CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2020 Dairy Digester Research and Development Program
Applications Submitted to CDFA
Updated in September, 2020

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#	Project Title	Description*	County	GHG Emission Reduction Over 10 Years ($MTCO_2e$)**	Requested Grant Funds	Matching Funds
1	3 Machado Dairy Digester Project	3 Machado Dairy Digester Project is a new covered lagoon digester at 3 Machado Dairy in Merced County, California. The project is owned by Merced Pipeline LLC and will be a part of the Merced Pipeline Cluster. This cluster is under construction and will deliver gas to the PG&E pipeline via the operational California Energy Exchange pipeline interconnect. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site CNG fueling station. The remainder of the biogas will be injected into the CEEC-to-PG&E pipeline for delivery to contracted CNG fueling stations in the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Merced	173,660	$ 1,200,000	$ 2,413,687
2	Ahlem Farms Dairy Digester Project	Ahlem Farms Dairy Digester Project is a new covered lagoon digester at Ahlem Farms Vista in Stanislaus County, California. The project is owned by Denair Biogas and will be a part of the Merced Pipeline cluster This cluster is under construction and will deliver to the PG&E pipeline via the operational California Energy Exchange interconnect. The biogas from this new digester will be transported via the private, low-pressure pipeline to a new nearby gas upgrading satellite hub. Once there, it will be upgraded to pipeline quality. Then the biogas will be compressed and delivered to the Merced Pipeline injection site via CNG-fueled truck. The fuel will be used for onsite CNG fueling or injected into the CEEC-PG&E pipeline. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Stanislaus	167,761	$ 1,195,000	$ 3,130,536
3	Ahlem Farms Jerseys - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Stanislaus	113,979	$ 1,592,287	$ 1,672,003
4	Albert Mendes Dairy - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Stanislaus	99,373	$ 1,388,241	$ 1,735,754
5	Bar Vee Dairy - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Stanislaus	34,293	$ 704,378	$ 2,291,686

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6	Bear Mountain and J&R Dairy Biogas	Bear Mountain & J&R dairies join the Kern dairy biogas to fuel cluster near Bakersfield, CA. They will install a shared Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning and compressor station will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to the centralized biogas upgrading facility and interconnection located at BV Dairy. 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.	Kern	172,549	$ 1,920,785	$ 5,524,103
7	Borba Dairy Farms - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Merced	164,805	$ 1,807,911	$ 2,730,845
8	Boschma Dairy Biogas	The project is committed to build a tier 1 double-lined, covered lagoon digester, a biogas conditioning system (iron sponge and activated carbon based H2S scrubber), a biogas to biomethane upgrader (skid mounted and located on-site) and a high pressure tube trailer truck loading station. The system will be shared with the neighboring Poso Creek Dairy. The produced RNG will be tube-trailered down to the CalBioGas Buttonwillow interconnection location, or alternatively other nearby CalBio facilities, for off-loading and metering into the SoCalGas pipeline.	Kern	191,478	$ 1,723,302	$ 4,819,704
9	Capstone Ranch Dairy Biogas	Capstone Ranch Dairy will install a Tier 1 designed manure only covered lagoon digester with integrated gas storage and pre-treatment. The digester gas will be moved a short distance over to the Southpoint Ranch dairy where the shared biogas conditioning station will remove the hydrogen sulfide and meter and move the clean biogas directly into a co-located, ultra-clean, high efficiency 3.5 MW Bloom Energy fuel cell 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. California Bioenergy is the project developer.	Madera	264,614	$ 3,000,000	$ 6,933,182
10	Clearlake Dairy Digester Project	Clearlake Dairy Digester Project is a new covered lagoon digester at Clearlake Dairy in Tulare County, California. The project is 100% farmer-owned by Decade Energy LLC and will be a part of the Lakeside Pipeline Cluster. This cluster is under construction and will deliver gas to the SoCalGas pipeline. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site CNG fueling station. The remainder of the biogas will be injected into the SoCalGas pipeline for delivery to contracted CNG fueling stations around the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Tulare	102,563	$ 1,624,488	$ 1,624,488

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11	Dairy Central - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Merced	103,604	$ 1,136,536	$ 1,300,305
12	Five Star Dairy and Lou-Mar Dairy Biogas	Five Star Dairy and Lou-Mar Dairy are two neighboring dairies within the established South Tulare dairy biogas to fuel cluster in Tulare County, CA. The dairies will install a shared Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. The dairies will also share an on-dairy biogas conditioning and compressor which will remove hydrogen sulfide and moisture and then meter and move the clean biogas from both dairies into a gathering line connecting to centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. SoCalGas has previously committed to build & operate the point of receipt & mainline extension to their gas distribution system. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Tulare	84,988	$ 849,880	$ 3,882,742
13	Foster Dairy Digester Project	Foster Dairy Digester Project is a new covered lagoon digester at Foster Dairy Farms #4 in Stanislaus County, California. The project is owned by Denair Biogas and will be a part of the Merced Pipeline cluster This cluster is under construction and will deliver gas to the PG&E pipeline via the operational California Energy Exchange pipeline interconnect. The biogas from this new digester will be transported via the private, low-pressure pipeline to a new nearby gas upgrading satellite hub. Once there, it will be upgraded to pipeline quality. Then the biogas will be compressed and delivered to the Merced Pipeline injection site via CNG-fueled truck. The fuel will be used for onsite CNG fueling or injected into the CEEC-PG&E pipeline. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Stanislaus	132,855	$ 1,100,000	$ 2,730,178
14	Griffioen Dairy Biogas	Griffioen Dairy is part of the established North Visalia dairy biogas to fuel cluster in Tulare County, CA. The dairy will install a Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning and compressor will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. SoCalGas has previously committed to build & operate the point of receipt & mainline extension to their gas distribution system. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Tulare	70,205	$ 702,050	$ 2,575,617
15	Grimmius Hanford Biogas	Grimmius Cattle Co., a dairy operation located in Hanford, CA proposes to build a Tier 1 designed manure only covered lagoon with enhanced gas storage, gas pre-treatment and effluent distribution. The project will include a sand lane, screens and mechanical separator with screw press for solid separation pre-digester. A compressor will deliver biogas via a biogas gathering line to a centralized upgrading facility where CO2, N2, O2, and further H2S removal produces biomethane meeting SoCalGas Rule 30 specifications. A gas compressor lifts the gas pressure to SoCalGas's point of receipt acceptance specification. Gas marketing, dairy processor and hauler commitments guarantee 100% delivery of the project's biomethane as R-CNG for vehicle fuel use in California. California Bioenergy, 4 Creeks Engineering, Anaergia, 4C Global and SoCalGas comprise the project team.	Kings	372,623	$ 1,565,016	$ 1,579,990

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16	Haringa Dairy Digester Project	Haringa Dairy Digester Project is a new covered lagoon digester at Haringa Dairy in Stanislaus County, California. The project is owned by Denair Biogas and will be a part of the Merced Pipeline cluster This cluster is under construction and will deliver gas to the PG&E pipeline via the operational California Energy Exchange pipeline interconnect. The biogas from this new digester will be transported via the private, low-pressure pipeline to a new nearby gas upgrading satellite hub. Once there, it will be upgraded to pipeline quality. Then the biogas will be compressed and delivered to the Merced Pipeline injection site via CNG-fueled truck. The fuel will be used for onsite CNG fueling or injected into the CEEC-PG&E pipeline. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Stanislaus	86,095	$ 700,000	$ 3,041,286
17	Hilmar Holsteins - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Merced	116,224	$ 1,274,977	$ 1,668,166
18	Howard Dairy Digester Project	Howard Dairy Digester Project is a new covered lagoon digester at JDS Howard Dairy in Merced County, California. The project is 100% farmer-owned by JDS Biogas LLC and will be a part of the Merced Pipeline cluster. This cluster is under construction and will deliver to the PG&E pipeline via the operational California Energy Exchange interconnect in early 2021. The biogas from this new digester will conditioned up at the dairy to pipeline quality standards, and then transported to the Merced Pipeline injection facility via CNG-powered trucks creating a virtual pipeline. The fuel will be used for onsite CNG fueling or injected into the CEEC-PG&E pipeline. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Merced	321,685	$ 2,000,000	$ 3,922,378
19	JDS Ranch Digester Project	JDS Ranch Digester Project is a new covered lagoon digester at JDS Ranch in Kern County, California. The project is owned by Maas Energy Works and will be a part of the Calgren Dairy Fuels Cluster. This cluster is operational, producing biogas from 10 connected digesters and injecting renewable natural gas into the SoCalGas pipeline The biogas from this new digester will be transported via the private, low-pressure pipeline to a gas upgrading hub at an adjacent dairy. Once there, it will be upgraded to pipeline quality. Then the biogas will be compressed and delivered to the Calgren Dairy Fuels injection site via CNG-fueled truck. The fuel will be used for onsite CNG fueling or injected into the SoCalGas pipeline. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Kern	159,082	$ 1,600,000	$ 3,044,536
20	JR Dairy Digester Project	JR Dairy Digester Project is a new covered lagoon digester at JR Dairy in Tulare County, California. The project is owned by Calgren Dairy Fuels and will be a part of the Calgren Dairy Fuels Cluster. This cluster is operational, producing biogas from 10 connected digesters and injecting renewable natural gas into the SoCalGas pipeline. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site compressed natural gas fueling station. The remainder of the biogas will be injected into the SoCalGas pipeline for delivery to contracted CNG fueling stations in the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Tulare	190,826	$ 1,300,000	$ 1,873,859

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21	K&R Blount Dairy - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Stanislaus	65,146	$ 910,090	$ 1,991,080
22	LegenDairy Digester Project	LegenDairy Digester Project is a new covered lagoon digester at LegenDairy Farms in Tulare County, California. The project is owned by Calgren Dairy Fuels and will be a part of the Calgren Dairy Fuels Cluster. This cluster is operational, producing biogas from 10 connected digesters and injecting renewable natural gas into the SoCalGas pipeline. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site CNG fueling station. The remainder of the biogas will be injected into the SoCalGas pipeline for delivery to contracted CNG fueling stations in the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Tulare	128,069	$ 750,000	$ 2,522,532
23	Lerda-Goni Dairy Biogas	Lerda-Goni Dairy is part of the established South Tulare dairy biogas to fuel cluster in Tulare County, CA. The dairy will install a Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning and compressor will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. SoCalGas has previously committed to build & operate the point of receipt & mainline extension to their gas distribution system. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Tulare	62,535	$ 687,885	$ 3,118,084
24	Martins Brothers Dairy Farms AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Merced	123,541	$ 1,355,245	$ 2,003,872
25	Mattos Bros Dairy Digester Project	Mattos Bros Dairy Digester Project is a new covered lagoon digester at Matos Bros Dairy in Kings County, California. The project is 100% farmer-owned by Matos Dairy LP and will be a part of the Lakeside Pipeline Cluster. This cluster is under construction and will deliver gas to the SoCalGas pipeline. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site CNG fueling station. The remainder of the biogas will be injected into the SoCalGas pipeline for delivery to contracted CNG fueling stations in the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Kings	117,408	$ 1,731,085	$ 1,731,085

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#	Project Title	Description*	County	GHG Emission Reduction Over 10 Years ($MTCO_2e$)**	Requested Grant Funds	Matching Funds
26	Oliveira Dairy - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Merced	81,494	$ 1,056,977	$ 2,103,160
27	Poso Creek Dairy Biogas	The project is committed to build a tier 1 double-lined, covered lagoon digester, a biogas conditioning system (iron sponge and activated carbon based H2S scrubber), a biogas to biomethane upgrader (skid mounted and located on-site) and a high pressure tube trailer truck loading station. The system will be shared with the neighboring Boschma and Sons Dairy. The produced RNG will be tube-trailered down to CalBioGas Buttonwillow interconnection location, or alternatively other nearby CalBio facilities, for off-loading and metering into the SoCalGas pipeline.	Kern	173,251	$ 1,464,930	$ 5,344,556
28	Rocky Road Dairy Biogas	Rocky Road Dairy is part of the established North Visalia dairy biogas to fuel cluster in Tulare County, CA. The dairy will install a Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning and compressor will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to centralized biogas upgrading and interconnection facility. The biogas conditioning system will be shared with the adjacent South Corner dairy. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. SoCalGas has previously committed to build & operate the point of receipt & mainline extension to their gas distribution system. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Tulare	59,642	$ 656,062	$ 4,205,416
29	S&S Dairy - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Stanislaus	91,009	$ 1,271,396	$ 1,988,964
30	South Corner Dairy Biogas	South Corner Dairy is part of the established North Visalia dairy biogas to fuel cluster in Tulare County, CA. The dairy will install a Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning and compressor will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to centralized biogas upgrading and interconnection facility. The biogas conditioning system will be shared with the adjacent Rocky Road dairy. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. SoCalGas has previously committed to build & operate the point of receipt & mainline extension to their gas distribution system. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Tulare	127,154	$ 1,144,386	$ 2,347,493

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31	Sozinho Dairy Digester Project	Sozinho Dairy Digester Project is a new covered lagoon digester at Sozinho Dairy #5 in Kings County, California. The project is owned by Maas Energy Works and will be a part of the Lakeside Pipeline Cluster. This cluster is under construction and will deliver gas to the SoCalGas pipeline. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site CNG fueling station. The remainder of the biogas will be injected into the SoCalGas pipeline for delivery to contracted CNG fueling stations in the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Kings	79,649	$ 850,000	$ 2,288,389
32	Sunrise Dairy Biogas	Sunrise Dairy is part of the established North Visalia dairy biogas to fuel cluster in Tulare County, CA. The dairy will install a Tier 1 designed manure-only covered lagoon digester with integrated gas storage and pre-treatment. An on-dairy biogas conditioning and compressor will remove hydrogen sulfide and moisture and then meter and move the clean biogas into a gathering line connecting to centralized biogas upgrading and interconnection facility. Biomethane, meeting SoCalGas Rule 30, will be injected into the co-located point of receipt. SoCalGas has previously committed to build & operate the point of receipt & mainline extension to their gas distribution system. The project's biomethane will be delivered as R-CNG to fleets and CNG fueling stations in California. California Bioenergy is the project developer.	Tulare	81,986	$ 819,860	$ 3,224,255
33	Trinkler Dairy - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Stanislaus	85,529	$ 1,194,840	$ 1,451,336
34	Wickstrom Jersey Farms - AAFK Central Dairy Digester Cluster	The Aemetis Biogas project team will install a covered lagoon digester at the project site. When complete, the proposed digester will produce biogas, which after being processed to remove hydrogen sulfide (H2S), will be conveyed via private pipeline to the Aemetis Advanced Fuels Keyes facility. There, Aemetis will further upgrade the biogas to pipeline-quality, negative-carbon-intensity renewable natural gas (RNG) suitable for use as transportation fuel. Aemetis will sell a portion of the RNG to local fleets via its onsite RNG fueling station and will direct the remainder to sale to larger fleets such as UPS, PepsiCo, LA Metro, and Toyota via the Pacific Gas & Electric (PG&E) pipeline, or for use as energy at AAFK to produce renewable ethanol, thus replacing carbon-based natural gas. Through access to $30 million in private investment funds, Aemetis has the resources to immediately start work on the project and stay on schedule through completion without extensions or funding-related delays. Aemetis has assembled a deep and experienced team to design, build, and operate the digester and related gas cleanup HUB. The Aemetis team has designed and completed projects of even greater scope, budget, and complexity, as well as 37 dairy digesters projects in California. The project will serve as one of 17 foundational digesters in the Aemetis Central Dairy Digester Cluster in Stanislaus and Merced Counties, an area with minimal CDFA investment. Aemetis plans to grow this cluster to 30 dairies by 2023. Aemetis Biogas LLC will complete and commission the first two dairy digester projects in the cluster, and related four-mile private gas pipeline, in May 2020.	Merced	122,423	$ 1,342,980	$ 1,383,737
35	Wilson Dairy Digester Project	Wilson Dairy Digester Project is a new covered lagoon digester at J&D Wilson and Sons Dairy in Fresno County, California. The project is owned by Wilson Dairy Biogas LLC and will be a part of the Five Points Pipeline Cluster. This cluster is under development and will deliver biogas to the PG&E pipeline. The biogas from this new digester will be transported via the cluster's private, low-pressure pipeline to the gas upgrading hub. Once there, it will fuel partner and public trucks at an on-site CNG fueling station. The remainder of the biogas will be injected into the PG&E pipeline for delivery to contracted CNG fueling stations in the Central Valley and the state. The project is developed by Maas Energy Works. Making use of 43.5% of DDRDP awards, this project team has completed 81% (13 of the 16) of all operational CDFA-funded digester projects, and 100% (10 out of 10) of all operational CDFA-funded vehicle fuel projects.	Fresno	206,745	$ 1,400,000	$ 2,309,120

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36	WTE-Riverdale Biogas To RNG	WTE-Riverdale proposes to develop a renewable natural gas (RNG) project at the Maddox Dairy in Riverdale, CA. Feedstock will be dairy manure from the Maddox Dairy that will be digested in a DVO digester vessel. Raw biogas will be scrubbed, dewatered, and upgraded to PG&E biomethane injection standards. RNG will be injected into an existing natural gas pipeline on dairy property. RNG from the project will be sold under a long-term contract for use as transportation fuel within California.	Fresno	137,116	$ 1,250,000	$ 14,067,834
37	WTE-Tollcrest - Biogas-to-Transportation Fuel	WTE-Tollcrest, LLC is looking to build an anaerobic digester system at Tollcrest Dairy, located in Yuba County near Wheatland, CA. It is a modern flush dairy where the owners want to collaborate with WTE-Tollcrest to establish an anaerobic digester to digest dairy-derived manure into biogas, quality animal bedding and nutrient-rich digestate. The digester will be a mixed plug flow design provided by DVO, Inc. Captured biogas will be scrubbed, conditioned, and injected utilizing systems provided by DMT Clear Gas Solutions ("DMT") into a PG&E gas main that runs through dairy property. Bio-methane will be purchased under a long-term 10-year offtake for use as transportation fuel consumed in California.	Yuba	121,176	$ 1,000,000	$ 8,900,000
			Total	**4,987,135**	**$ 47,270,586**	**$ 119,475,956**