



FOREVER PROJECT

BUILDING A SUSTAINABLE TOMORROW

2030 **MASTER PLAN**

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MESSAGE FROM OUR CEO

Dear Team Members and Friends,

Our 75-year journey as a resort company defines and demonstrates a heritage of stewardship, leadership, creativity, and innovation. Today, as Boyne Resorts endeavors to transform the North American four-season resort experience, we must also aim to help lead our industry and communities toward a sustainable tomorrow, ensuring our next 75 years and future generations are afforded the same quality of life we have and that our resorts represent. It is with this backdrop that we launched our ForeverProject.

The ForeverProject Master Plan will guide us in this mission and reflects our culture of embracing new technologies and ways of doing business. The Plan outlines efforts necessary to reach our aggressive net zero carbon emissions by 2030 goal and supports our commitment to be a leader in sustainable business practices. It is important that each of us embrace the guidance it provides. This will not only increase the likelihood of achieving these goals ourselves, it will also help inform, motivate and educate others in this critical effort. Mitigating the impacts of climate change is a responsibility each of us carries and can be accomplished together as individuals and as a company, nation, and united world.

Your contributions to our recent progress are greatly appreciated and I am hopeful you will be a proud advocate and supporter of these important efforts at work and in your communities.

Sincerely,



Stephen Kircher
President and CEO Boyne Resorts



ACKNOWLEDGEMENTS

Achieving Boyne Resorts' ForeverProject goals requires action and collaboration throughout our operations, commensurate with the scale of the challenge ahead. Our commitment to collaboration is reflected in the creation of this plan, which incorporates coordinated input from representatives at each resort, alongside that of corporate leadership.

Many thanks go to all who contributed to this plan and will continue to bring it to life in the coming years as we work together to build a more sustainable tomorrow.

FOREVERPROJECT MASTER PLAN LEADERSHIP TEAM

Special thanks to the core team that tirelessly led the development of Boyne Resorts' ForeverProject Master Plan:

Amy Fonte, Big Sky Resort
Brad Keen, Boyne Resorts
Mari Kissinger, The Highlands

Taylor Middleton, Boyne Resorts
Jay Scambio, Boyne Resorts

Input from each resort team and our corporate team was critical to the creation of a plan that will guide action in every area of our operations. Many thanks to those who provided support and encouragement throughout the development process:

Roland Andreasson, Boyne Resorts
Julie Ard, Boyne Resorts
Frederic Barbier, Boyne Resorts
Dan Beeler, Boyne Resorts
Mac Bevier, Loon Mountain
Mike Chumbler, The Highlands
Aaron Clark, Boyne Mountain
Keith Collins, Boyne Resorts
Jeremy Cooper, Boyne Resorts
Michael Costello, Inn at Bay Harbor
Jenn Dickie, Cypress Mountain
Mike Doyle, Jr., Brighton Resort
Bernie Fredrich, Boyne Resorts
Ed Grice, Boyne Mountain
Brian Heon, Sunday River
Nick Herrin, Boyne Resorts
Beatrice Johnson, Sugarloaf
Stephen Kircher, Boyne Resorts

Nick Lambert, Boyne Resorts
Tara Lauder, The Summit at Snoqualmie
Guy Lawrence, The Summit at Snoqualmie
Abby Layton, Brighton Resort
Ralph Lewis, Pleasant Mountain
Nate Maclure, Pleasant Mountain
Kate Matthews, Sunday River
Troy Nedved, Big Sky Resort
Brian Norton, Loon Mountain
Jason Perl, Boyne Mountain
Josh Richter, Boyne Resorts
Barb Rooney, Boyne Resorts
Brendan Ryan, Boyne Resorts
Karl Strand, Sugarloaf
Bob Turner, Boyne Resorts
Mike Unruh, Boyne Resorts
Randy Watson, Gatlinburg SkyLift Park
Cathy Witherspoon, Boyne Resorts

BRENDLE GROUP CONSULTANT TEAM

Imogen Ainsworth, Master Plan Lead
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Modeling





BOYNE RESORTS 2030 MASTER PLAN EXECUTIVE SUMMARY



FOREVERPROJECT
BUILDING A SUSTAINABLE TOMORROW

Throughout our 75-year history, Boyne Resorts has created a legacy of environmental stewardship and conservation. From patenting our highly efficient snowmaking equipment nearly 50 years ago to achieving 100% clean electricity across our operations in 2021, we are mindful in prioritizing creative and innovative initiatives to protect, preserve, and sustain the land on which we depend.

While we are proud of our progress, we know that the next few years will be the most important yet if we are to mitigate impacts of the global climate crisis we currently face. Acknowledging our responsibility to do everything in our power to leave a positive legacy for future generations, Boyne Resorts is committed to achieving **net zero greenhouse gas emissions across our operations by 2030**.

The ForeverProject Master Plan was developed to provide an understanding of what it will take to get there.

Through engagement with staff and leadership, a significant amount of data and detail was gathered to help quantify the magnitude of the challenge ahead and begin to identify the actions and investments necessary to reach our shared goal. This plan charts a pathway that enables us to reduce our carbon footprint while balancing environmental and economic sustainability.

GOALS

NET ZERO EMISSIONS

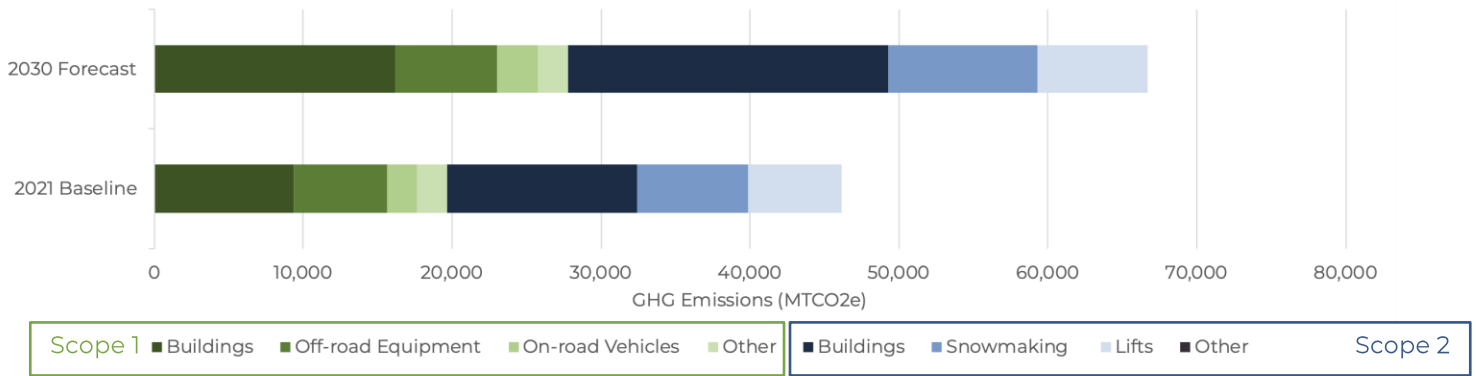
Boyne Resorts is committed to a goal of reducing carbon emissions to net zero throughout our North American operations by 2030.

100% CLEAN ELECTRICITY

An important step in reaching our net zero carbon emissions goal is to power all resorts and facilities with 100 percent clean electric energy.

OUR EMISSIONS TODAY AND IN 2030

To map a pathway to net zero emissions, we first needed to understand our current emissions and future trajectory.

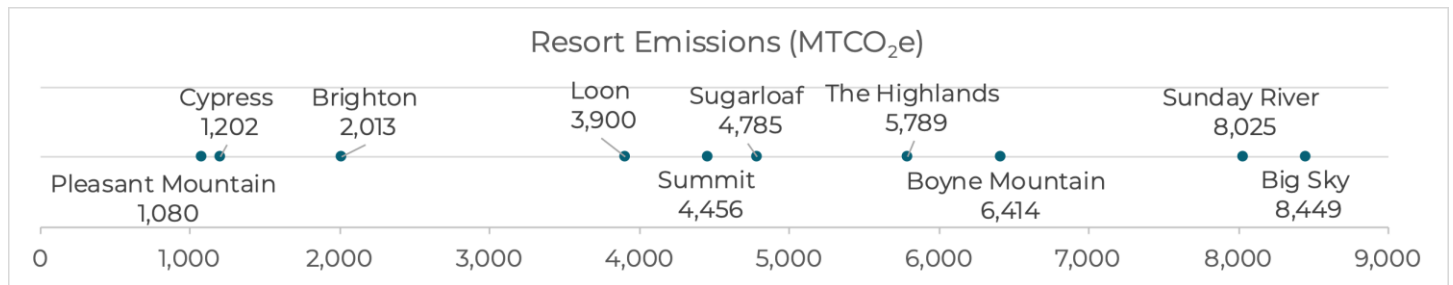


Boyne Resorts FY 2020-21 Baseline and FY 2029-30 “Business-as-Usual” Greenhouse Gas Emissions Forecast

Our company-wide fuel and electricity emissions (Scopes 1 and 2) for financial year 2020-21 was calculated. We then developed a 2030 “Business-As-Usual” emissions forecast for financial year 2029-30 that accounts for anticipated growth in terrain, buildings, lifts, snowmaking, and annual visitation at each resort. Without swift and ambitious action, Boyne Resorts’ total emissions could rise by 45% within the next seven years.

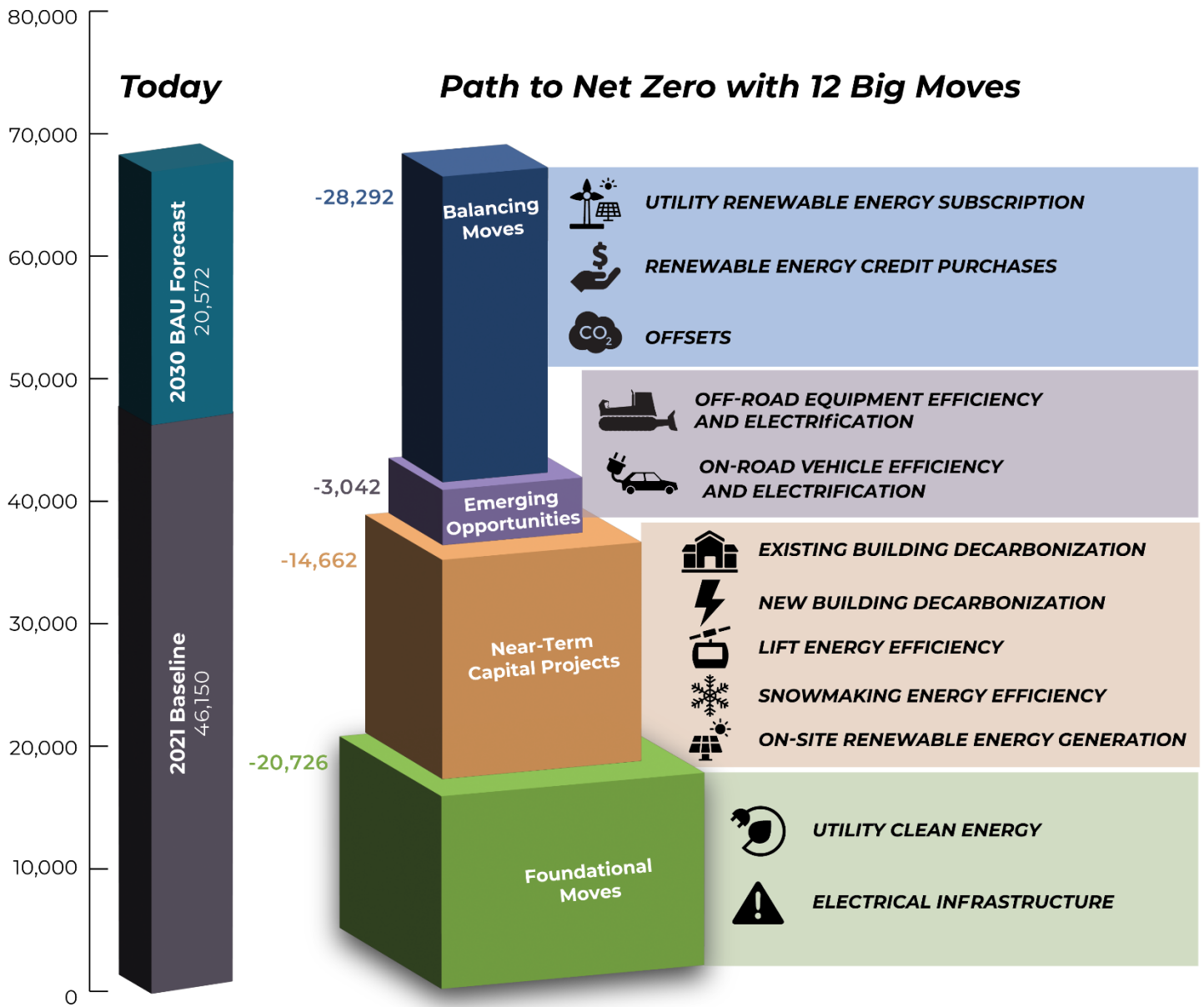
RESORT-SPECIFIC EMISSIONS

Recognizing the unique characteristics of each of our resorts, individual emissions inventories and forecasts were created to inform the development of resort-specific pathways and action plans. The chart below summarizes total emissions by resort.



PATHWAY TO NET ZERO EMISSIONS

Twelve high-impact actions were identified that cumulatively will propel us forward in the pursuit of our aggressive, yet attainable net zero emissions and 100% clean electricity goals. These actions are Boyne Resorts' Big Moves and they represent our commitment to unprecedented collaboration and progress on climate action across our operations.



The ForeverProject Master Plan defines a clear and strategic pathway with immediate, and short- and medium-term action steps identified for each Big Move. The plan also highlights staffing considerations along with opportunities for corporate leadership and support for resort-scale projects and initiatives.

In bringing our Big Moves to life, we are not only reducing our carbon footprint, we are realizing utility bill and maintenance cost savings, improved health and safety, and an enhanced resort experience for team members and guests.

Boyer Resorts is committed to continuing our current climate investment and ramping our level of investment to meet the scale of the challenge ahead. In addition, we recognize the importance of leveraging external funding to further accelerate our pathway to net zero.



Photo from Big Sky Resort lift operations



Photo from The Highlands summer activities

As we move forward with implementation, diligent tracking and consistent reporting on our progress can be expected. Annual reporting and bi-annual modeling updates for NSAA's Climate Challenge is also a source of progress measurement. Tracking includes evaluating how our Big Moves are playing out on the ground and is key to being prepared to adjust our course of action, if needed.

Finally, we are excited about the opportunities for partnership that this ForeverProject Master Plan creates. We

are not alone in this journey and look forward to collaborating with industry peers and local partners at each of our resorts to realize our goals over the next critical seven years.

“Greatness is not a function of circumstance. Greatness, it turns out, is largely a matter of choice and conscious discipline.”

– Jim Collins

RESORT PROFILES

Our Boyne Resorts ForeverProject Master Plan describes twelve Big Moves to meet our net zero carbon emissions goal by 2030. While this effort requires company-wide planning and action, each resort's attraction, and division is unique, requiring a customized approach. This section of the Master Plan includes resort-specific analysis and dedicated profiles outlining each property's unique pathway to net zero (Figure 11).

These profiles were developed using data provided by each property, input received during planning workshops, and additional context provided through internal surveys.

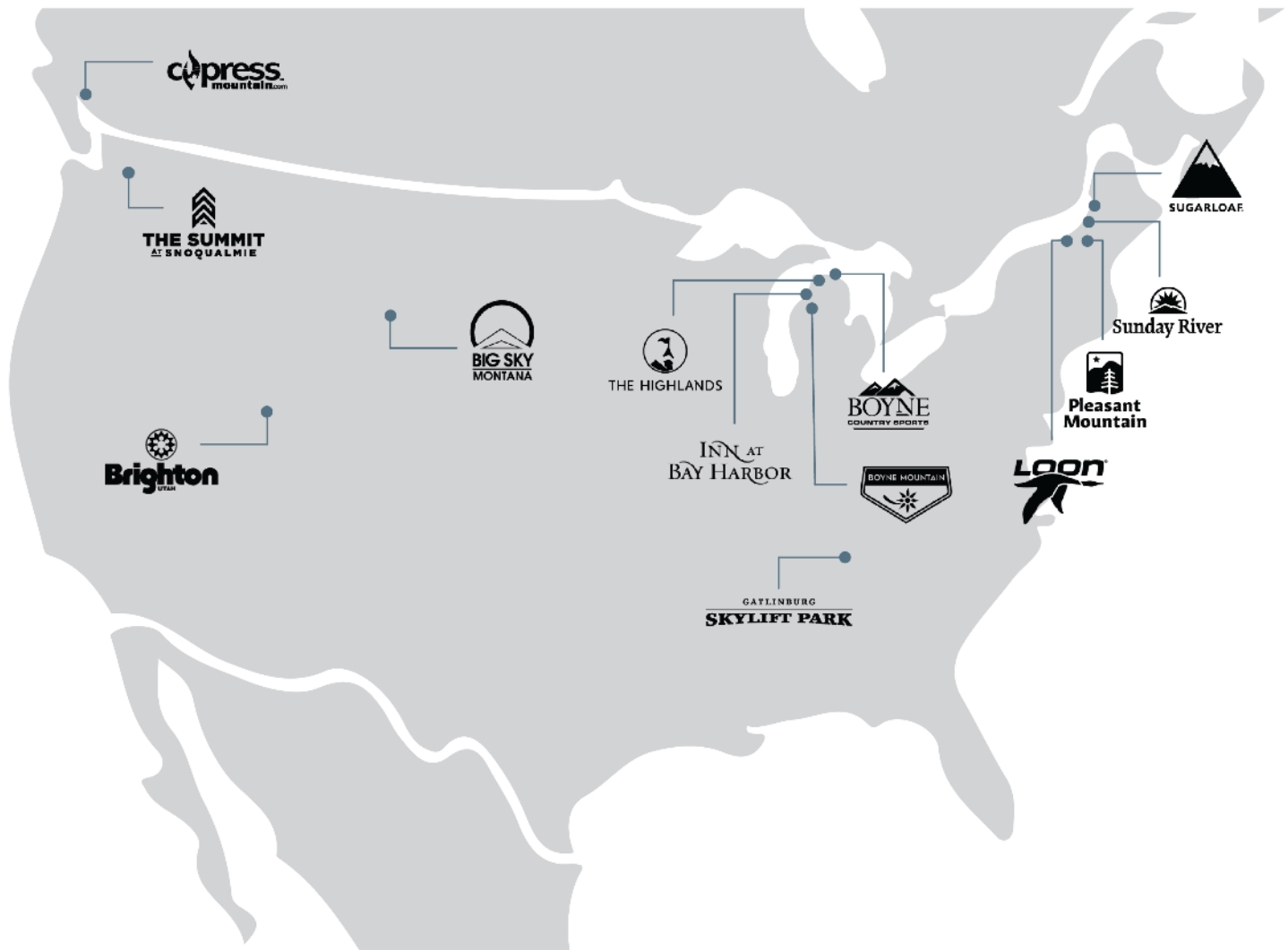
















Figure 11. Boyne Resorts Properties



NET ZERO EMISSIONS AT EACH BOYNE RESORTS PROPERTY

Due to the unique characteristics of properties, we developed an emissions inventory, a 2030 forecast, and an individual Net Zero Pathway for each one.

Property Name	FY 2020-21 Baseline (% of company-wide total)	FY 2029-30 Forecast (% of company-wide total)	Foundational Moves	Near-Term Capital Projects	Emerging Opportunities	Balancing Moves
 Big Sky Resort	8,449 MTCO ₂ e (18%)	20,450 MTCO ₂ e (31%)	12%	18%	2%	67%
 Sunday River Resort	8,025 MTCO ₂ e (17%)	9,393 MTCO ₂ e (14%)	46%	19%	5%	31%
 Boyne Mountain Resort	6,414 MTCO ₂ e (14%)	7,074 MTCO ₂ e (11%)	40%	29%	1%	31%
 The Highlands	5,789 MTCO ₂ e (13%)	7,757 MTCO ₂ e (12%)	33%	44%	3%	20%
 Sugarloaf	4,785 MTCO ₂ e (10%)	6,097 MTCO ₂ e (9%)	42%	21%	9%	29%
 The Summit at Snoqualmie	4,456 MTCO ₂ e (10%)	5,310 MTCO ₂ e (8%)	51%	18%	5%	26%
 Loon Mountain Resort	3,900 MTCO ₂ e (8%)	5,413 MTCO ₂ e (8%)	47%	14%	3%	36%
 Brighton Resort	2,013 MTCO ₂ e (4%)	2,489 MTCO ₂ e (4%)	15%	13%	12%	59%
 Cypress Mountain	1,202 MTCO ₂ e (3%)	1,588 MTCO ₂ e (2%)	0%	15%	25%	59%
 Pleasant Mountain	1,080 MTCO ₂ e (2%)	1,114 MTCO ₂ e (2%)	39%	9%	15%	37%
 Gatlinburg SkyLift Park	37 MTCO ₂ e (<1%)	37 MTCO ₂ e (<1%)	12%	48%	0%	41%
 Inn at Bay Harbor	<i>Data not finalized at time of plan development</i>					
 Boyne Country Sports	<i>Data not finalized at time of plan development</i>					
 Corporate Facilities	<i>Data not finalized at time of plan development</i>					
Total	46,150	66,722	31%	21%	4%	44%



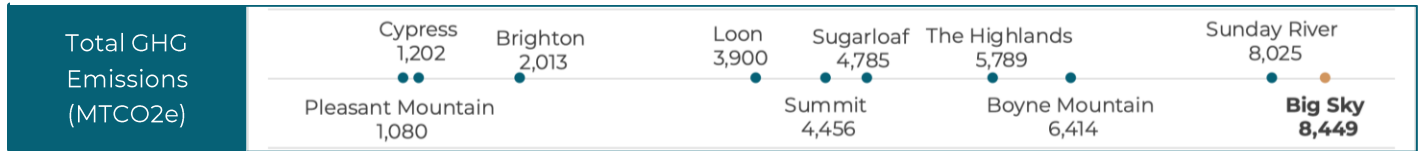
BIG SKY RESORT

2030 NET ZERO EMISSIONS PLAN

Big Sky Resort’s 2030 Net Zero Emissions Plan supports Boyne Resorts’ commitments to 100% clean electricity and net zero greenhouse gas emissions by 2030. It is based on specific conditions and opportunities at Big Sky Resort, located in Big Sky, Montana.

Big Sky Resort is the largest GHG emitter among Boyne Resorts’ portfolio but is below its average for emissions per ski and summer visitor.

RESORT EMISSIONS COMPARISON (FY 2020-21 BASELINE)



This plan provides the specifics of Big Sky Resort’s journey to net zero emissions including:

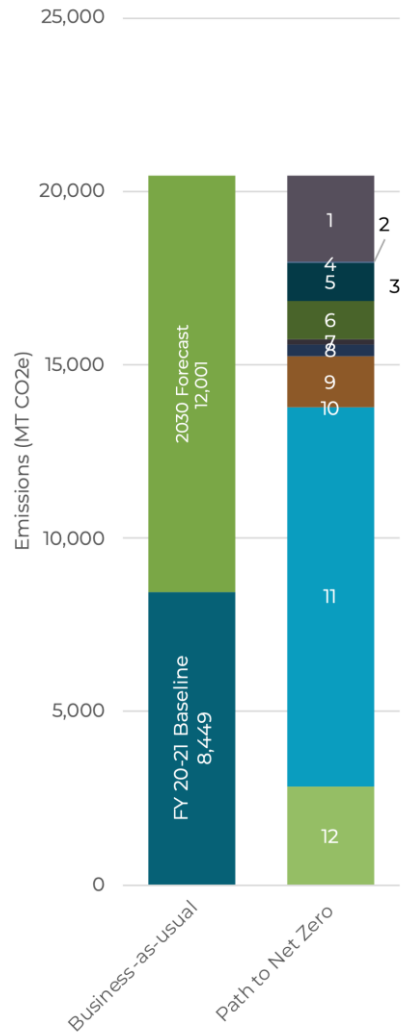
- Breakdown of energy use and GHG emissions by Scope, fuel type, and operations in baseline year FY 2020-21 and forecasted for FY 2029-30
- General factors and performance metrics influencing Big Sky Resort’s journey to net zero emissions
- Big Moves and their individual contributions to GHG reductions
- Short-term implementation priorities, project highlights, and community partnership opportunities



Project Highlights

- Implemented several energy efficiency upgrades during the renovation of Summit Hotel and Huntley Lodge including installation of high-efficiency LED lighting, upgraded HVAC systems with smart controls, thermostats with occupancy sensors, and low-flow water fixtures
- Installed a new all-electric pool dehumidifier with a heat recapture system for exhaust air at Whitewater Inn to replace the propane air handler
- A planned 32kW solar array on the new manager housing project, Levinsky Lodge will produce 39,000 kWh annually

PATHWAY TO NET ZERO



Big Move		2030 Performance Target	Annual Savings Starting in 2030
1	Utility Clean Energy	✓ Emissions factor: 0.255 MTCO2e/MWh	2,494 MTCO2e (12%)
2	Electrical Infrastructure	✓ 0.1% savings of off-road diesel	3 MTCO2e (<1%)
3	Lift Energy Efficiency	✓ n/a	n/a
4	Snowmaking Energy Efficiency	✓ n/a	n/a
5	Existing Building Decarbonization	✓ 30% energy use reduction ✓ 58% fossil fuel energy use electrified	1,119 MTCO2e (5%)
6	New Building Decarbonization	✓ Average EUI of new buildings: 113 kBtu/sq. ft. ✓ Electrify 85% of typical fossil fuel use	1,103 MTCO2e (5%)
7	Off-Road Equipment Efficiency & Electrification	✓ 15% off-road diesel use reduction	151 MTCO2e (<1%)
8	On-Road Vehicle Efficiency & Electrification	✓ 82% on-road gasoline use reduction ✓ No on-road diesel use	324 MTCO2e (2%)
9	On-Site Renewable Energy Generation	✓ 1.54 MW on-site solar PV	1,489 MTCO2e (7%)
10	Utility Renewable Energy Subscription	✓ No utility subscriptions	n/a
11	REC Purchases	✓ RECs purchased to cover 14,968 MWh of electricity use	10,919 MTCO2e (53%)
12	Offset Purchases	✓ Purchase offsets to cover remaining Scope 1 emissions	2,847 (14%)
Total Impact:			20,450 MTCO2e (100%)¹

¹ Percentages may not add up to 100% due to rounding.



ENERGY USE BASELINE AND BUSINESS-AS-USUAL FORECAST

For Boyne Resorts’ net zero goal, Scope 1 and 2 emissions are considered. Scope 1 emissions result from on-site combustion of fossil fuels to heat buildings and fuel vehicles and equipment, and also from direct release of greenhouse gases from refrigerants used in cooling equipment. Scope 2 emissions account for the emissions released during generation of electricity that is consumed on site. In FY 2020-21, Big Sky Resort’s energy use was 103,511 MMBtu in total. The breakout of energy usage by end use is shown below, along with projected energy use if Big Sky Resort continues business as usual.

KEY RESORT CHARACTERISTICS

STATE (CLIMATE ZONE): Montana (6)

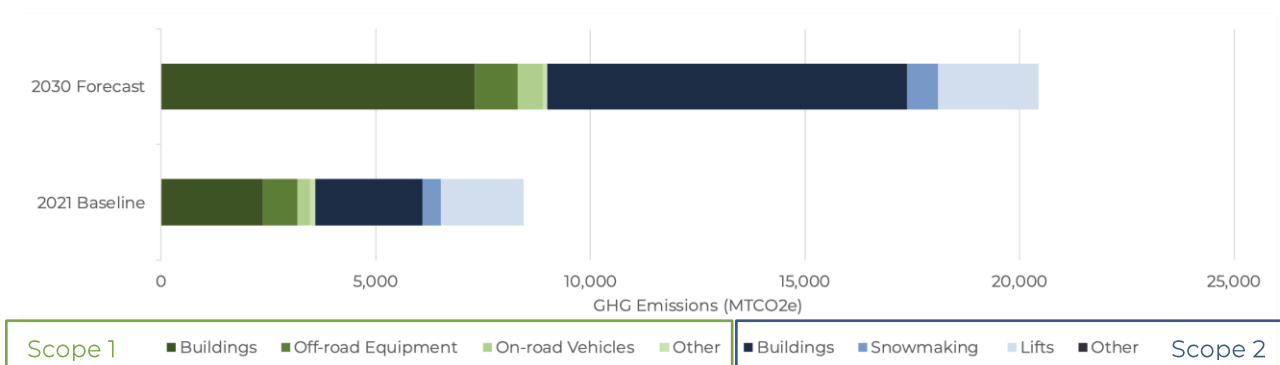
ELECTRIC UTILITY: NorthWestern Energy

NEW BUILDING ENERGY CODE: IECC 2021

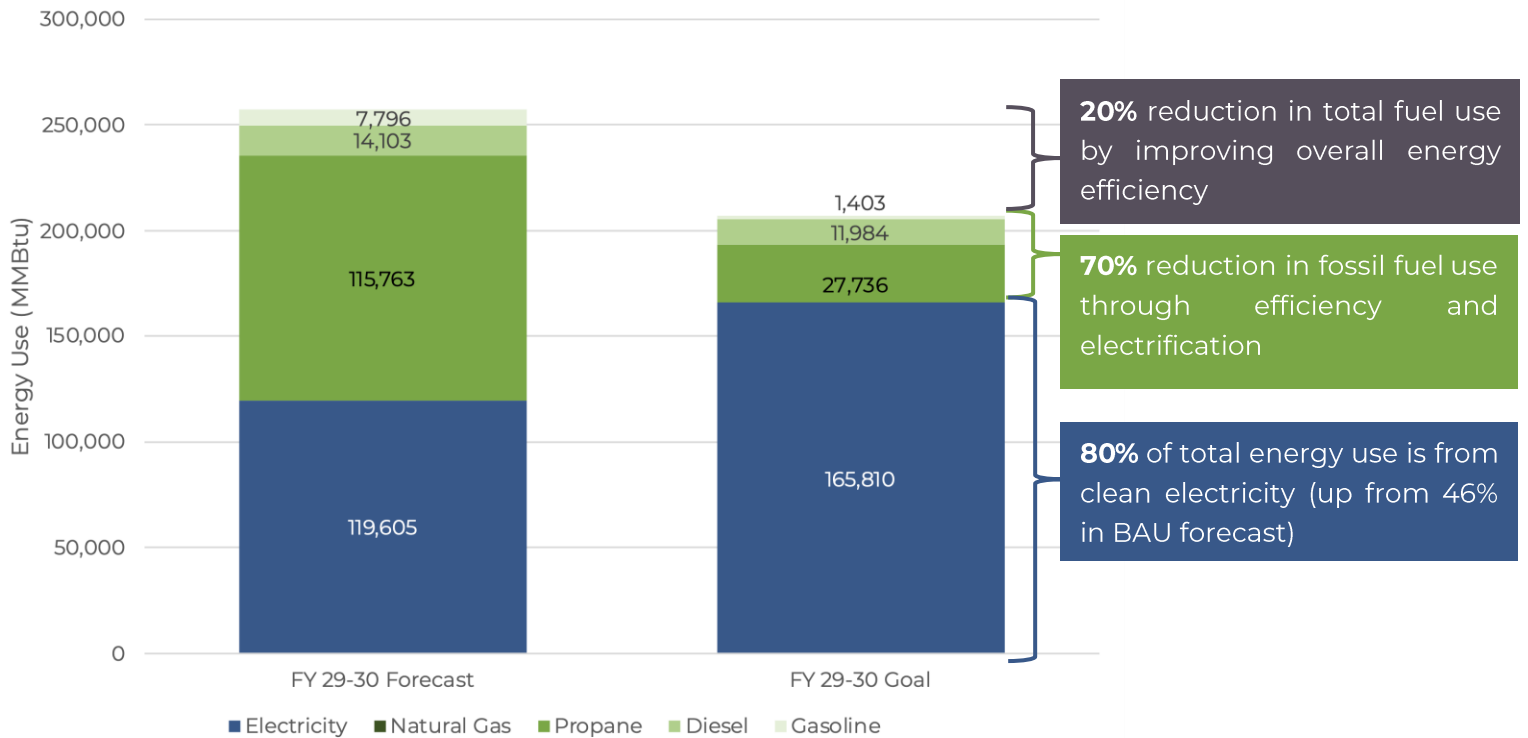
	Fuel	End Use	FY 2020-21 Baseline Use	FY 2029-30 Forecasted Use
Scope 1	Natural Gas	Buildings	0 therms	0 therms
	Propane	Buildings	412,251 gallons	1,272,119 gallons
	Diesel	Off-Road Equipment	80,377 gallons	99,328 gallons
	Diesel	On-Road Vehicles	1,730 gallons	2,360 gallons
	Gasoline	On-Road Vehicles	30,847 gallons	62,368 gallons
Scope 2	Electricity	Buildings	7,669 MWh	25,665 MWh
	Electricity	Lifts	5,909 MWh	7,169 MWh
	Electricity	Snowmaking	1,297 MWh	2,219 MWh

EMISSIONS BASELINE AND BUSINESS-AS-USUAL FORECAST

The graph below shows current GHG emissions (8,449 MTCO₂e) at Big Sky Resort by Scope, as well as the projected emissions in 2030 (20,450 MTCO₂e) if no steps are taken to mitigate emissions.



To reach net zero by 2030, Big Sky Resort will need to transform the energy used on site, transitioning from fossil fuel use to clean electricity. The total energy system transformation and some key characteristics of this transformation are shown below:



KEY RESORT CONSIDERATIONS

- Several boilers are approaching end of life, presenting opportunities for electrification
- Opportunity for improvements in efficiency and automation in the Yellowstone Conference Center and Huntley Dining Room
- With homeowners’ associations (HOAs) at hotels, each HOA board of directors must approve any upgrades and efficiency improvements
- Limited to 50kW net metered solar per service address, according to state regulations

KEY PARTNERS

- Collaborating with [Big Sky Sustainability Network Organization](#) (SNO) on a community Climate Action Plan and ongoing projects related to transportation, waste reduction, building efficiency, green energy, and carbon sequestration
- Completed two stream restoration projects with the Gallatin River Task Force to preserve the Gallatin River along the Big Sky golf course and restore the wetland habitat downstream from Lake Levinsky



ADDITIONAL INFORMATION

We invite you to read the full [Boyne Resorts ForeverProject 2030 Master Plan](#), which can be found on the Boyne Resorts sustainability webpage, to learn more about the following:

ForeverProject: Our Commitment to Building a Sustainable Tomorrow

Goals

Objectives

NSAA Climate Challenge and Sustainable Slopes

Mountain Collaborative for Climate Action

Company-Wide Master Plan

A Look Back and Ahead

Greenhouse Gas Emissions Profile and Forecast

Boyne Resorts Big Moves

- Foundational Big Moves
- Near-Term Capital Projects
- Emerging Opportunities
- Balancing Moves

Other Property Profiles

Boyne Country Sports

Boyne Mountain Resort

Brighton Resort

Cypress Mountain

Gatlinburg SkyLift Park

Inn at Bay Harbor

Loon Mountain Resort

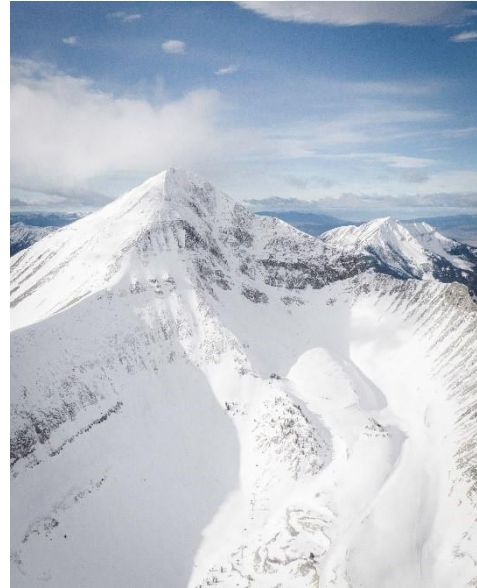
Pleasant Mountain

Sugarloaf

Sunday River Resort

The Highlands

The Summit at Snoqualmie



For more information about specific sustainability initiatives at Big Sky Resort, visit our Big Sky Resort ForeverProject webpage:

www.bigskyresort.com/sustainability

If you have questions, please contact sustainability@bigskyresort.com





Building a sustainable tomorrow by
positively affecting the lasting implications
our resorts, team members, and guests
have on the planet.