

Project Greenhouse Gas Emissions and Reductions Summary - New Wineries

The Napa County Climate Action Plan requires that staff calculate for all projects the GHG emissions in 2020 of all discretionary projects assuming "business as usual" (BAU) conditions, and that applicants reduce those emissions by 38%. The required 38% reduction in GHG emissions can be achieved through a combination of state level policies and programs, County level policies and programs, on-site project level actions and contributions to the Napa County GHG reduction fund. This sheet contains results of calculations completed to demonstrate that the project has achieved the required 38% reduction target in 2020.

Project Name:	B Cellars P 12-00371	Target Build-Out Year:	2020
Project Summary	new 45,000 gallon per year winery with: A 5,989 s.f. production building, 2,057 s.f. tasting room, & 22,950 s.f. caves, 13FTE s; 294,840 sf hardscape; 25 average T&T; 860 pp/yr. marketing events.		

(MT CO₂e)

A. PROJECT'S BAU EMISSIONS IN 2020

Energy Use, Mobile, Area, Water and Wastewater, Solid Waste
Fugitive Emissions from Winery Wastewater if applicable
Land Use Change (one time loss in carbon stock + loss in sequestration)

224
208
15
1

B. PROJECT'S TARGET EMISSIONS IN 2020

62% of BAU Emissions (BAU - 38%)

139

C. PROJECT'S TARGET EMISSIONS REDUCTIONS IN 2020

BAU Emissions - Target Emissions (A-B)

85

D. GHG REDUCTIONS FROM STATE LEVEL PROGRAMS

Energy
Mobile
Other
Land Use Change

19
10
9
TBD
-

E. GHG REDUCTIONS FROM LOCAL PROGRAMS AND PROJECT LEVEL ACTIONS

Energy
Mobile
Other

25
25
-
-
0.70

Total Stock at 100 years (Reference): 69.74

Land Use Change

G. TOTAL GHG REDUCTIONS IDENTIFIED

State + Local + Project (D + E); Compare to Box C above

44

H. PURCHASED IN THE NAPA GHG REDUCTION BANK

Balance of reductions needed to reach target (C-G)

41



Data Requirement of Operational Characteristics for Residential, Commercial, or Industrial Projects

The Napa County Climate Action Plan requires that staff calculate the GHG emissions of all discretionary projects assuming "business as usual" (BAU), and that applicants reduce those emissions by 38%. This checklist identifies the data needed to complete the required calculations and allows applicants to select the emissions reduction measures they wish to use. Applicants may retain consultants to prepare their own calculations if desired. Default calculations will be based on the URBEMIS and Bay Area Air Quality Management District's BGM model, as well as standard factors for vegetation removal and retention/replacement.

Contact Information:

Name of project:	B Cellars Winery
Project address & APN:	701 Oakville Cross Road 031-070-026
Project contact name:	Harry (Duffy) Keys
Project contact e/mail:	duffykeys@bcellars.com
Project contact phone:	(858) 756-5614

Part A: Business As Usual (BAU)

1. Input for new construction or operations (or change in land use type)

Land Use Type	Square Feet	# of Units	Total Daily Trips	# of employees
Dwelling unit				
Warehouse				
Light Industrial (Wine Production)	5,989	1	29	11
Tasting Room	2,057	1	6	2
Retail				
Office				
Other (please explain):				
<i>Total</i>	<i>8046</i>	<i>2</i>	<i>35</i>	<i>13</i>

Refer to Table 3-1 of the BAAQMD CEQA Guidelines (2011) for other precursor screening levels

2. Site Development

Removal (One Time Emissions)	Acres removed	Acres planted
Vegetation type		
Coniferous Forest	0	
Oak Woodland	0	
Riparian Woodland	0	
Shrub	0	
Vineyard	0.18	
<i>Total acres of land</i>	<i>0.18</i>	
New Site Improvements	Amount	Unit
Caves	22,950	Square feet
Grading	254,330	Square feet
Roads	54,940	Square feet
Parking	17,440	Square feet
Hardscape (anything paved)	17,130	Square feet
Landscape	14,190	Square feet
<i>Total square footage of site improvements</i>		
Size of wastewater lagoons	N/A	Square feet
Amount of groundwater	2,270,000	Gallons per year

Part B: Emission Reduction Measures

		amount	unit	yes	no
1	Are you a Napa Certified Green Winery?				X
2	Does the facility have alternative fuel vehicles in fleet?				X
3	If yes, what percentage of fleet?		%		
4	Has the facility already installed renewable energy on-site since 2005?				X
5	If yes, how much?		KW hrs.		
6	Do you intend to build to Cal Green* Tier 2 standards?				X
7	Do you intend to build to Cal Green* Tier 3 standards?				X
8	Do you have areas such as a cave, or natural cooling, passive solar that will exceed 2005 Title 24 standards? Explain: _____			X	
9	If so, how many square feet?	22,946	Sq. Ft.		
10	What is the percent reduction of 2005 Title 24 standards for that		%		
11	If the project is a winery, does it propose any energy efficient equipment (i.e.: gravity flow rather than pumping, energy star appliances, etc)? Please list _____				X
12	If so, how many annual kilowat hours saved?		KW hrs.		
13	Do you intend to recycle more than what the local landfill provides, if so what percentage of reduction? Explain: _____		%		X
14	Does the project intend to restore degraded habitat?				X
15	If so, how many acres?		acres		
16	Does the landscape plan include the planting of more than 6 shade trees within 40 feet of the southside or 60 feet of the westside?			X	
17	If so, how many trees?	28	trees		
18	Will the project replace more than a 2:1 ratio of trees on site, and if so how many additional?			X	
19	What specie?	variety			
20	Does the project connect to a munipical water source?				X
21	Will the project rely on an onsite well?			X	
22	How many gallons of water per day is dedicated to domestic water use?		g/day		
23	How many gallons of water per day is dedicated to landscape?		g/day		
24	Will the project connect to municipal sanitary sewer system?				X
25	Will the project have an on-site septic system?			X	

26	If so, how big are the proposed lagoons?		sq. ft.		X
27	Will the project have it's own treatment system? If so, explain: _____			X	
28	Does your project have bicyclce access and parking?			X	
29	Does your employer have an employee transportation demand management plan with feasible commute incentives? If yes please provide example				X
30	Does the employer sponsor a van/pool shuttle for visitors? If yes, what percentage of visitation will use it?		%		X
31	Is the project requesting a parking reduction, if yes what percentage?		%		X
32	Does the parking lot provide a charging station for electrical vehicles?			X	
33	Other, please explain: Drought tolerant plants, barrel storage within _____, enhanced insulation				

Checklist of Voluntary Greenhouse Gas Emission Reduction Measures



A Tradition of Stewardship
A Commitment to Service

An addendum to the Entitlement Application and a supplement for Initial Studies as required by CEQA

PROJECT NAME	B Cellars Winery		
PROJECT ADDRESS	701 Oakville Cross Road 031-070-026		
APPLICANT	Harry (Duffy) Keys		
CONTACT INFO	duffykeys@bcellars (858)-756-5614		
	email	phone	

- | | yes | no | I don't know |
|---|--------------------------|-------------------------------------|--------------------------|
| 1 Have you designed to U.S.G.B.C.™ LEED™ or Build It Green™ standards?
If yes, please include a copy of their required spreadsheets. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 Do you have an integrated design team?
if yes, please list: _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

3 SITE DESIGN

- | | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--|
| 3.1 Does your design encourage community gathering and is it pedestrian friendly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.2 Are you building on existing disturbed areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.3 Landscape Design | | | | |
| 3.31 native plants? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.32 drought tolerant plants? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.33 Pierce Disease resistant planting? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.34 Fire resistant planting? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.35 Are you restoring open space and/or habitat? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3.36 Are you harvesting rain water on site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.37 planting large trees to act as carbon sinks? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.38 using permeable paving materials for drive access and walking surfaces? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.4 Does your parking lot include bicycle parking? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.5 Do you have on-site waste water disposal? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.6 Do have post-construction stormwater on site detention/filtration methods designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.7 Have you designed in harmony with existing natural features, such as preserving existing trees or rock outcroppings? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.8 Does the project minimize the amount of site disturbance, such as minimizing grading and/or using the existing topography in the overall site design (such as cave design)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.9 Is the structure designed to take advantage of natural cooling and passive solar aspects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

civil
civil

4 ENERGY PRODUCTION & EFFICIENCY

- | | | | | |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--|
| 4.1 Does your facility use energy produced on site?
If yes, please explain the size, location, and percentage of off-set: _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4.2 Does the design include thermal mass within the walls and/or floors? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.3 Do you intend to commission the performance of the building after it is built to ensure it performs as designed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 4.4 Will your plans for construction include: | | | | |
| 4.41 High density insulation above Title 24 standards? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4.42 Zones for heating and cooling to provide for maximum efficiency? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.43 Energy Star™ or ultra energy efficient appliances? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.44 A "cool" (lightly colored or reflective) or a permeable/living roof? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4.45 Timers/time-outs installed on lights (such as the bathrooms)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

cave

evaporated clay tile roof

5 WATER CONSERVATION

- | | | | | |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--|
| 5.1 Does your landscape include high-efficiency irrigation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 5.2 Does your landscape use zero potable water irrigation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 5.3 Is your project in the vicinity to connect to the Napa Sanitation reclaimed water? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.4 Will your facility use recycled water? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.41 If no, will you prepare for it by pre-installing dual pipes and/or purple lines? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.5 Will your plans for construction include: | | | | |
| 5.51 a meter to track your water usage? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.52 ultra water efficient fixtures and appliances? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.53 a continuous hot water distribution method, such as an on-demand pump? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.54 a timer to insure that the systems are run only at night/early morning? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

	yes	no	I don't know
6 MATERIAL RECYCLING			
6.1 Are you using reclaimed materials?		X	
If yes, what and where: _____			
6.2 Are you using recycled construction materials-			
6.21 finish materials?		X	
6.22 aggregate/concrete road surfaces?			X
6.23 fly ash/slag in foundation?			X
6.3 Will your contractor be required to recycle and reuse construction materials as part of your contract?			X
6.4 Does your facility provide access to recycle-			
6.41 Kitchen recycling center?	X		
6.42 Recycling options at all trash cans?	X		
6.43 Do you compost green waste?	X		
6.44 Provide recycling options at special events?	X		
7 NATURAL RESOURCES			
7.1 Will you be using certified wood that is sustainably harvested in construction?			X
7.2 Will you be using regional (within 500 miles) building materials?		X	
7.3 Will you be using rapidly renewable materials, such as bamboo?		X	
7.4 Will you apply optimal value engineering (studs & rafters at 24" on center framing)?	X		
7.5 Have you considered the life-cycle of the materials you chose?	X		
8 INDOOR AIR QUALITY			
8.1 Will you be using low or no emitting finish and construction materials indoors-			
8.11 Paint?	X		
8.12 Adhesives and Sealants?	X		
8.13 Flooring?	X		
8.14 Framing systems?	X		
8.15 Insulation?	X		
8.2 Does the design allow for maximum ventilation?	X		
8.3 Do you plan for a wood burning fireplace (US EPA Phase II certified)?		X	
8.4 Does your design include dayliting, such as skylights?	X		
9 TRANSPORTATION DEMAND MANAGMENTMENT			
9.1 After your project is complete, will you offer your employees incentives to carpool, bike, or use transit?			X
9.2 After your project is complete, will you allow your employees to telecommute or have alternative work schedules?			X
9.3 Does your project include design features that encourage alternatives modes of transportation, such as			
preferred parking for carpooling, ridesharing, electric vehicles?			X
secured bicycle parking, safe bicycle access?	X		
loading zones for buses/large taxi services?	X		
9.4 How close is your facility to public transportation?			
10 Are there any superior environmental/sustainable features of your project that should be noted?			
<u>cave - naturally climate controlled barrel storage</u>			
11 What other studies or reports have you done as part of preparing this application?			
1			
2			
3			
4			
12 If your project involves an addition or modification to an existing building, are you planning to improve energy conservation of existing space (such as insulation, new windows, HVAC, etc.)?			
If yes, please describe: _____			
13 Once your facility is in operation, will you:			
13.1 calculate your greenhouse gas emissions?			X
13.2 implement a GHG reduction plan?			X
13.3 have a written plan to reduce your vehicle miles traveled of your operations and employee's commute?			X
14 Does your project provide for education of green/sustainable practices?			
If yes, please describe: _____			
15 Any comments, suggestions, or questions in regards to the County's efforts to reduce greenhouse gases?			

Form filed out by: Jeff Redding

Please feel free to include additional sheets of paper as necessary.