

## Follow-up on meeting today

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To: Leeanna Kohn-Hardy <leeanna.kohn-hardy@finappster.co.nz>

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Hi Leeanna,

Just a follow up email outlining what you discussed with us today:

- Option 1 is the chosen table design and thus is the development direction for the rest of the project.
- Option 1 was chosen because:
  - Updates to share and fund can be done independently while remaining consistent with each other
  - It follows the same table design as *tau*, which is more intuitive and easier to implement
  - Option 1 reads only from the separate template files, rather than having to resort to messily mixing reading your raw data where calculations are made
- Development is expected to finish by next week.
- Links to test our final work (in a development environment) is expected to be available next week.
- Documentation and work towards handover is expected to begin next week, meeting on this tentatively booked for 2pm Tuesday 10<sup>th</sup>.
- Handover will include cloned repositories of our work.
- Production deployment will happen near the end of the handover.

### Covering the rationale on option 1 again:

A share's SDG values in the context of its fund weighting has the same value whether the weighted percentage is applied at the metric level or at the share's full SDG value level.

Examples using the Affordable and Clean Energy SDG:

- Applying a share's fund weighting at the metric level (**Option 2's way, and how you're currently doing it**):
  - Formula components: U = Total renewable energy consumption (MWh), metric 1. S = Total energy consumption (MWh), metric 2. P = share's weighting in x fund, from raw data column
  - Formulas:  $U / S * 100$  = Clean Energy SDG full value calculation in raw data converted to percentage,  $(P * U) / (P * S) * 100$  = Weighted version of SDG value of Clean Energy SDG within x fund, converted to percentage
  - Example, Full SDG value, BHP, row 2 in raw data =  $U_2 / S_2 * 100 = 10,000 / 41,300,000 * 100 = 0.02421307506053268765133171912833$
  - Example, weighted version within ASX fund, applying fund weighting to metrics, raw 2 in raw data =  $((P_2 * U_2) / (P_2 * S_2)) * 100 = ((0.0252224277 * 10,000) / (0.0252224277 * 41,300,000)) * 100 = 0.0252224277 * (252.224277 / 1,041,686.26401 * 100) = \underline{\underline{0.00061071253\%}}$
- Applying a share's fund weighting at the full share SDG value that is stored in the Share table (**Option 1 way**)
  - Formula components: SDG = Clean Energy SDG full value in Share table, stored in database and uploaded as part of the share template in Option 1, P = Share's weighting in x fund in Fund\_share table, stored in database and uploaded as part of the fund template in Option 1
  - Formulas: SDG = Clean Energy SDG full value in Share table,  $P * SDG$  = Weighted version of SDG value of Clean Energy SDG within x fund

- Example, Full SDG value, BHP, taken from Share database in Share table = SDG = 0.02421307506053268765133171912833
- Example, weighted version within ASX fund, multiplying share weighting value in Fund\_share table against the matching share SDG from the Share table =  $0.0252224277 * 0.02421307506053268765133171912833 = \underline{0.00061071253\%}$

As we can see above from that example, the values are the same calculated either way.

### Another example:

Same formulas applied on Reduced Inequalities, row 9, Fletcher Building:

- Full share weighting calculation using metrics in raw data = # of staff / # of staff discriminated against, bullied etc. \* 100 =  $CJ / EN * 100 = 110 / 9694 * 100 = 1.1347225087683102950278522797607\%$ , P = Share's weighting in x fund
- Metric level calculations =  $P * ((P * CJ) / (P * EN)) * 100 = 0.02489518 * (0.02489518 * 110) / (0.02489518 * 9694) * 100 = \underline{0.0282491211\%}$
- Full share weighting level calculations = Full Reduced Inequalities SDG for Fletcher Building, taken from Share database in Share table \* P =  $0.02489518 * 1.1347225087683102950278522797607 = \underline{0.0282491211\%}$

### Rounding note:

(it is worth mentioning that some of the cells in your raw data have decimal places that cut off values such as column EN in the calculation above, which I could see in excel was actually 109.952921622042, not 110. This changes the calculation if the whole value is used to  $109.952921622042 \div 9694 = 0.01134236864266989890654012791417 \times 100 = 1.1342368642669898906540127914174\%$ , which matches the full value of the SDG in the Co-SDG template, but that is also rounded down too, from 1.13423686426699% to 1.134237%. Perhaps you're okay with that, but if not you might want to consider increasing the decimal place inclusion in the raw data/across all pages, or at least decide on a point across all cells in your data where anything past a decimal place isn't important. It won't change what we do though, the data upload app will upload whichever values you choose in the share and fund templates. Just something for you to consider).

At any rate, another SDG, weighting applied to metrics verses the full SDG just like in the first example, same weighted result.

Attached is the file used to calculate these examples for your reference.

Let us know if you have any questions.

Thanks,  
Chris