

Power BI for waste prevention & reduction planning

Tessa Vlaanderen

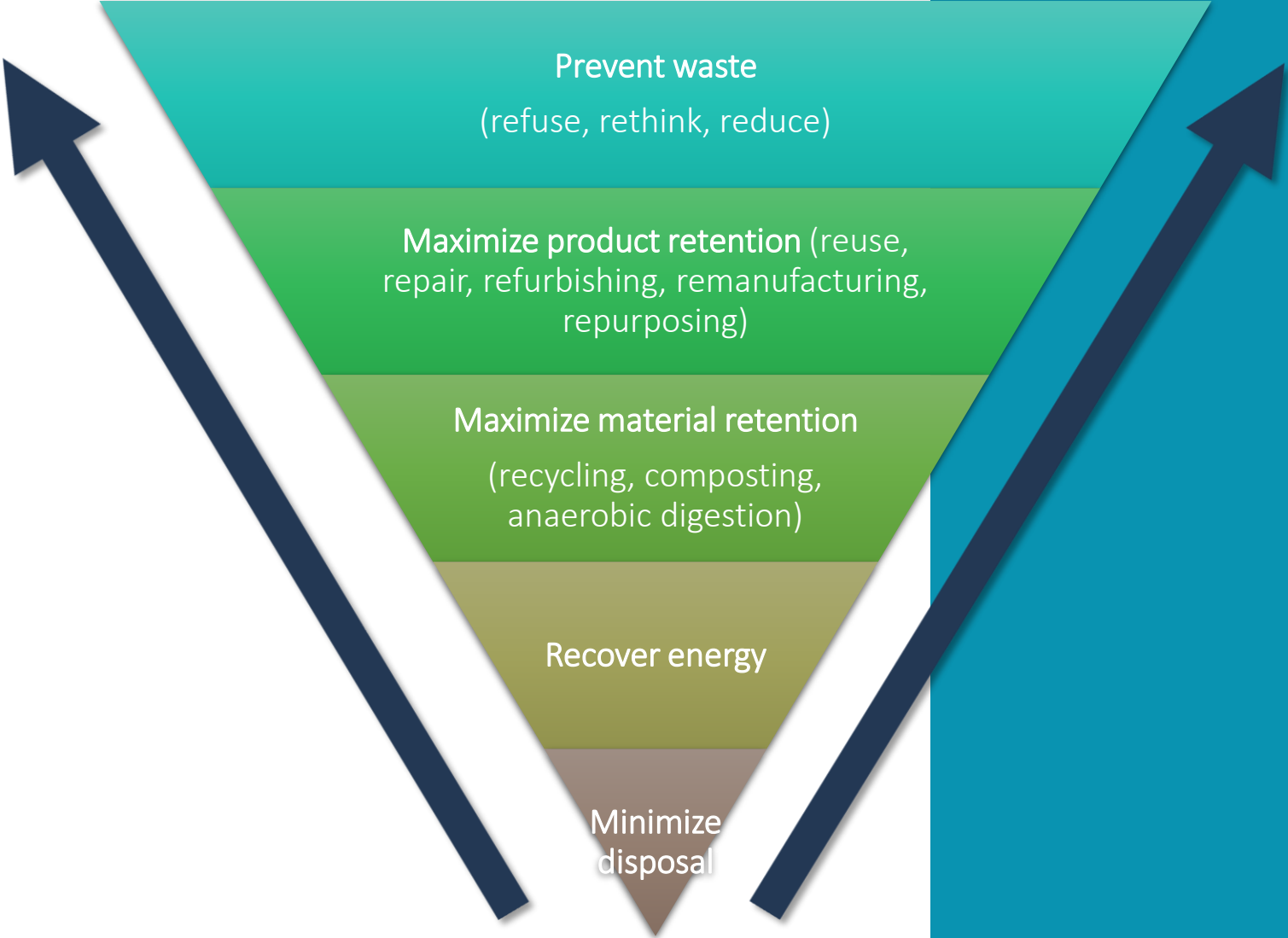
April 4, 2024





April May June July August September October November December

Up the waste hierarchy



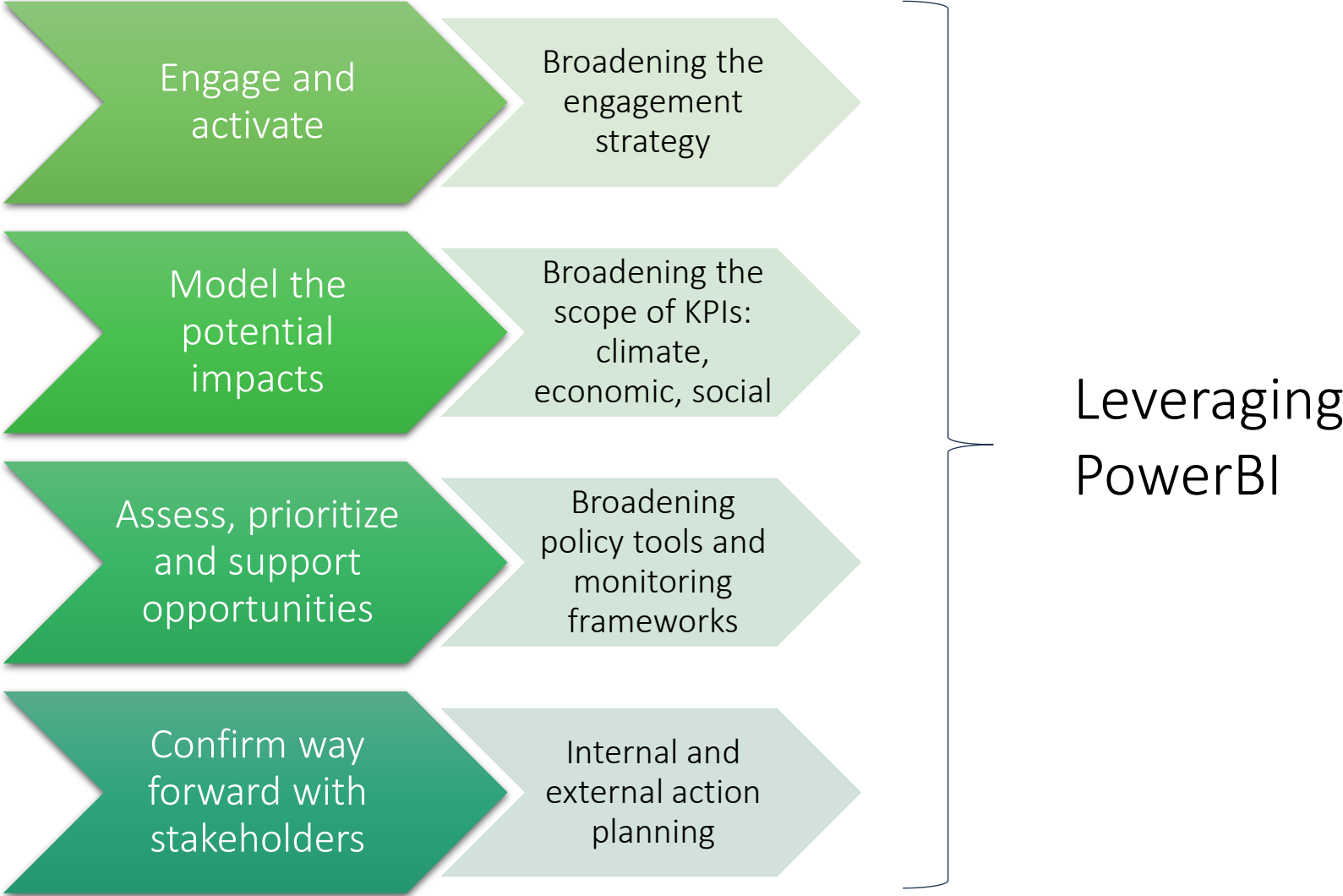


Municipal roles

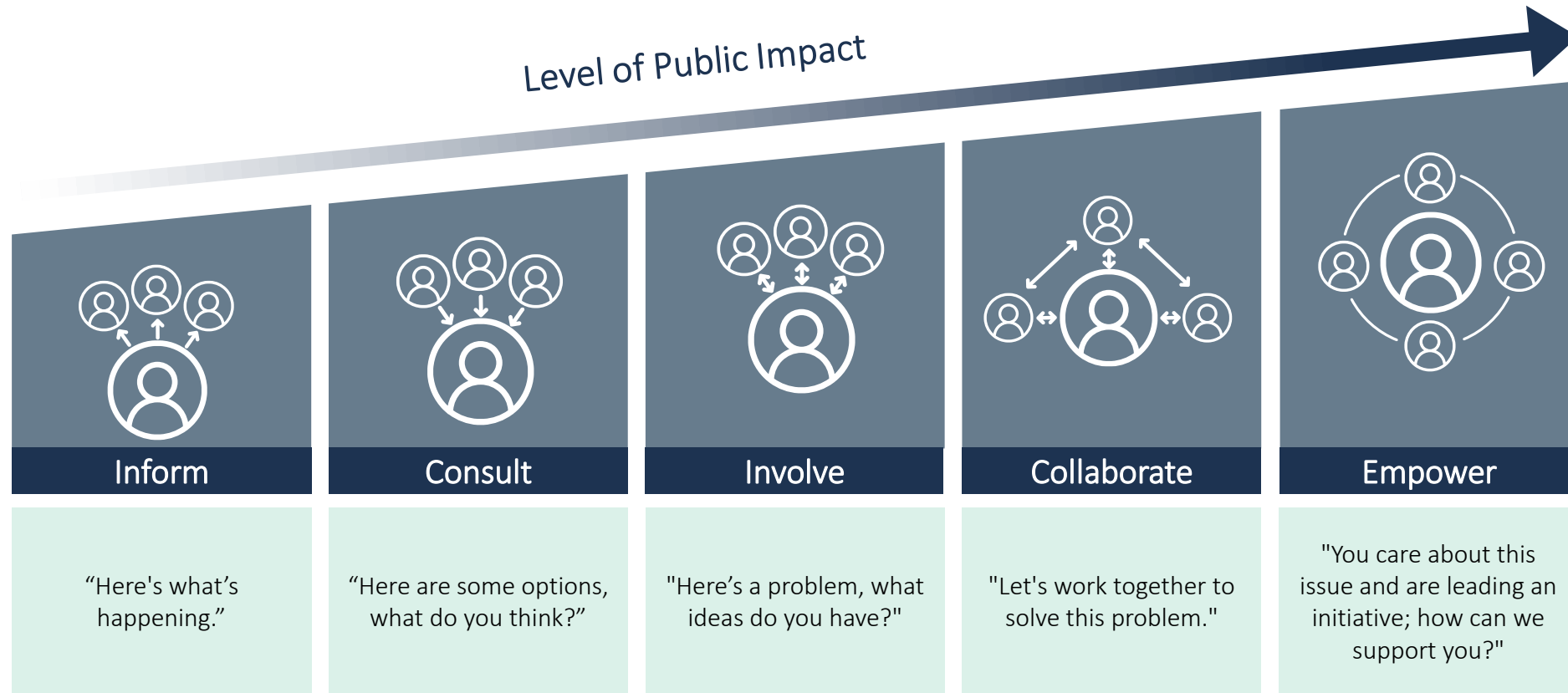




Planning for waste prevention

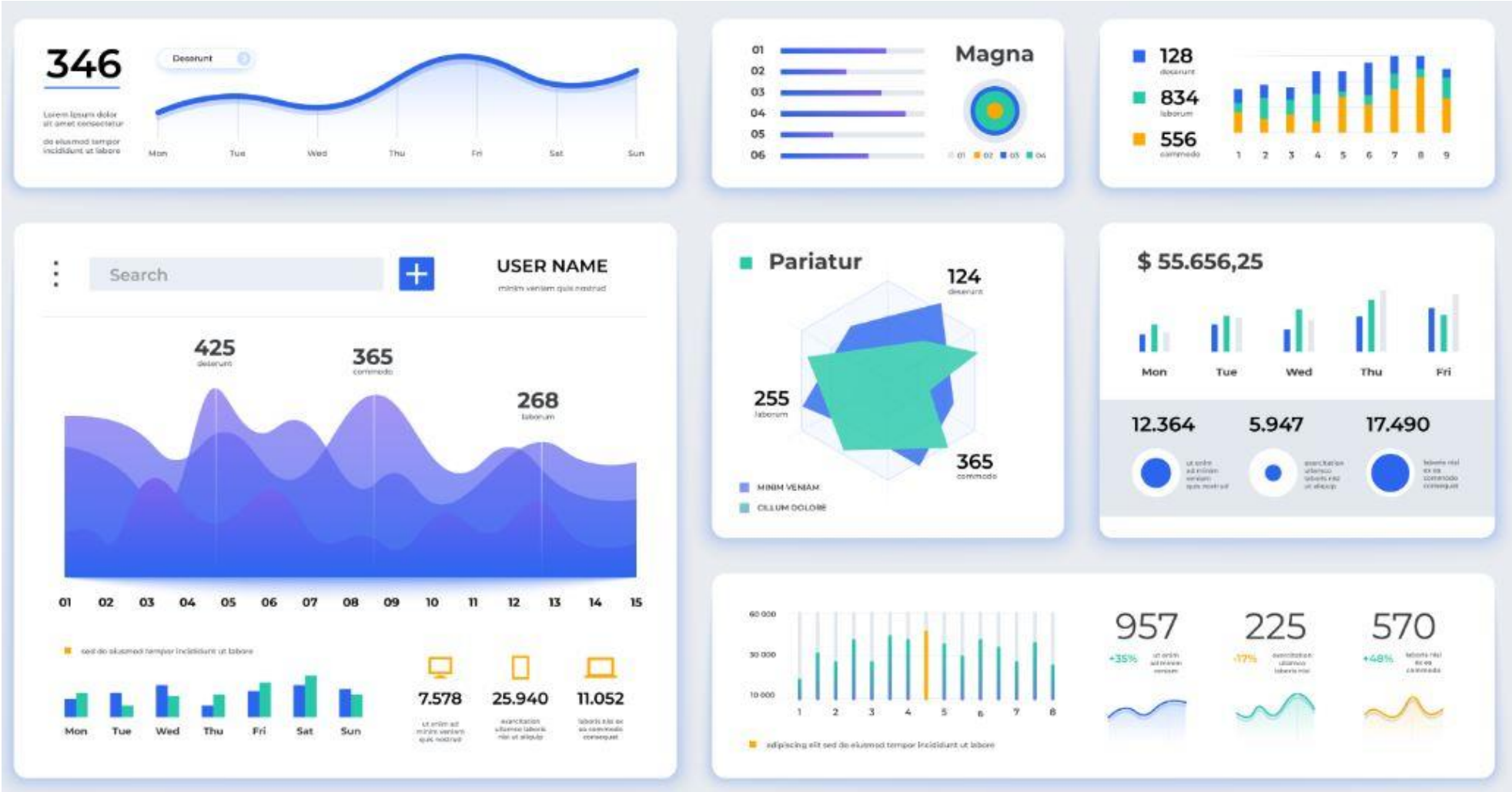


Engagement strategy



Adapted from the IAP2 spectrum of public participation

How can we use PowerBI?



SOLID WASTE MANAGEMENT PLANNING

Waste Source: All | Waste Stream: All | Approach: All | Target: All

WASTE REDUCTION

2035 REDUCTION TARGET

15%

IMPACT OF INITIATIVES (T)

60,480



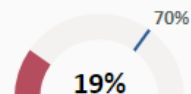
WASTE DIVERSION

2035 DIVERSION TARGET

70%

IMPACT OF INITIATIVES (T)

61,300

BASELINE WASTE
GENERATED (T)

316,500

ID	Target	Waste Source	Waste Stream	Actor	Title	Diversion Potential (T)
10	Waste Reduction	Residential	Building materials	Regional cluster	Building material passports and building database	12,750
14	Waste Diversion	IC&I	Building materials	Regional cluster	Voluntary advanced demolition standard	12,600
17	Waste Reduction	Residential	Food	Regional cluster	Food innovation hub	10,000
23	Waste Reduction	Residential	Building materials	Single organization	Modular manufacturing plant	9,500
24	Waste Diversion	Residential	Building materials	Consortium	Biobased construction product manufacturing	9,000
3	Waste Diversion	IC&I	Building materials	Single organization	CRD reuse warehouse and store	8,500
5	Waste Diversion	IC&I	Plastic packaging	Local cluster	Circular Neighborhood	7,500
12	Waste Diversion	Residential	Non-food organics	Symbiosis	Protein production from organic waste for animal feed by insects	7,000
2	Waste Reduction	Residential	Bulky items	Single organization	Furniture remanufacturing	6,500
21	Waste Reduction	Residential	Plastic packaging	Sector-wide	CPP packaging refill initiative	6,300
11	Waste Reduction	Residential	Bulky items	Regional cluster	Sharing platforms high value consumer goods	5,700
18	Waste Diversion	IC&I	Building materials	Consortium	Drywall recycling	5,000
19	Waste Diversion	IC&I	Hazardous	Consortium	Medical waste recycling	3,500
15	Waste Reduction	Residential	Plastic packaging	Single organization	Zero Waste Grocery	3,500
25	Waste Diversion	Residential	Food	Symbiosis	Catering food collection and reuse	2,500
7	Waste Diversion	IC&I	Plastic packaging	Sector-wide	Tenant engagement in multi-residential buildings	2,500
1	Waste Reduction	IC&I	Plastic packaging	Consortium	Festival and event cup reuse	2,400
9	Waste Reduction	Residential	Electronics	Local cluster	Repair hub	1,750
20	Waste Diversion	Residential	Food	Local cluster	Grass-roots composting programs	1,600
8	Waste Diversion	Residential	Food	Single organization	Fruit peel recycling plant	850
4	Waste Reduction	Residential	Food	Single organization	Urban harvest	750
13	Waste Diversion	Residential	Textiles	Single organization	Used clothing in-store take-back program for recycling	750
16	Waste Reduction	IC&I	Plastic packaging	Single organization	Reusable transportation packaging	600
22	Waste Reduction	Residential	Electronics	Single organization	Appliance rental and repair service	550
6	Waste Reduction	Residential	Textiles	Single organization	Clothing leasing company	180
Total						121,780

WASTE PREVENTION & REDUCTION

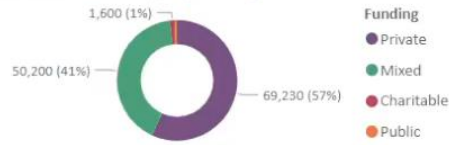
SOLID WASTE MANAGEMENT PLANNING



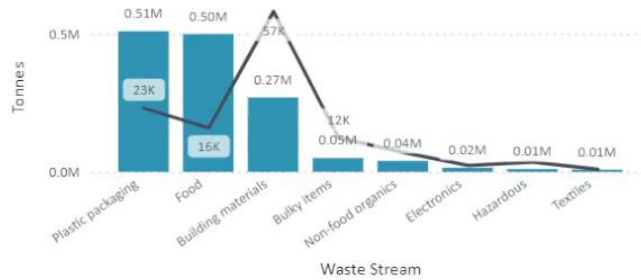
Filters

Waste Source: All | Waste Stream: All | Approach: All | Target: All

Diversion Potential (T) by Funding Source



Total Generated (●) Diversion Potential (●)



Target x Waste Stream x Approach x

Diversion Potential
121,780

WASTE PREVENTION & REDUCTION

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Filters

What is the opportunity for plastic waste reduction?



WASTE PREVENTION & REDUCTION

SOLID WASTE MANAGEMENT PLANNING



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WASTE REDUCTION



WASTE DIVERSION



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Filters

What about electronic and electrical equipment?



MetroVancouver Circular Economy & 3Rs Study



Worldwide scan of circular initiatives, creation of a library of 75 case studies



Metrics and methodology development

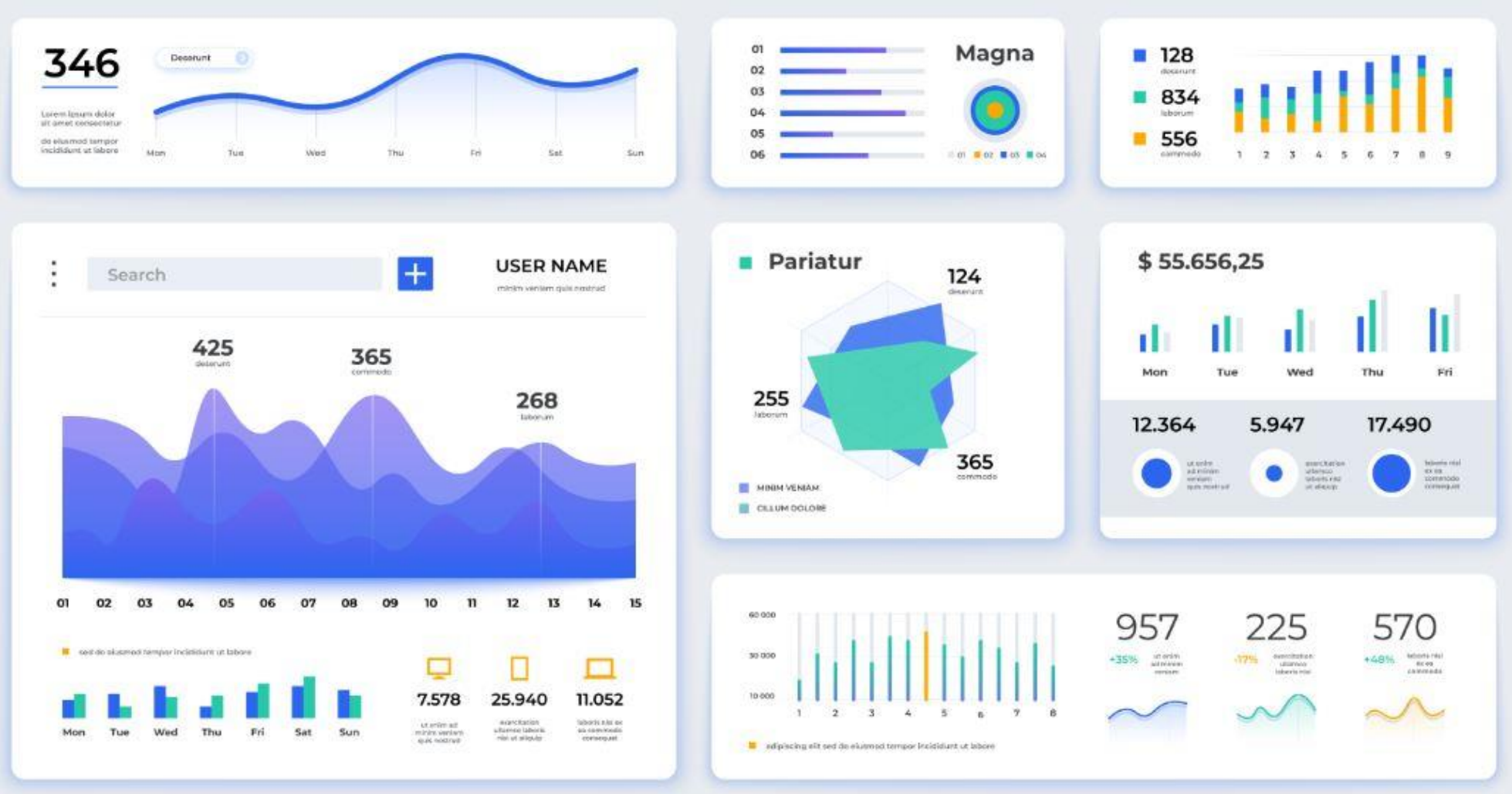


Impact assessment per initiative



PowerBI tool development

What is next?

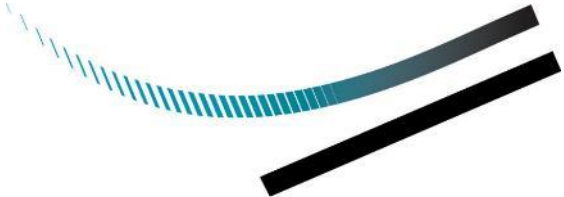


Contact

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DILLON
CONSULTING



Thank you!

