



RTZ Plan & Pledge - FAMILIA TORRES (Miguel Torres SA)

2030 TARGET: 60% reduction vs 2008
2040 TARGET: NET ZERO

Done by: Climate Change Department - MTSA
Date: 15th June 2023

Target Setting Baseline Year & Carbon Footprint: 2008 - 104.779 MTCO2e
Transition Plan Baseline Year & Carbon Footprint: 2021 - 60.095 MTCO2e

According to our comittment to Science Based Target Initiative (SBTi) and the SBTi's FLAG Protocol, Net Zero means: 72% reduction on all three Greenhouse Gas emissions Scopes (including
- This Transition Plan will be reviewed on a 5-year cycle, in line with the Paris Agreement -

Familia Torres (Miguel Torres SA) Transition Plan High-Level Summary Towards 2030

	Initiative Description (Also include actions to phase out non-CO ₂ gases other than methane)	Planned Emissions Reductions (MTCO ₂ e) vs 2021 (Specify whether within Value chain/territory or additional contributions to Global mitigation)		Up Front Capital Investment (In local currency)	Detail on How Activity will be Financed	How Activity Differs from Business as Usual (with sustained increases in non-fossil CAPEX and/or investmetnt in non-CO ₂ GHG reduction)
		Internal (Scope 1,2)	External (Scope 3)			
I	Avoiding land use change	1.209		N/A	N/A	N/A
2	Electric Tractors & Minimize km	408	95	1M€ - 3M€	Potentially partially subsidized. Tested sveral and already booked the first unit.	Regenerative Viticulture implies less kilometers made with the tractor given that less treatment is necessary. Electrical trators are more suitable for a regenerative viticulture approach, lowering the total GHG emissions involved
3	Replacement of cooling F-gas systems by cooling water	257		pending full study	N/A	F-Gas systems are simpler and easier to operate but potentially induce fluorate gas leakages. Working with cold water avoids such leakages although its operation and maintenance is more difficult.
4	Electric fleet (corporate & sales agents cars)	89	23	N/A (leasing plan)	N/A	Increased complexity to ensure appropriate charging points at the households. Familia Torres already counts with 50 charging points.
5	Carbon Capture from fermentation and Reuse (CCR) as inert gas	33		140.000€ - 200.000€	N/A	Applying a circular economuy at the main winery, which reduces the amount of CO2 bought to a third party which comes from fossil
6	Back-up Natural Gas Boiler Optimization	264	45	400.000€ - 800.000€	N/A	N/A
7	Increased solar energy self-consumption -> target 55% electricity self-consumption by 2030 at Pacs del Penedes winery	652		4,5M€ - 6M€	Potentially partially subsidized, but very limited.	Solar power is not anymore installed in flat rooftops but in more complex spaces, increasing project costs. Also batteries will be needed to avoid excess electricity flowing into the public grid. Some projects will be installed in places that help reduce the solar radiation in the winery, thus helping reduce energy
8	Glass bottles weight reduction + reutilization opportunities + reduced carbon footprint of our suppliers.		5.374	N/A	N/A	Strengthening the link with our glass suppliers to apply very light weight wine bottles in our portfolio. Currently, the average is already below 420gr/bottle. Some of our 75cl weight as low as 370gr. Currently testing reutilization schemes (Rebo2vino project). Electric glass melting ovens are already under construction.
9	Distribution & supply : increasing loading capacity, bulk wine operations, railway prioritization & suppliers own improvement.		2.425	N/A	N/A	Our clients choose the distribution modality, therefore we have to convince them to choose the train. Bulk wine also saves emissions since it avoids sending glass bottles
10	Grape suppliers: regenerative viticulture, fuel reduction, etc.		1.033	N/A	N/A	N/A
11	Regenerative Organic Viticulture CO2 reduction of fertilizers	106	256	N/A	N/A	Regenerative Viticulture will little by little improve soil fertility, thus reducing the by 30% the need of organic fertilizers in the mid-term.
12	Planting in gobelet system instead of traditional trellising systems		159	N/A	N/A	We avoid investing in trellising and we reduce the distance made by the tractor. More man-labor is needed
13	Reforestation effort on own land in Chile and Spain [Natural based solutions]		8.196	2,75M€ - 3,75M€	N/A	Investing in our own land but not for production purposes. Instead, reforestation seeks to capture CO2 from the air, since trees are the perfect machine to do so
14	Regenerative Viticulture CO2 sequestration in our own vineyards [Natural based solutions]	600		N/A	N/A	It implies a holistic approach of organic viticulture which not only considers the organic principles but the soil health and regeneration. Considered 0,5Tn/ha absorbed every year

Metrics & Targets Timeline

	Initiative Detail (include Metrics & Targets)	Implementation Teams/Departmental Leads	Year 1 (Plans for measuring & monitoring progress)	Year 2-3	By 2030	By 2040
1	Avoiding land use change (MTCO2e; timeline: 2023-2030)	Viticulture Department	Expecting 15% reduction -> just need to maintain avoiding land use change	Expecting 33-46% reduction -> just need to maintain avoiding land use change	Expecting 100% reduction -> just need to maintain avoiding land use change	N/A
2	Electric tractors & Minimize km (MTCO2e; timeline: 2023-2030)	Viticulture Department / Engineering Dept / Climate Change Dept	Expecting 8% reduction due to acquiring 1-2 electric tractors + reducing the km done by all the rest thanks to the regenerative viticulture approach.	17% reduction while applying first set of electric tractors and regenerative viticulture approach.	75% reduction expected	100% reduction expected given that all electric tractors will be powered by renewable energy only.
3	Replacement of cooling F-gas systems by cooling water (MTCO2e; timeline: 2023-2030)	Engineering Department	Expecting 6% reduction	11% to 17% reduction in emissions derived from F-gas leaks	50% reduction expected	We expect to get rid of 100% cooling F-gases causing global warming thanks to technical improvements and upgrading current chillers.
4	Electric fleet (corporate & sales agents cars) (MTCO2e; timeline: 2023-2027)	Purchasing Department	Expecting 14% reduction	26% to 39% reduction on emissions if kilometrage is maintained stable.	90% reduction expected. Some all wheel drive heavy field vehicles might be maintained diesel.	100% reduction
5	Carbon Capture from fermentation and Reuse as inert gas (MTCO2e; timeline: 2023-2030)	Engineering Department + Climate Change Department + Winemaking Department	Expecting 33% reduction	Expecting 66% reduction	Expecting 100% reduction	We expect to develop ways to transform CO2 into other products like sodium carbonate and reduce the carbon footprint of our glass providers thanks to our fermentation CO2.
6	Back-up Natural Gas Boiler Optimization) (MTCO2e; timeline: 2023-2030)	Engineering Department	Expected reduction of 0.5% of the Natural Gas emissions	N/A	Substitution of the Natural Gas Boiler by an additional biomass boiler or biogas boiler. Expected 95% reduction	Expected 100% reduction of the emissions related to the heating demand of the winery by using biogas and/or increasing the biomass capacity.
7	Increased solar energy self-consumption -> target 55% electricity self-consumption by 2030 at Pács del Penedes winery (MTCO2e; timeline: 2023-2030)	Engineering Department	Expecting 7% reduction on scope 2 (although all electricity purchased by MTSA comes from renewable certified sources already, but we don't consider them 0 emissions)	Expecting 21% Reduction	Expecting 51% Reduction	100% reduction expected, relying on efficient storage solutions, or using the grid as backup
8	Glass bottles weight reduction + reutilization opportunities + reduced carbon footprint of our suppliers. (MTCO2e; timeline: 2023-2030)	Purchasing Department + Product Engineering + Marketing + Quality Departments	Expecting 4% reduction on greenhousegas emissions	Expecting 9-13% reduction on greenhousegas emissions	Expecting 40% reduction on greenhousegas emissions	Expecting 75% reductions of the emissions related to packaging material thanks to electric furnaces installed at the glass factories.
9	Distribution & supply : increasing loading capacity, bulk wine operations, railway prioritization & suppliers own improvement. (MTCO2e; timeline: 2023-2030)	Logistics Department / Supply Chain Dept / Sales Dept / Winemaking Dept / Quality Dept	Expecting 1% Reduction	Expecting 1-5% Reduction	Expecting 25% Reduction	Expected 50-70% reduction of the emissions related to distribution thanks to electrification, synthetic fuels etc. This an estimate that will be updated according to global commitments in the logistic sector.
10	Grape suppliers: regenerative viticulture, fuel reduction, etc. (MTCO2e; timeline: 2023 - 2030)	Viticulture Department	Expecting 2% Reduction	Expecting 4-6% Reduction	Expecting 10-15% Reduction	Expected 30-60% reduction of the emissions related to grape suppliers thanks to regenerative viticulture and its potential to sequester CO2.
11	Regenerative Viticulture CO2 reduction of fertilizers (MTCO2e; timeline: 2023-2030)	Viticulture Department	Expecting 3% Reduction	Expecting 7-10% Reduction	Expecting 30% Reduction	Expected 80% reduction of the emissions related to fertilizers due to soil regeneration
12	Planting in goblet system instead of traditional trellising systems (MTCO2e; timeline: 2023-2030)	Viticulture Department	Expecting 3% Reduction	Expecting 7-10% Reduction	Expecting 30% Reduction	Expected 50% reduction in emissions related to the manufacture of trellises
13	Reforestation effort on own land in Chile and Spain [Natural based solutions] (MTCO2e; timeline: 2023-2030)	Miguel Torres Chile Viticulture Departement	Expecting 1032 MT absorbed by the growing trees	Expecting 1572 - 2400 MT CO2 absorbed by the growing trees	Expecting 8.196 MT CO2 absorbed by the growing trees	Offsetting remaining emissions with reforestation to reach net zero
14	Regenerative Viticulture CO2 sequestration in our own vineyards [Natural based solutions] (MTCO2e; timeline: 2023-2030)	Viticulture Department	Expected low-to-neglectable sequestration	Expecting 100 MT CO2 sequestered	Expecting 600 MT CO2 sequestered	Offsetting remaining emissions with sequestration to reach net zero

Transition Plan Detail

Initiative	Foundations (ambition & strategy including feasibility)	Processes (what actions are taken & how decisions are made to reduce emissions)	Policies (sectoral policy, plans for lobbying & engagement)	Accountability (clear governance structures, disclosure, performance incentives etc.)	Stakeholder Engagement (clients, counter-parties, industry peers, regulators, industry associations, consumers, etc)
Avoiding land use change	Planting a new vineyard has a significant impact if there is some land use change involved. Knowing that deforestation is one of the biggest causes of global warming, our plan is to avoid any kind of land use change. Instead, regenerative viticulture is applied to regenerate existing vineyards reducing the impact of potential previous land use changes.	Potential land use changes are restricted under our biodiversity policy.	Negative land use changes are considered. We expect to be able to take into account positive land use changes as well (regeneration of green areas).	The GIS tools allows us to demonstrate any land use change to auditors	We strongly recommend this same practice to our grape suppliers.
Electric Tractors & Minimize km	Our aim is to switch to electric tractors as soon as possible. Unfortunately the test we ran with European models were not 100% satisfactory. We expect to be able to purchase cutting edge models by the end of the year onwards	Electric tractors imply a different approach to viticulture practices. This is totally aligned with the regenerative viticulture approach we follow, where only a little surface operation is needed which means less power necessary on the tractor and therefore less battery need, less	We've made lobby to include electric tractors inside the plans for electrifying vehicles (MOVES3 in Spain)	Following our electric vehicles policy, tractors will follow the same approach	We've done several tests and booked our first electric tractor. We'll share the experience with other wineries from the Spanish Wine Federation (FEV) and International Wineries for Climate Action (IWCA)
Replacement of cooling F-gas systems by cooling water	Full F-Gas replacement is a tricky goal, since small equipments are rarely proposed in non-Fgas options. But this is expected to change in the years to come given that European laws will ban their use in the near future. Our strategy is to replace the remaining F-gas equipment we have by water-based systems that run with our absorption machine or ammonia coolers, expecting to phase out F-gases by no later than 2040	We're replacing old F-gas based compressors by new ones with lower GWP (Global Warming Potential) so that in case there is a leakage the impact is much lower. The biggest cooling demand in the wineries are covered with either an absorption machine or by ammonia chillers, both with no GWP.	On April 2022, the European Commission presented a proposal for a regulation on fluorinated greenhouse gases (F-gases) that would repeal the current F-gas Regulation. The proposal aims to reduce F-gas emissions further. It would change the existing quota system, gradually reducing the supply of hydrofluorocarbons (HFC) to the EU market to 2.4 % of 2015 levels by 2048. It would also ban F-gases in specific applications.	F-gas leakages are audited annually on the different ISO verifications (ISO14064, ISO50001, ISO14001) in our main winery in Pács del Pendés.	We cannot lobby on such EU laws, but we must remain attentive to the new cooling solutions in order to install the right equipment for it to last as long as possible while ensuring the minimal GWP as possible.
Electric fleet (corporate & sales agents cars)	We've been pioneers in hybrid and plug-in hybrid vehicles with a number of models to make it possible. This reality served as a training while waiting for the electric cars boom. Right now we count with 50 charging stations in all Familia Torres facilities.	The renting policy has been modified in order to ensure electric cars are being deployed. Some exceptions are still accepted since not always is possible to install a charging point at the driver's house. However, we also have a carsharing service for employees based only on electric cars.	We've taken advantage of the MOVES3 subsidies and continue to make lobby so that more charging stations are installed in Spain. We've set up together with other wineries the so-called wine road "Carretera del vi" where visitors can rent an electric car and charge in any of the wineries of the circuit.	The renting internal policy already includes the allocation of electric cars to our employees.	We've been testing all new electric models in order to offer the best-in-class vehicles for our drivers. Visitors can charge their electric cars in our visitors center (4 charging stations)
Carbon Capture from fermentation and Reuse (CCR) as inert gas	Fermentation CO2 is pure, neat, biogenic, and is part of the atmospheric carbon cycle. We are not adding more carbon to the atmosphere by making wine. Instead it is a big opportunity for us to capture this CO2 and reuse it. We've been testing for many years and finally we brought into reality an effective carbon capture and reutilization solution that we expect to scale up. Another opportunity under study is to transform CO2 into sodium carbonate which is an ingredient for glass.	Substituting CO2 sourced from gas companies (from fossil sources) by our own CO2. We apply this technique to our fermentation tanks in collaboration with the winemaking team.	CCR is necessary to reach the Paris Agreement below 1.5 degrees. Wineries can help reach this target by capturing it in a fairly easy way (much easier than capturing it from the air where the concentration is minimal).	We must capture the CO2 making sure that the entire process will be carbon negative, the goal is to reduce emissions, not to capture CO2 and release it again.	Universities, technical institutions, suppliers have been working with us to develop different methods to capture and reuse CO2. We have shared our findings with other wineries from the Spanish Wine Federation and International Wineries for Climate Action
Back-up Natural Gas Boiler Optimization	To reduce fossil fuel use. Natural gas is our back-up energy and we target ways to reduce its consumption after having already installed a biomass boiler.	Optimization systems such as economizers to reduce natural gas consumption.	N/A	The ISO50001 (energy efficiency) covers every year all the energy consumption of our main winery in Pács del Pendés, continuously seeking the right use of energy consumption.	N/A
Increased solar energy self-consumption -> target 55% electricity self-consumption by 2030 at Pács del Pendés winery	Familia Torres has implemented solar power self-consumption in all its wineries. Our first solar array was installed in 2008. Today our strategy is to build up the % of self-consumption in Pács del Pendés winery up to 55% by 2030 (70% including biomass energy)	Installing solar energy while increasing radiation avoidance effect (implementing solar panels above the fermentation tanks).	Policies have changed and are nowadays quite favourable to solar power projects. Solar power doesn't need subsidies to become profitable. We lobby to reduce the time spent to get the project approvals.	Our figures are audited. IWCA is monitoring the % of self-generated energy at the winery.	We've been promoting solar power inside and outside the wine sector, organizing conferences and events next to the Spanish Photovoltaic Union (UNEF).
Glass bottles weight reduction + reutilization opportunities + reduced carbon footprint of our suppliers.	We've reduced the weight of our glass bottles but this has a limit. Therefore while we keep working with our providers to reduce their emissions and the weight of our bottles, we test reutilization schemes as a partial solution for our packaging emissions.	Working with the glass supplier makes us able to work with the lightest bottles available while ensuring mechanical resistance and food safety.	We've raised awareness about the need to accept light weight bottles and fight the old-fashioned thinking that links heavy bottles with wine quality.	Every bottle restyling or new model must take into account the weight of the bottles.	We know some markets are more keen to embrace reusing schemes such as those where the wine is only sold in state owned shops and where the consumers are more conscious about climate change. We participate in sectorial projects involving federations, suppliers and clients (retailers and restaurants) and other wineries, to build successful and profitable returnable schemes.
Distribution & supply : increasing loading capacity, bulk wine operations, railway prioritization & suppliers own improvement.	Distribution is one of the most difficult areas for us to reduce emissions given that if it is the client the responsibility to select their own logistics solution. Hence, our strategy is to engage our clients into group conversations with IWCA (International Wineries for Climate Action) and find ways to choose the lowest emitting solutions. Logistic operators themselves have also strong GHG reduction	We work with retailers to switch from truck convey to railway. We're selling in bulk in some markets, lowering the distribution carbon footprint by avoiding the weight of the glass bottles.	Limits for trucks and other heavy-duty vehicles were adopted in June 2019 by the European Commission. New rules will require manufacturers to cut CO2 emissions from new trucks (compared with 2019 levels) on average by 30% from 2030.	Distribution made by truck accounts for 52% of our good's distribution GHG emissions.	Given that most logistic operators are big companies, the role of IWCA (International Wineries for Climate Action) is expected to be key in order to rise our voice to ask for greener distribution, targeting both logistic operators and clients, so that the latter can ask for the greenest solution available.
Grape suppliers: regenerative viticulture, fuel reduction, etc.	Hundreds of grape suppliers bring grapes to Miguel Torres wineries every harvest season, some of them have a long-lasting relationship spanning several generations. We ask our grape suppliers key data to calculate their carbon footprint, and we give them recommendations on how to reduce it.	Tips and recommendations are being shared every year with all our grape suppliers. We act as the example to be followed, applying organic regenerative viticulture techniques in our vineyards and sharing the lessons learnt with our suppliers. The regenerative approach lowers the carbon footprint of viticulture tasks.	We expect to see regenerative viticulture being taken into account by the administration bodies including subsidies and in the PAC (common agriculture policy) in the near future to promote its implementation.	The data from our suppliers is obtained via a survey document that is sent every year including question about regenerative viticulture approach.	The Regenerative Viticulture Association we cofounded is pushing forward the exchange of knowledge among grape producers and just released a regenerative viticulture certificate.
Regenerative Organic Viticulture CO2 reduction of fertilizers	The regenerative approach is expected to lower the amount of organic fertilizer needed in the vineyard (which is already quite low compared to other crops) that produce nitrogen oxides when applied.	Increasing the organic matter of the soil makes it more fertile, which must be managed appropriately to ensure high quality grapes. Some specific cover crops between the rows can act as nitrogen fixators.	We expect to see regenerative viticulture being taken into account by the administration bodies including subsidies and in the PAC (common agriculture policy) in the near future to promote its implementation.	We are certifying our regenerative vineyards (around 600ha this year) following the regenerative viticulture association certificate, which has been created in collaboration with a group of well known experts and scientist.	The Regenerative Viticulture Association we cofounded is pushing forward the exchange of knowledge among grape producers and just released a regenerative viticulture certificate.
Planting in gobelet system instead of traditional trellising systems	Planting vines in "Gobelet" prevents grapes from receiving too much sunlight and heat. We are planting more and more Gobelet to adapt to climate change but this has also a positive impact on emissions given that the vines must be harvested manually, hence less emissions from tractors are involved. Also no trellising is needed, reducing further the carbon footprint.	Most new plantations or re-planting include vines in Gobelet. Especially those with higher added value.	N/A	N/A	N/A
Reforestation effort on own land in Chile and Spain [Natural based solutions]	This is a greenhouse gas emissions-in-setting approach. Knowing that the simplest way to fight climate change is sequestering CO2 from the air, there is no better machine to do so than trees and plants. We plant in our own land and we conduct and monitor the project ourselves, supported by experts and national institutions.	We own land in Chile whose main use is to capture CO2 from the air. We've planted trees and replanted those that didn't survive (common survival ratio around 80%). The project is verified by a third party the plantations and its continuous growth.	We've participated as pilot companies in the GHG Protocol's Land Sector and Removal Guidelines to ensure that such projects are aligned with the international standards.	Our reforestation projects are verified by an external forestal expert and verified by ISO14064 accredited auditors.	The stakeholders of these projects are society in general but also local people. We develop these projects as a way to increase the carbon sink capacity of our planet to mitigate climate change.
Regenerative Viticulture CO2 sequestration in our own vineyards [Natural based solutions]	Regenerative viticulture consists of increasing the amount of organic matter in the soil while improving soil health (micro-biodiversity, nutrients...) and structure. This has many benefits but also the capacity to sequester and store atmospheric CO2 into the soil. According to literature, we can expect at least 0,5tNCO2/ha/year.	Since 2020 we've embraced this approach turning our vineyards, already organic, into regenerative by applying a holistic way of working. Currently, we manage 600ha of organic regenerative vineyards in Catalunya in which we reduce the tillage, we apply cover crops between the vine rows (or leave them grow spontaneously), reintroduce pruning shoots and apply animal fertilization.	We expect to see regenerative viticulture being taken into account in regional campaigns including subsidies and in the PAC (common agriculture policy) in the near future to promote its implementation. But also we expect GHG Protocol and the European Commission to set up a standard by which we can justify the amount of carbon sequestered by means of the regenerative approach.	We are certifying our regenerative vineyards (around 600ha this year) following the regenerative viticulture association certificate, which has been created in collaboration with a group of well known experts and scientist. We don't account yet the CO2 sequestration given that there is no a clear standardized way to do so. But we conduct our own measures and tests to demonstrate the improvements on our soils carbon absorption capacity.	The Regenerative Viticulture Association we cofounded just released a regenerative viticulture certificate. This is very useful for those clients that consider regenerative viticulture as a way to fight climate change, increase vines resiliency to climate and protect the environment and biodiversity of the vineyards. We share our findings with our grape suppliers, other winery members of the Regenerative Viticulture Association and International Wineries for Climate Action