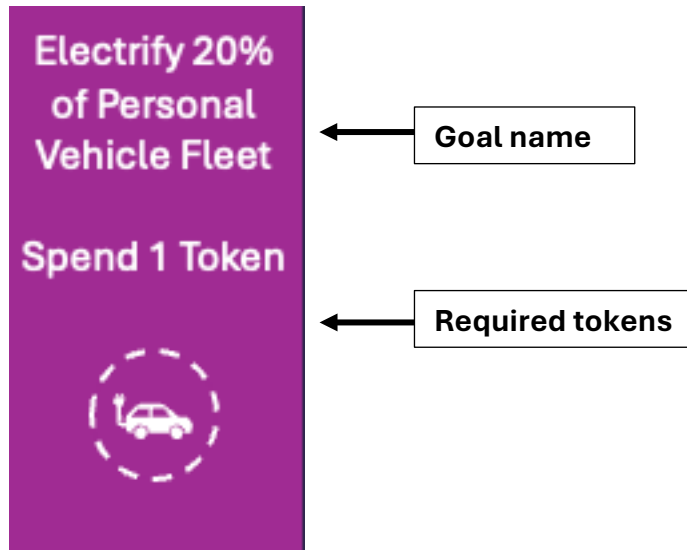
During the game there will be 8 turns, shown by the 8 columns on your Energy Roadmap. For each turn, you will be able to fill three action spaces, thereby completing 3 actions as illustrated by the rows on your Energy Roadmap.



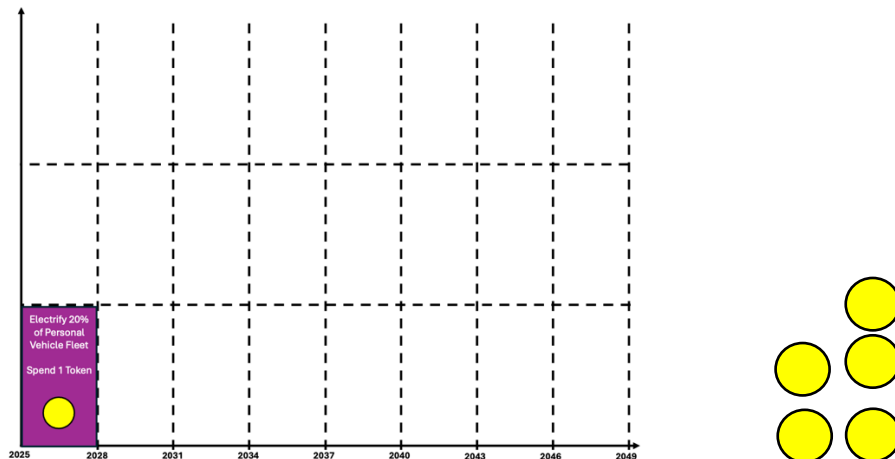
For each turn, there are three options for filling each of your action spaces: 1. Implement An Electrification Goal, 2. Add New Generation or 3. Blank. Below is an explanation of each action.

1. Implement An Electrification Goal

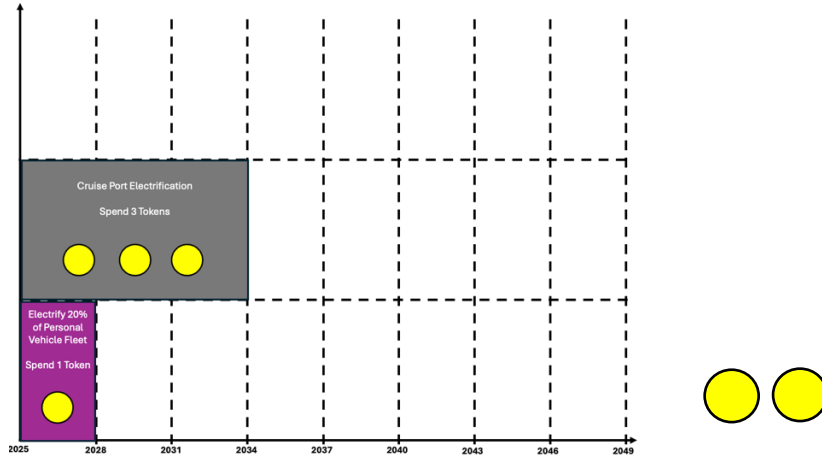
To implement an electrification goal, you will play the goal in an action space. Each goal requires a certain number of generation tokens, which is indicated on the card.



To start you will be given 6 existing generation tokens (yellow), which represent the current generation available in Sitka. You can gain more generation tokens by Adding New Generation, as described below. If at any point you want to implement a goal but don't have sufficient generation tokens, you can use diesel tokens (red).

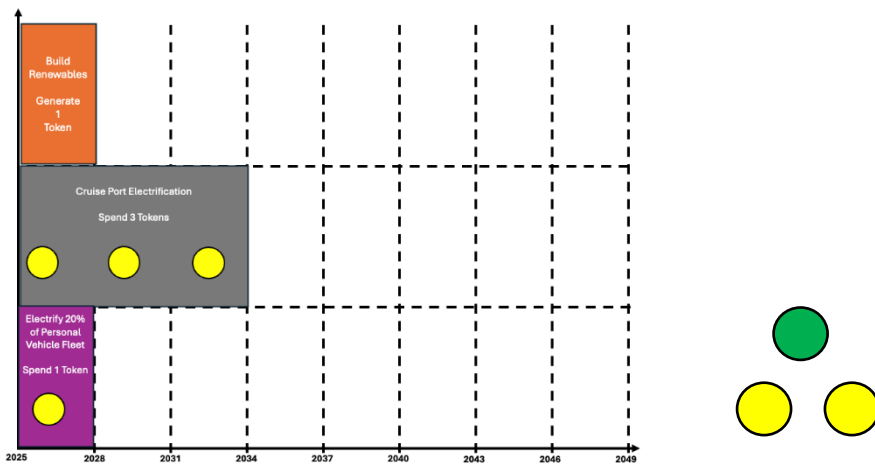


Some goals require more than one turn, so they will block action spaces in future turns.



2. Add New Generation or Home Efficiency

To increase the number of available generation tokens that you have, you will need to Add New Generation or Home Efficiency. There are 4 different kinds of generation and efficiency cards, each take a different number of turns or produce a different number of tokens. Once you place the generation card in the action space, you can collect the at the end of the generations final turn. For example, if the generation card only requires 1 turn, then you collect the tokens at the end of the turn. If the generation card requires 2 turns, you collect the tokens after the second turn.



3. Blank

If at any turn you don't want to implement a goal or add new generation/efficiency you can place a Blank card in the action space. This is essentially just skipping that action space so you can move on the next turn.

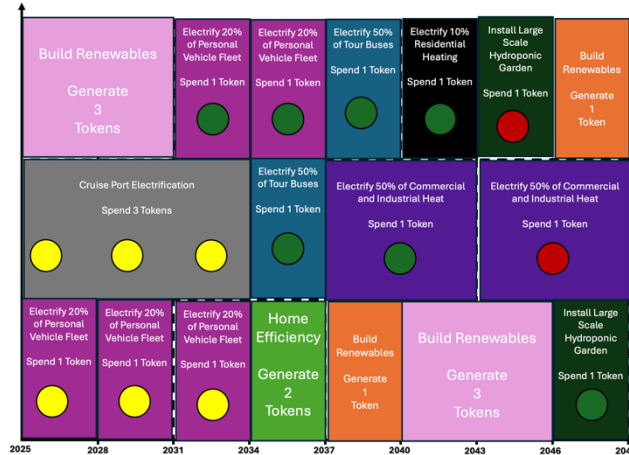
Part 2 – Event Cards

At the end of each turn, you will draw an event card. Each event card is label 1-8 and should be played in order. For example, Event Card #1 is drawn after you first turn. Each event card describes an event or scenario that you need to respond to. Some events will require you to be able to adapt to changes, and if you are able to adapt you are given bonus points. Other events present new

technology opportunities or goals. You are not required to take every new opportunity presented by the Event Cards.

End of the Game

The game is complete after you play your final turn and draw the final event card. At the end of the game your Energy Roadmap should be filled, if there are any empty action spaces fill them with the BLANK cards. Below is an example of a completed mat. Once your mat is complete, it's time to add up the points. In this game there are two ways to earn points: 1. Implementing Goals and 2. Responding to Events.



1. Implementing Goals

Points for Implementing Goals are counted based on the number of turns a goal required with 1 Turn = 1 Point. Below is a chart of all the goals and their point values. Add up the points for all the goals you were able to implement.

Goal	Points
Build a Commercial Composting Facility	2
Build New Energy Efficient Housing	3
Cruise Port Electrification	3
Electrify 10% of Residential Heating	1
Electrify 20% of Personal Vehicle Fleet	1
Electrify 50% of Commercial and Industrial Heat	2
Electrify 50% of Tour Buses	1
Electrify Public Transportation	2
Install Large Scale Hydroponic Garden	1

2. Responding to Events

Being able to respond to certain event cards earned you bonus points. These are added on top of the points gained by implementing goals. The chart below summarizes the event cards that gave bonuses and the associated points.

Event	Points
Low Water Year	2
New Aviation Policy	2

Final point total is the sum of points from Implementing Goals and Responding to Event

$$\text{Point Total} = \text{Points from Goals} + \text{Event Card Bonus Points}$$