How much of Sustainability Fund is committed to mass education on recycling streams and waste separation?

General Funding

The Municipal and Industrial Landfill Levy (MILL) is collected by the Environment Protection Authority (EPA) and distributed by the Department of Environment Land Water and Planning (DELWP) in accordance with the Environment Protection and Sustainability Victoria Amendment Act 2014. A portion of the levy is allocated each year to Sustainability Victoria (SV), EPA and the seven Waste and Resource Recovery Groups (WRRGs). The remaining unallocated portion of funds collected through the MILL is distributed to the Sustainability Fund.

In addition to its MILL allocation, SV may receive funding that is tied to the delivery of specific government policies. This funding is administered through contracts with the Sustainability Fund that have agreed outcomes and timeframes and the funding can only be used for the specific purposes for which it has been granted. SV delivers programs based on strong research and engagement that are designed to turn the Victorian Government's strategic commitments into practical outcomes. We continue to help the Victorian community through advice, guidance, recognition and promotion and facilitating investment in infrastructure. SV is established under the Sustainability Victoria Act 2005, to facilitate and promote environmental sustainability in the use of resources. SV's priorities are to help Victorians act on climate change, to create less waste, recycle more and transition to a zero-carbon lifestyle. SV works closely with DELWP and works in collaboration with EPA, the seven WRRGs and other relevant Victorian Government departments.

Education funding

SV's Waste Education Program (including Love Food Hate Waste, Waste Education in Health care and Victorian Litter Plan) was allocated $4.5 million over four years under the 2017-18 *Investing in waste and resource recovery for a growing Victoria* funding package. This will support the Victorian Waste Education Strategy. SV is delivering this strategy to support Victorians to engage in preferred and appropriate waste disposal practices including waste avoidance, resource recovery or recycling, reducing litter and understanding the essential nature of Victoria's waste and resource recovery system.

Love Food Hate Waste

- SV is a founding participant of the $120 million Fight Food Waste Cooperative Research Centre which was announced in April 2018. The Cooperative Research Centre partnership between 59 industry, government, not for profit and research organisations from around Australia will deliver a 10-year research program to reduce Australia's food waste from the point of production to its final disposal. SV has committed $150,000 over three years from the Love Food Hate Waste program to conduct collaborative research projects investigating how we can further support Victorian households to change behaviours that lead to food waste.
- Love Food Hate Waste is delivered by SV and aims to raise awareness of avoidable food waste from Victorian households. Each year Victorian households produces more than 250,000 tonnes of avoidable food waste that ends up in landfill, presenting a financial loss for households which has a significant impact on our environment.

Victorian Litter Plan

- Support the WRRGs to create regional litter plans
- Let's Strain the drains - Victorian-first monitoring project of marine debris in Port Phillip Bay. This innovative project is funded by the Victorian Government and delivered by Tangaroa Blue Foundation, Cleanwater Group and SV, with support from the Cities of Wyndham, Hobson's Bay, Moreland, Kingston, Maribyrnong, and Greater Dandenong. To address the increasing amount of litter washing up on Port Phillip Bay beaches, 120 stormwater drain traps have been installed by the Cleanwater Group in consultation with the six councils. The contents captured in the traps will be sorted and counted, providing data to the Australian Marine Debris Initiative Database which is used to identify specific information on sources and distributions of litter

originating from urban areas that would normally flow through the stormwater system into Port Phillip Bay. These audits will be completed by volunteers between now and May 2020.

Waste Education in Healthcare

- In 2017-18 Victorian public health services generated approximately 35,000 tonnes of solid waste and of this approximately 8,000 tonnes was recycled, 5,000 tonnes was clinical waste, 22,000 tonnes was classified as general waste. The disposal costs of this solid waste were close to $17 million, of which half was for treating and disposing of clinical waste. SV, in collaboration with the Department of Health and Human Services, are undertaking a two-year project (2018-2020) to explore waste avoidance, resource recovery opportunities and to minimise clinical waste costs in the healthcare system.

Plastic Bag Ban

- As of 1 November 2019, lightweight plastic shopping bags with a thickness of 35 microns or less have been banned from all retail outlets. The single-use plastic bag ban has been introduced following extensive community consultation on tackling plastic pollution, which showed significant support, with 96 per cent in favour of the ban.

- Approximately 150 million plastic bags end up in our oceans and waterways each year, contributing to an estimated eight million tonnes of plastic dumped into the ocean. To support the community in moving to reusable bags, SV is running a Better Bag Habits campaign – helping Victorian households to remember their phone, wallet, keys and bag before leaving home. The campaign is currently live with advertising, PR and influencers in market. All WRRGs and councils have been provided with materials and tools to support the campaign in their local community.

To protect our environment and recover more precious resources, the Victorian Government banned all e-waste from landfill from 1 July, 2019. The ban will ensure valuable materials left inside e-waste can be safely recovered and reused, while reducing the damage electronic items can have on the environment and human health. E-waste is the fastest-growing stream of waste worldwide and covers everything from old mobile phones, computers, audio devices, refrigerators and other white goods, hair dryers, TVs, heaters, and air-conditioners.

To support the rollout of the ban, the Victorian Government has invested $15 million to upgrade e-waste collection and storage facilities across the state and $1.5 million to deliver an education and awareness program to support the ban on e-waste in landfills.

- SV has funded 122 council e-waste transfer station collection upgrades to existing facilities – 70 of which have been completed to date, with the remainder to be completed throughout 2020-2021. These infrastructure upgrades will provide 98% of Victorians with reasonable access to best practice e-waste disposal facilities across the state and improve Local government's capacity to safely collect e-waste in line with the key requirements of the AS/NZ5377:2013 and Waste Management Policy (E-waste).
- Through the e-waste education grants, approximately 50 additional e-waste hubs were installed at libraries, council offices and community centres as part of e-waste council education grants.

These facilities form part of a network of more than 1000 locations across the state that take a range of e-waste items. The campaign began in June 2018, a year ahead of the ban, with an integrated education campaign and the final paid advertising stage of the e-waste campaign has concluded with regional TV, state-wide press, outdoor, online, radio and CALD media running from July - September 2019. The campaign continues with PR and influencer engagement from October to November 2019.

- 85% of councils engaged through e-waste council education grants, and 100% engaged with resources, tools and support.
- Seven e-waste projects have been funded under the Resource Recovery Infrastructure Fund (over $1.4 million)
    - Five recovery projects
    - Officeworks – funded to rollout new recycling stations to all 50 stores in Victoria including batteries, e-waste, soft plastics.

- The National E-Waste Alliance, in collaboration with WDEA (a disability employment enterprise), will establish a network of collection points across the Western districts of Victoria to permit the drop off of end of life electronics

With regards to recycling the silicon components, which are the most difficult components to recycle. Could you just make some comments on what the pathways are to the commercial viability of this and what sort of time lines we are looking at for commercialisation of this technology?

The current national market for recycling silicon-based photovoltaic (PV) panels is limited with a few players offering end-of-life management services, however, mostly recovering the aluminium frame component which represents a small portion of the overall panel by weight. There are no dedicated solar PV cell recyclers currently operating in Victoria or in Australia more broadly. At present, only a small number of PV panels are entering Australia's waste stream and these low volumes are part of the reason why large scale investment in PV panel recycling is yet to emerge. Sustainability Victoria (SV) is leading a national approach, working closely with the PV sector, to investigate product stewardship options for PV system products in Australia.

Product stewardship is an approach that looks to share the responsibility for a products impacts across its lifecycle. Creating a national system of shared responsibility for emerging priority products like PV panels would help Victorians appropriately manage hazardous materials, use resources more wisely and contribute to a circular economy in Victoria. To support the ongoing development of Victoria's e-waste recycling sector, funding is available through SV's Resource Recovery Infrastructure Fund and Research, Development and Demonstration grant programs. Round 2 was announced recently and includes $150,000 for a project led by Deakin University which will investigate a new recycling technique for end of life silicon base PV panels to be used in the production of high-energy anodes for lithium-ion batteries.

We might need a new toxic hazardous materials facility in Victoria, given the volume of ash material that we produce and the number of proposals of incineration going ahead. Have you all been considered in that discussion? Are we going to have a new toxic facility?

SV is required under the *Environment Protection Act 1970* to write and implement the State Waste and Resource Recovery Infrastructure Plan (SWRRIP). This SWRRIP considers the infrastructure needed to manage the solid wastes that enter the waste and resource recovery system. It does not consider infrastructure needed to manage hazardous wastes in Victoria. The only exception is where hazardous waste management crosses over with managing non-hazardous wastes.

SV acknowledges this gap and plans to include this in the next iteration of the SWRRIP due in 2023.
The regulation and management of hazardous wastes is now provided in Victoria through the Environment Protection (Industrial Waste Resource) Regulations 2009, which is administered by EPA.

During 2018-19, SV**:**

- Established a hazardous waste data base for portfolio use:
  - Enables storage, extraction and analysis and reporting of hazardous waste data
  - Includes waste tracking Certificate data, landfill levy data, Survey data, licence conditions etc.
  - Capacity projection model
- Profiled the current hazardous waste system
  - Analysed Waste streams, volumes trends
  - Analysed available infrastructure types and capacities
  - Identified and preliminary assessment of emerging issues and high risks