Climate Change Response & Environmental Sustainability

Feb 8, 2022

Contents

Facility Climate Change Resilience	 Facility Risk Screening Capital Project Risk Screening Capital Project Design Requirements New Construction Projects
Waste Diversion/Reduction	 Vitacore PPE Recycling Pilot MAGS Waste to Energy Pilot Supporting Waste Reduction
Transportation	Fleet Electrification

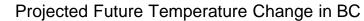
		⊞ CDH	⊞NRGH	H CLRC	⊞ CPRC	⊞ CHCC	⊞ LSHC
Climate Event	Risk/Vulnerability						
1. Extreme Heat	Overheating (i.e. lack of cooling capacity)	12	! 16	12	12	12	9
	Loss of power	12	. 12	12	12	12	9
2. Wildfire Smoke	Poor indoor air quality due to wildfire smoke	g	12	9	9	9	9
3. Drought	Water shortage and/or decrease in water quality (e.g. temperature)	12	. 12	12	9	9	9
4. Extreme Rain	Localized flooding at site	S	3	9	9	9	9
	Decrease in water quality (e.g. turbidity)	g	3	9	9	9	9
	Loss of power, transportation, telecommunications, supply chains	12	16	12	12	12	9
	Structural impacts from snow load	12	. 12	12	12	8	12
5. Extreme snowfall	Impacts on FMO personnel	g	6	9	9	9	9
5. Extreme showfall	Loss of power, transportation, telecommunications, supply chains	g	9	9	9	9	9
	Localized snowmelt increasing surface water	4	4	4	4	4	4
	Loss of power	12	. 12	9	12	12	9
6. Extreme storms Loss of telecommunications		g	9	9	9	9	9
(e.g. wind storm)	Loss of transportation routes (e.g. patients and staff in and out of facilities)	g	9	9	9	9	9
	Loss of supply chains (e.g. medical gas, fuel deliveries)	g	12	9	9	9	9
	Facility Risk Score	9.9	9.8	9.7	9.7	9.4	8.9
	Facility Risk Rating	Moder	a Moderate	Modera	Moderat	Moderat	Moderat

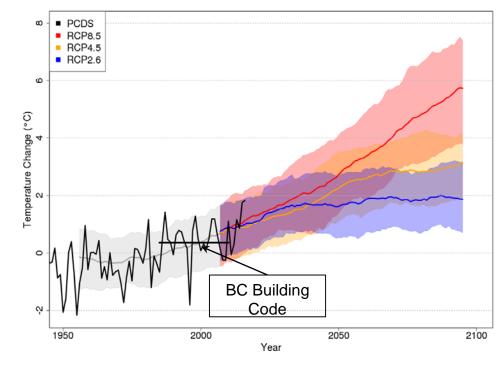
Capital Project Climate Change Risk Screening

Climate Variable(s)	Climate Impacts	Has the climate impact occurred in the recent PAST at the facility or site?	2. Will this climate impact negatively affect the intended outcomes of the project <u>at completion</u> ?	3. As the climate impact intensifies will there be negative effects to the intended outcomes of the project over its service life?	4. Is there an opportunity to include other enhancements to build resilience within this project or in future projects?	Next Steps	
1. Warming	Overheating	No	No	No	Maybe/Unknown	Review resilience opportunities with Sustainability & Business Continuity	
2. Increased / Reduced Rainfall	Reduced water quality	No	No	No	Yes	Review resilience opportunities with Sustainability & Business Continuity	
3. Reduced Rainfall	Water shortage	Yes	Maybe/Unknown	Maybe/Unknown	Yes	Future climate change planning required	
4. Reduced Rainfall & Warming	Poor indoor air quality due to wildfire smoke	No	No	No	No	No action required	
5. Increased Rainfall	Flooding	No	No	No	Yes	Review resilience opportunities with Sustainability & Business Continuity	
6. Increased Severity, Incidence and Duration of Storms	Loss of power, utility services, transportation	No	Maybe/Unknown	Maybe/Unknown	Maybe/Unknown	Future climate change planning required	

Capital Project Climate Change Design Requirements

- Applies to construction, renovations and retrofits to existing facilities where climatic data is required
- Requirements:
 - Use data that reflects future climate over service life
 - Identify measures to enhance resiliency





Source: Trevor Murdock, Pacific Climate Impacts Consortium

Resiliency in New Construction Projects

Climate Resilience Guidelines

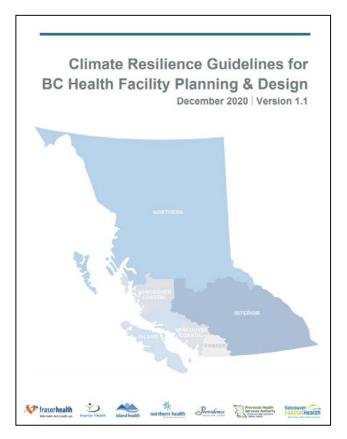
Guidelines adopted for new construction projects:

Step 1: Exposure Screen

Step 2: Climate Risk Assessment

Step 3: Resilient Design Review

Step 4: Compliance Audit



Vitacore PPE Mask Recycling Pilot

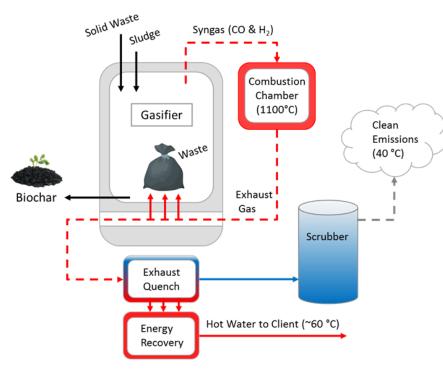
- Accepted Materials: surgical masks, procedure masks, procedure masks with visor, and disposable respirators
- Duration: 12 weeks
- Location: Royal Jubilee Hospital
- **Bins:** 10
- Data Collection: feedback, recovery rate, total weight diverted, end product quality/volume
- Supported by Ministry of Health



Waste to Energy Pilot

Micro Auto Gasification System (MAGS)

- Technology to convert biomedical waste into energy
- Bio-hazardous waste targeted for pilot
- Victoria General Hospital selected as best site
- Applied to MoE for Permit



Source: Terragon

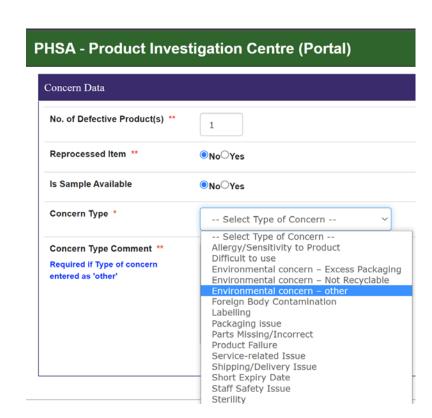
Supporting Waste Reduction

Sustainable Procurement Briefing Note

- Joint health authority briefing note submitted to PHSA Supply Chain
- PHSA Supply Chain developing ethical and environmental procurement policy

PHSA Product Investigation Portal

- Staff can submit environmental concerns on the products they use directly to PHSA Supply Chain
- Read more: <u>Submitting environmental</u> <u>concerns</u>



Supporting Waste Reduction Initiatives

Eliminating plastic waste from perineal bottles

- Identified through PHSAProduct InvestigationPortal
- Product change to eliminate plastic bag
- Over ~10,000 plastic bags avoided annually

Refilling plastic water cups in NRGH DRU

- Staff champion trained colleagues to refill plastic water cups (pre-COVID19)
- Estimated to avoid over 6,000 plastic cups/year in unit

Bring your own bag campaign

- Reducing plastic personal belonging bags
- Targeting outpatient procedures
- Communications campaign stopped due to COVID19

Fleet Electrification

Current Fleet Electrification

- 9 electric vehicles
- 4 plug-in hybrid electric vehicles

Fleet Assessment

 Conducting telematics assessment on 25 fleet vehicles

