

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2023 Dairy Digester Research and Development Program
Applications Submitted to CDFA

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#	Project Title	Description*	County	GHG Emission Reduction Over 10 Years (MTCO ₂ e)**	Requested Grant Funds	Matching Funds
1	Hidden Valley Dairy LLC	Hidden Valley Dairy is part of the developing Gustine dairy biogas to fuel cluster in Merced County, CA. The project is committed to building an on-dairy Tier 1 double-lined, manure-only, covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning system will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to a centralized biogas upgrading and interconnection facility. Biomethane, meeting PG&E Rule 29, will be injected into the co-located point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Merced	119,686	\$ 1,150,000.00	\$ 6,316,000.06
2	Pires Dairy Farms Biogas LLC	Pires Dairy Farms is part of the developing Gustine dairy biogas to fuel cluster in Merced County, CA. The project is committed to building an on-dairy Tier 1 double-lined, manure-only, covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning system will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to a centralized biogas upgrading and interconnection facility. Biomethane, meeting PG&E Rule 29, will be injected into the co-located point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Merced	216,003	\$ 1,600,000.00	\$ 8,676,343.96
3	HD Ranch Biogas LLC	HD Ranch is part of the developing Gustine dairy biogas to fuel cluster in Merced County, CA. The project is committed to building an on-dairy Tier 1 double-lined, manure-only, covered lagoon digester with integrated gas storage and pretreatment. An on-dairy biogas conditioning and upgrading plant will remove hydrogen sulfide and upgrade the biogas to biomethane. The biomethane, meeting PG&E Rule 29, will be loaded into tube trailers on-site and transported via virtual pipeline to be injected into the co-located point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Solano	189,562	\$ 1,600,000.00	\$ 5,004,014.90
4	Dairy Avenue and Circle H Biogas LLC	Dairy Avenue and Circle H dairies are part of the developing South Tulare dairy biogas to fuel cluster in Tulare County, CA. The project is committed to building a shared Tier 1 double-lined, manure-only, covered lagoon digester between both dairies. The digester will include integrated gas storage and pre-treatment. An on-dairy biogas conditioning and upgrading plant will remove hydrogen sulfide and upgrade the biogas to biomethane. The biomethane, meeting SoCalGas Rule 30, will be loaded into tube trailers on-site and transported via virtual pipeline to be injected into the colocated point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Kings	226,707	\$ 1,600,000.00	\$ 8,667,957.35
5	Delta View Biogas LLC	Delta View Farms is part of the developing West Visalia dairy biogas to fuel cluster in Tulare County, CA. The project is committed to building an on-dairy Tier 1 double-lined, manure-only, covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning system will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to the existing centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. This project will also include a vermifiltration system to reduce nutrients and volatile solids in the dairy's wastewater. California Bioenergy is the project developer.	Tulare	39,445.79	\$ 1,600,000.00	\$ 3,317,272.85
6	Moonstone Biogas LLC	Moonstone Dairy is part of the developing West Visalia dairy biogas to fuel cluster in Tulare County, CA. The project is committed to building an on-dairy Tier 1 double-lined, manure-only, covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning system will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to the existing centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. This project will also include a vermifiltration system to reduce nutrients and volatile solids in the dairy's wastewater. California Bioenergy is the project developer.	Kings	128,298	\$ 1,600,000.00	\$ 4,102,694.90
7	Felicita Dairy Biogas LLC	Felicita Dairy is part of the established South Tulare dairy biogas to fuel cluster in Tulare County, CA. The project is committed to building an on-dairy Tier 1 double-lined, manure-only, covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning system will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to the existing centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Kings	124,869	\$ 1,300,000.00	\$ 4,613,649.35

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8	(1) Blue Sky Dairy Digester Project	The Blue Sky Dairy Digester Project will construct a new covered lagoon dairy digester facility for the purpose of capturing manure methane emissions to create carbon-negative transportation fuel while increasing the environmental sustainability of the host dairy, Blue Sky Dairy. The Blue Sky Dairy Digester Project will truck the product biomethane to the Merced Pipeline facility and inject it directly into the utility pipeline. This project is being developed by Maas Energy Works LLC.	Merced	203,589	\$ 1,000,000.00	\$ 7,374,475.00
9	(2) Coelho Dairy Digester Project	The Coelho Dairy Digester Project will construct a new covered lagoon dairy digester facility for the purpose of capturing manure methane emissions to create carbon-negative transportation fuel while increasing the environmental sustainability of the host dairy, Coelho Dairy. The Coelho Dairy Digester Project will capture the biogas from the digested manure and then transport it to the Merced Pipeline conditioning facility for upgrading to biomethane and inject it directly into the utility pipeline. The project is being developed by Maas Energy Works LLC.	Merced	104,155	\$ 1,000,000.00	\$ 3,158,248.00
10	(3) DDW Farms Dairy Digester	The DDW Dairy Digester Project will construct a new covered lagoon dairy digester facility for the purpose of capturing manure methane emissions to create carbon-negative transportation fuel while increasing the environmental sustainability of the host dairy, DDW Farms. The DDW Dairy Digester Project will capture the biogas from the digested manure, transport it via private pipeline to the Lakeside Pipeline conditioning facility and then inject the product biomethane directly into the utility pipeline. The project is being developed by Maas Energy Works LLC.	Tulare	116,281	\$ 1,600,000.00	\$ 2,521,250.00
11	(7) Brasil Dairy Digester Project	The Brasil Dairy Digester Project will construct a new covered lagoon dairy digester facility for the purpose of capturing manure methane emissions to create carbon-negative transportation fuel while increasing the environmental sustainability of the host dairy, Brasil Dairy. The Brasil Dairy Digester Project will capture the biogas from the digested manure and then transport it to the Turlock Pipeline upgrading facility and inject it directly into the utility pipeline. The project is being developed by Maas Energy Works LLC.	Stanislaus	199,843	\$ 1,600,000.00	\$ 8,266,008.00
12	Barcellos/Brasil Centralized Dairy Digester	The Barcellos/Brasil Centralized Dairy Digester Project will construct a new covered lagoon dairy digester facility for the purpose of capturing manure methane emissions to create carbon-negative transportation fuel while increasing the environmental sustainability of the participating Barcellos/Brasil dairy facilities. The Barcellos/Brasil Centralized Dairy Digester Project will capture the biogas from the digested manure, transport it via private pipeline to the Calgren Dairy Fuels conditioning facility for upgrading to biomethane and then inject it directly into the SoCalGas utility pipeline. This project is being developed by Maas Energy Works LLC.	Tulare	96,990	\$ 1,600,000.00	\$ 5,646,260.00
13	MB Lucky Lady Digester	Aemetis proposes the construction, installation, and operation of an anaerobic covered lagoon digester at MB Lucky Lady Dairy. The digester is a large, double-lined, and covered pond that works in a plug flow fashion. As manure wastewater from the dairy flush system is pumped into the digester, an equal amount of effluent from digester pond is discharged from the opposite end. Captured biogas is pretreated locally at the "biogas skid" before being sent to the Aemetis Advanced Fuels Keyes (AAFK) facility via a private biogas pipeline. The pretreatment process includes removing hydrogen sulfide (H ₂ S) using passive media vessels, compression, and dehydration (moisture removal). Once at AAFK, the biogas will be upgraded to biomethane (RNG) for use as a transportation fuel.	Stanislaus	69,226	\$ 1,600,000.00	\$ 2,490,795.00
14	DeJager North Biogas LLC	DeJager Dairy North #1 and #2 will install a shared Tier 1 designed manure only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning system will remove hydrogen sulfide and meter and move the clean biogas directly into 6 co-located, ultraclean, high efficiency Mainspring linear generators interconnected to PG&E. CalBio will generate LCFS credits by directly matching generation and supplying the renewable energy credits to in-state electric vehicle re-charging load. This project will also include a vermifiltration system to reduce nutrients and volatile solids in the dairy's wastewater. California Bioenergy is the project developer.	Merced	425,505	\$ 1,600,000.00	\$ 10,838,371.40

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15	Jordao Digester	Aemetis proposes the construction, installation, and operation of an anaerobic covered lagoon digester at Jordao Dairy. The digester is a large, double-lined, and covered pond that works in a plug flow fashion. As manure wastewater from the dairy flush system is pumped into the digester, an equal amount of effluent from digester pond is discharged from the opposite end. Captured biogas is pretreated locally at the "biogas skid" before being sent to the Aemetis Advanced Fuels Keyes (AAFK) facility via a private biogas pipeline. The pretreatment process includes removing hydrogen sulfide (H ₂ S) using passive media vessels, compression, and dehydration (moisture removal). Once at AAFK, the biogas will be upgraded to biomethane (RNG) for use as a transportation fuel.	Stanislaus	57,148	\$ 1,000,000.00	\$ 2,858,353.13
16	Joe Rocha Digester	Aemetis proposes the construction, installation, and operation of an anaerobic covered lagoon digester at Jordao Dairy. The digester is a large, double-lined, and covered pond that works in a plug flow fashion. As manure wastewater from the dairy flush system is pumped into the digester, an equal amount of effluent from digester pond is discharged from the opposite end. Captured biogas is pretreated locally at the "biogas skid" before being sent to the Aemetis Advanced Fuels Keyes (AAFK) facility via a private biogas pipeline. The pretreatment process includes removing hydrogen sulfide (H ₂ S) using passive media vessels, compression, and dehydration (moisture removal). Once at AAFK, the biogas will be upgraded to biomethane (RNG) for use as a transportation fuel.	Merced	95,532	\$ 1,600,000.00	\$ 3,353,544.00
17	Zylstra Digester	Aemetis proposes the construction, installation, and operation of an anaerobic covered lagoon digester at Zylstra Dairy. The digester is a large, double-lined, and covered pond that works in a plug flow fashion. As manure wastewater from the dairy flush system is pumped into the digester, an equal amount of effluent from digester pond is discharged from the opposite end. Captured biogas is pretreated locally at the "biogas skid" before being sent to the Aemetis Advanced Fuels Keyes (AAFK) facility via a private biogas pipeline. The pretreatment process includes removing hydrogen sulfide (H ₂ S) using passive media vessels, compression, and dehydration (moisture removal). Once at AAFK, the biogas will be upgraded to biomethane (RNG) for use as a transportation fuel.	Stanislaus	103,518	\$ 1,000,000.00	\$ 4,430,558.72
			Total	2,516,358	\$ 24,050,000	\$ 91,635,797