

Attachment A
Summary of SWIG/SWICS Coalition's
Proposed Changes to Solid Waste Sector Implementation Plan

The Coalition recommends that ARB & CalRecycle modify the Waste Management and Recycling Sector Implementation Plan to reflect short-, medium- and long-term activities and priorities, and that some of the actions and timeframes be modified in a manner that supports the agencies' desire for a major shift in the management of municipal solid waste in California away from traditional landfills. This shift will require major investments in new programs and infrastructure, as well as regulatory support, research and public education. A major focus in the short- and medium-term must be the development of organic waste diversion infrastructure, such as organic waste processing, anaerobic digestion and composting facilities. The Coalition recommends that expanding the mandatory commercial recycling program to include large generators of organic wastes be given a high priority to start this process. The Coalition further recommends that ARB hold off on considering the need for further regulation of landfill emissions (either directly or through Cap-and-Trade) until the impacts of the Early Action Measure (Landfill Methane Recovery) and other recommended short- and medium-term actions that will be implemented between 2014 and 2020 are assessed. Lastly, the Coalition recommends several minor modifications to the Implementation Plan, such as consolidating similar actions and recategorizing a few actions.

Attachment A – SWICS and SWIG Recommended Changes to Scoping Plan Implementation for Solid Waste Sector

Short term 2014-2018

Mid term 2019-2023

Long term 2024 and beyond

Category/Task	Actions	Timeframe
1. Emission Reduction Factors	a. Revise compost emission reduction factors to include avoided landfill emissions	Short term/in progress by late 2013
	b. Develop new emission reduction factors for aerobic and anaerobic digestion	Short term/in progress by late 2013, ongoing element
	c. Develop emission reduction factors for materials that can be recycled (carpet, paint)	Short term/mid-2014
	d. Update emission reduction factors for landfills, including avoided methane emissions for organics that are shifted to non-landfill alternatives	Short term/mid-2014
	e. Consider any additional quantifiable data on end use of exported recyclables and incorporate into future new and updates of the emission reduction factors as needed	Short term/2014- 2020 , ongoing element
2. Permitting	a. Work with U.S. EPA, other agencies, districts, and jurisdictions to address conflicting or redundant requirements, including cross media and multi-jurisdictional issues	Short term/mid-2014, ongoing element
	b. Streamline permitting process for new and upgraded facilities – develop programmatic EIRs and/or model permit and guidance documents to assist in environmental review and CEQA	Short term/mid-2015
	c. Develop industry specific web-based tools for planning and permitting guidance	Short term/mid-2015, ongoing element
	d. Investigate facilitating permits for co-location of organics processing at existing POTWs and for post closure land use at landfills	Short term/mid-2015, ongoing element
3. Public Education/Acceptance	a. Initiate public education campaign addressing: goals of waste sector, benefits of recycling/remanufacture, collection of cleaner recyclable commodities, need for contamination-free feedstocks, reducing carbon footprint through increased recycling	Short term/2014- 2020 ongoing element
	b. Educate project developers about next generation organic processing facilities that minimize odors and emissions and can be sited closer to urban centers	Short term/2014- 2020 ongoing element
	c. Foster State, local, and private cooperation in achieving Waste Sector Goals	Short Long term/ongoing through 2035
	d. Evaluate effectiveness of education programs and modify as needed	Short Long term/2015, ongoing element- 2050
	e. Provide education on State procurement requirements to all State agency purchasing officials and all staff within agencies that purchase materials	Short term/2014 ongoing element

Category/Task	Actions	Timeframe
4. Funding & Incentives for Infrastructure	a) Provide funding, <u>potentially including use of cap and Trade auction funds</u> , for <u>incentive, grant and loan programs for facility improvements</u> to meet air, water, and EJ goals <u>and</u> to develop sustainable low-carbon waste management systems to handle waste shifted from landfills to compost, anaerobic digestion, biomass, <u>recycling, remanufacturing</u> , and other technologies	Short term/201 43-2020 , ongoing element
	b) Establish feed-in-tariffs for electricity production to make instate renewable energy production more competitive	Short term/201 43-2018 20
	c) Increase AB 118 funding for anaerobic digestion projects and support re-authorization of AB 118	Short term/2014-201 58
	d) Continue to provide regulatory certainty that fuel produced from anaerobic digestion of organic waste can qualify for Low Carbon Fuel Credits. Continue pursuing pathways for Low Carbon Fuel Credits for anaerobic digestion	Short term/2013-201 85
	e) Pursue expanded sustainable financing for infrastructure development for recycling, composting, anaerobic digestion, and biomass projects: <ul style="list-style-type: none"> Expand RMDZ program Obtain GoBiz support and expand technical support Determine which, if any, offset project protocols are viable for recycling, composting, anaerobic digestion or other bioenergy processes Establish remanufacturing incentive payments, grant programs, or product stewardship programs for management of high-GHG commodities 	Short term/2014- 2015 , ongoing element
	f) Obtain Cap & Trade funding or other funding sources for incentive, grant, and loan programs for compost and anaerobic digestion projects, recycling and remanufacturing facilities, and other projects that reduce waste to landfills (combined with (a) above)	Short term/2013-2020
	g) Establish new incentive programs geared for biomass conversion projects, including gasification projects, possibly through Cap and Trade revenues (combined with (a) above)	Short term/2014-2020
	h) Ensure EPIC fund is devoted to new bioenergy facilities. Explore tax credits	Short- <u>mid</u> term/2014-2020
	i) Investigate the costs associated with interconnection to the transmission grid from biomass conversion projects	Short- <u>mid</u> term/2014-2020
	h) Identify landfills close to pipelines and evaluate economic feasibility of biogas injection	Short term/2014-2015
	ik) Monitor the Renewable Market Adjusting Tariff to assess whether it incentivizes new bioenergy projects	Short- <u>mid</u> term/2015-2020
	jl) Investigate the feasibility of criteria pollutant offset banks for new composting & AD facilities and the generation of offsets by upgrading existing facilities to reduce emissions	Short- <u>mid</u> term/2015-2020
	km) Evaluate whether to allow all municipal solid waste thermal technologies (MSW Thermal) to generate renewable energy and receive credits	Short- <u>mid</u> term/2014-2015

Category/Task	Actions	Timeframe
5. Markets/Quality of Products	a. Maximize recovery potential by establishing grants and /or performance standards for MRFs and C&D facilities to recover higher-quality commodities	Short term/201 43 -20 18 <u>20</u>
	b. Support development of advanced processes and/or equipment that enables cost effective removal of contaminants from the organics waste stream, particularly glass and plastic	Short term/201 43 -20 18 <u>20</u>
	c. Investigate the feasibility and impact of not allowing the use of green waste Alternative Daily Cover (ADC) to count as recycling	Short term/2013-2020
	d. Consider mandatory organic waste recycling for large commercial generators	Short term/2013-2020
	ce. Increase markets for anaerobic digestion and compost products by investigating potential financial incentives for increased usage of compost and anaerobic digestion products	Short Long term/2013- 2035 <u>ongoing element</u>
	df. Work with industry to develop markets for increased quantities of composted material and digestate, and develop standardize quality specifications for new and specialty products from composting and anaerobic digestion	Short Long term/ongoing <u>element through 2025</u>
	g. Incorporate recycling and recyclability as front-end design parameter for packaging and products	Long term/ongoing through <u>2035</u>
	eh. Identify and support markets for recycled, reused, and remanufactured materials	Short Long term/ongoing <u>element through 2035</u>
	fi. Work with stakeholders to promote the sorting of urban organics	Short- <u>mid</u> term/2013-2020
	j. Complete updates to CalRecycle regulations for composting and anaerobic digestion of food materials and other highly putrescible wastes	Short term/2013-2020
	k. Reform SABRC statutes for State procurement (include more products with recycling or GHG implications; revise minimum percentages; include Community Colleges and University of California; require State contractors to meet same purchasing requirements as State agencies; establish enforcement mechanism for non-compliance)	Short term/2013-2020
	l. Provide education on State procurement requirements to all State agency purchasing officials and all staff within agencies that purchase materials	Short term/2013-2020
	gm. Create system to verify PCRC of products, identify suppliers of PCRC products, and track State procurement ; require manufacturers and suppliers to disclose product environmental information	Short- <u>mid</u> term/201 43 -2020
6. Sustainability	a. To protect-promote recycling, composting, and AD programs, establish front-end processing standards <u>that focus on use of for waste sent to MSW-thermal plants to manage non-recoverable/non-recyclable organic waste streams</u>	Short term/2013-2020
	b. Maximize recycling of packaging materials <u>Promote source reduction principles into packaging and product design, as well as foster recycling and recyclability as a front end design parameter for packaging and products that cannot be reduced.</u>	Long-Short term/2014 <u>ongoing element -2035</u>
	c. Evaluate opportunities to <u>source reduce and promote reuse of</u> materials	Short Long term/ongoing <u>element through 2035</u>
	d. Develop new product stewardship programs (See 3e above)	Short- <u>mid Long</u> term/ongoing <u>element</u> <u>through 2035</u>

Category/Task	Actions	Timeframe
7. Research	a. Improve characterization of direct and avoided GHG emissions from composting and anaerobic digestion and from compost use	Short term/late 2013-2014
	b. Characterize properties of digestate from anaerobic systems and determine the suitability for uses	Short Long term/2015-ongoing through 2025
	c. Support research and development projects demonstrating newest best management practices for composting and anaerobic digestion	Short Long term/2015-ongoing through 2025
	d. Pursue research into development and commercialization of emerging biomass conversion and thermal technologies	Short Long term/ongoing through 2025
	e. Conduct additional research for safe and beneficial uses of MSW and biomass conversion ash	Short Long term/ongoing through 2025
	f. Investigate carbon sequestration and water savings potential of compost use in agricultural settings such as irrigated croplands and rangelands	Short Long term/ongoing through 2025
	g. Conduct research to improve understanding of landfill gas collection efficiencies	Short Long term/2014 ongoing through 2025
	h. Conduct statewide characterization of landfill methane emissions and criteria pollutants by best available direct measurement methods and validation of inventory models	Mid Long term/2019 ongoing through 2025
	i. Support research and demonstration projects for methane capture equipment and technology to convert it to commercial LNG	Short Long term/ongoing through 2025
8. Regulatory/Statutory	<u>a. Develop mandatory organic waste recycling program for large commercial generators</u>	Short-mid term/2014-2020
	<u>ba. Following re-evaluation of landfill emissions in 2018, consider incentives, regulatory and/or statutory actions requiring to phase out organics out of landfills and moving toward inert only landfilling practices</u>	Mid Short term/2019-2024 ongoing through 2020
	<u>c. Investigate the feasibility and impact on overall methane emissions and on local jurisdictions of not allowing the use of green waste Alternative Daily Cover (ADC) to count as diversion</u>	Mid term/2019-2024
	<u>db. Investigate regulatory actions to further reduce GHG emissions at landfills such as incorporating BMPs and establishing lower methane emissions standards</u>	Mid Short term/2019-2024 ongoing through 2020
	<u>ee. Monitor and participate in potential regulatory changes that could address the cost, timelines, and other hurdles to interconnecting to the electricity grid</u>	Short-mid term/ongoing through 2020
	<u>f. Complete updates to CalRecycle regulations for composting and anaerobic digestion of food materials and other highly putrescible wastes</u>	Short term/2014-2018
	k. Reform SABRC statutes for State procurement (include more products with recycling or GHG implications; revise minimum percentages; include Community Colleges and University of California; require State contractors to meet same purchasing requirements as State agencies; establish enforcement mechanism for non-compliance)	Short-mid term/2014-2020

Category/Task	Actions	Timeframe
9. Cap and Trade	a. Consider use of Cap and Trade auction funds for infrastructure development	Short term/late 2013/early 2014
	b. Review benchmarks for capped recycling and remanufacturing facilities	Short term/ late 2013 /early 2014
	c. Determine status of MSW-Thermal facilities in Cap-and-Trade	Short term/late 2015
	d. Review landfills for inclusion in Cap-and-Trade	Mid Short term/ late 2014 <u>2019-2022</u>