Dairy and Livestock Working Group Digester Subgroup DRAFT Working Recommendations for Discussion July 11, 2018

Deliverable #5: Identification of Value Added Products from Manure and Digestate

Identification of key current and emerging technologies and approaches for converting manure and digestate into useful products including fuel/energy. The assessment will characterize products by technology readiness and outline general opportunities and issues.

Issue	Discussion	Recommendation		
A) Investment is needed to identify and demonstrate emerging technologies that can convert manure and digestate into useful products including fuel/energy	Discussion CEC has issued various grants under the: 1) Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) and 2) California Energy Commission's Research and Development Program (EPIC and PIER funding) for low carbon fuels production facilities (both for commercial and for pilot/demonstration scale projects). Recently, annual ARFVTP funding for biofuel and biogas fuel production plants has been ~\$25M and R&D funding has been ~\$25M and R&D funding has been ~\$4M. Starting July 1, 2018, ARFVTP funds will no longer be allocated for biofuel and biogas fuel production plants, but the FY 2018-19 state budget allocated \$12.5M from GGRF for these purposes (\$25M AFTVT funds being moved to support zero emission vehicles).	The legislature should allocate \$XM annually to expand research, demonstration and commercialization funding: 1) for process technologies and biomethane delivery alternatives capable of producing clean, low carbon renewable fuels from dairy manure, and 2) on approaches to integrate covered lagoon digesters and other solutions with nutrient export.	specific consensus poli Formatted: Font: (Defa Formatted: Font: (Defa Formatted: Font: (Defa Formatted: Font: (Defa Deleted: Is additional f	uult) Arial ault) Arial ault) Arial ault) Arial ault) Arial ault) Arial, 11 pt unding needed and/or programs ng technologies that can conver
	A one-time FY 2017-18 allocation of \$66M for food processing plants (potentially including dairies) energy RD&D projects has been augmented by \$68M in FY 2018-19 from GGRF.			
	Programs that integrate digester deployment with future water restrictions will be important.		Formatted: Font: (Defa	ault) Arial, 11 pt

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