



Thematic Allocation: The Water Investment Opportunity through Funds Solutions

Peer Group Analysis and Portfolio Construction

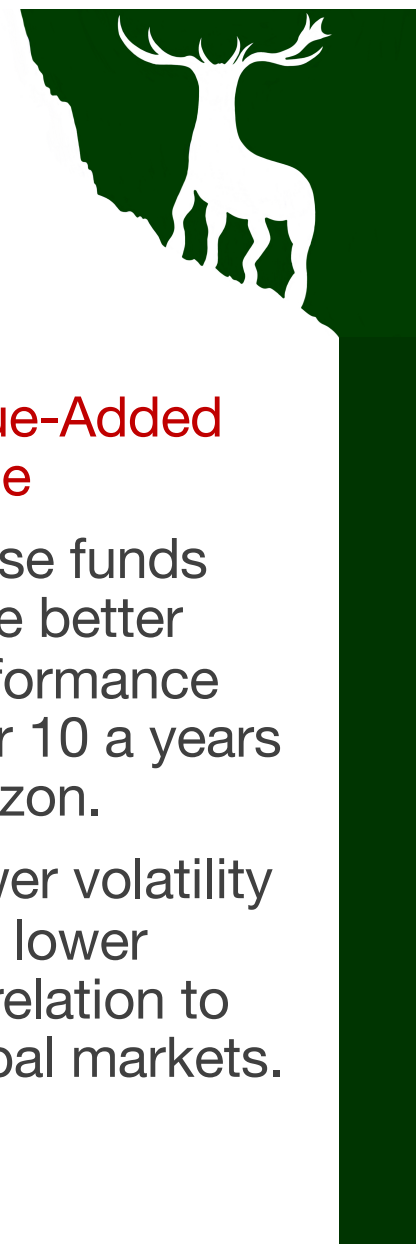
by Nicola Lei Ravello

Why Invest in Water

- **Underserviced** basic need: fixed supply for increasing demand.
- **Not a commodity allocation:** investments done through water efficiency, treatment, delivery or recycling vectors.
- Opportunity to **take responsibility** on the investments and contribute to **development** of an important resource. **Sustainable ratings** of the products are available.
- **Segmented Sector:** stand-alone performance drivers in Utilities, Industrials, Technologies and Infrastructure.
- Wide array of funds with **different strategies**. Custom-made solution possible.
- These funds invest through **global listed equities**. This allocation can fit in a **traditional equity portfolio**.
- Potential for **added-performance, reduced volatility and diversification**.

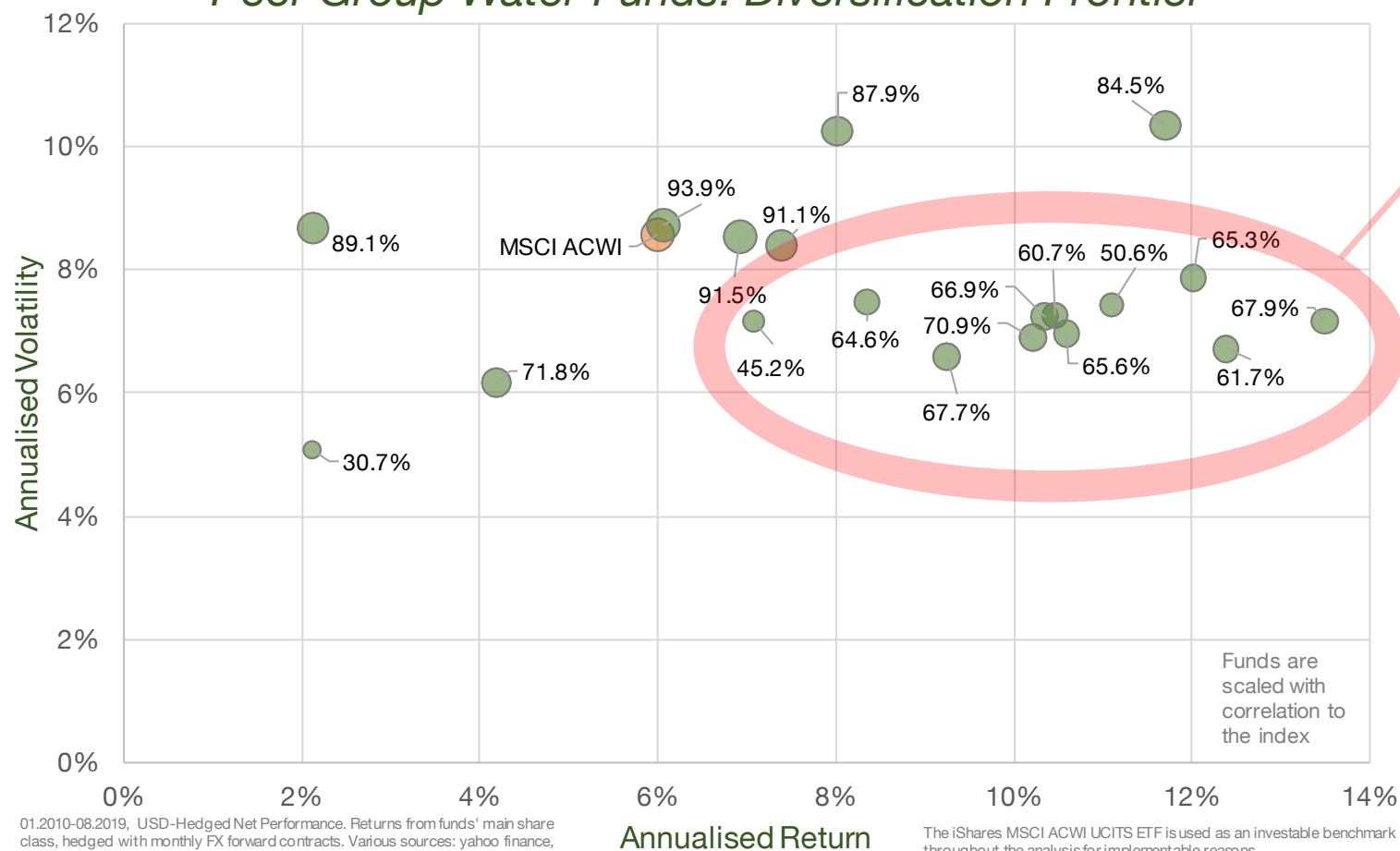
6 CLEAN WATER AND SANITATION





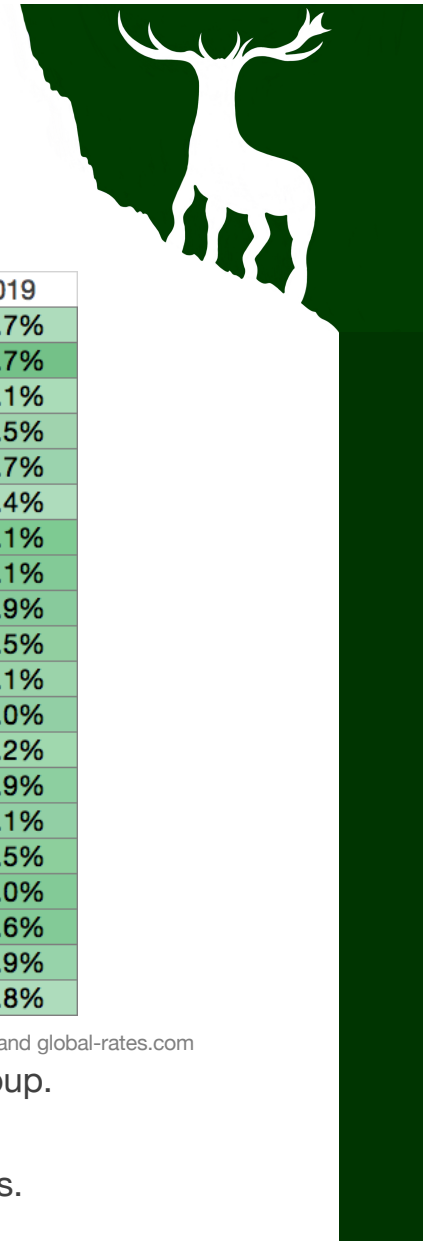
Source of Return and Diversification

Peer Group Water Funds: Diversification Frontier



- **Value-Added Zone**
- These funds have better performance over 10 a years horizon.
- Lower volatility and lower correlation to global markets.

Overview of the Performance and its Dispersion: Yearly



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MSCI ACWI	10.7%	-9.9%	14.0%	19.8%	1.5%	-4.6%	6.0%	21.8%	-11.0%	15.7%
Fund 1	13.3%	-10.5%	24.1%	27.0%	-1.1%	-15.2%	13.9%	23.6%	-6.3%	28.7%
Fund 2	8.8%	-12.2%	17.3%	29.6%	-2.8%	-1.5%	10.6%	26.4%	-14.3%	17.1%
Fund 3	16.1%	-8.0%	21.6%	23.8%	-1.2%	0.3%	4.9%	22.3%	-12.5%	19.5%
Fund 4	15.0%	-7.5%	20.2%	26.2%	3.9%	-1.8%	6.7%	26.7%	-12.4%	19.7%
Fund 5	13.6%	-9.9%	27.1%	28.7%	-3.8%	-12.8%	14.0%	18.9%	-13.6%	16.4%
Fund 6	19.5%	-5.6%	26.9%	30.9%	0.4%	-9.8%	32.2%	24.3%	-8.9%	26.1%
Fund 7	18.9%	-12.8%	19.2%	18.8%	8.9%	3.6%	-1.0%	15.0%	-13.5%	25.1%
Fund 8	23.4%	-2.2%	14.6%	18.1%	16.6%	11.3%	10.0%	10.7%	-7.9%	23.9%
Fund 9	21.6%	-8.5%	20.9%	21.4%	14.5%	12.5%	13.3%	12.8%	-8.2%	22.5%
Fund 10	15.0%	-15.5%	18.4%	24.8%	15.0%	10.6%	9.7%	11.9%	-8.4%	20.1%
Fund 11	14.9%	-7.3%	20.2%	26.1%	3.8%	-1.9%	6.5%	26.7%	-10.1%	22.0%
Fund 12	28.1%	-13.4%	17.9%	24.6%	6.2%	11.6%	8.5%	7.8%	-16.2%	19.2%
Fund 13	21.5%	-2.6%	17.9%	22.3%	22.5%	18.5%	9.3%	10.3%	-12.8%	22.9%
Fund 14	23.2%	-7.0%	20.7%	21.6%	13.2%	6.2%	8.1%	9.1%	-13.1%	22.1%
Fund 15				18.5%	17.0%	2.1%	3.6%	6.1%	-8.9%	23.5%
Fund 16									-7.3%	25.0%
Fund 17	0.7%	-26.1%	2.1%	20.3%	15.2%	8.7%	5.1%	8.1%	-10.2%	25.6%
Fund 18	20.4%	-7.7%	22.5%	22.1%	11.2%	5.7%	13.4%	5.1%	-12.8%	20.9%
Fund 19	22.6%	-5.9%	24.8%	24.3%	10.3%	-1.6%	17.9%	17.4%	-12.1%	15.8%

01.2010-08.2019, USD-Hedged Net Performance. Returns from funds' main share class, hedged with monthly FX forward contracts. Source: various: yahoo finance, funds and global-rates.com

- The heatmap shows additional evidence on the dispersion and volatility of performance across the Peer Group.
- Each fund has a different strategy in terms of allocations to the sector's segments.
- There is potential for multiple drivers of performance. There is a rationale for an allocation to a basket of funds.



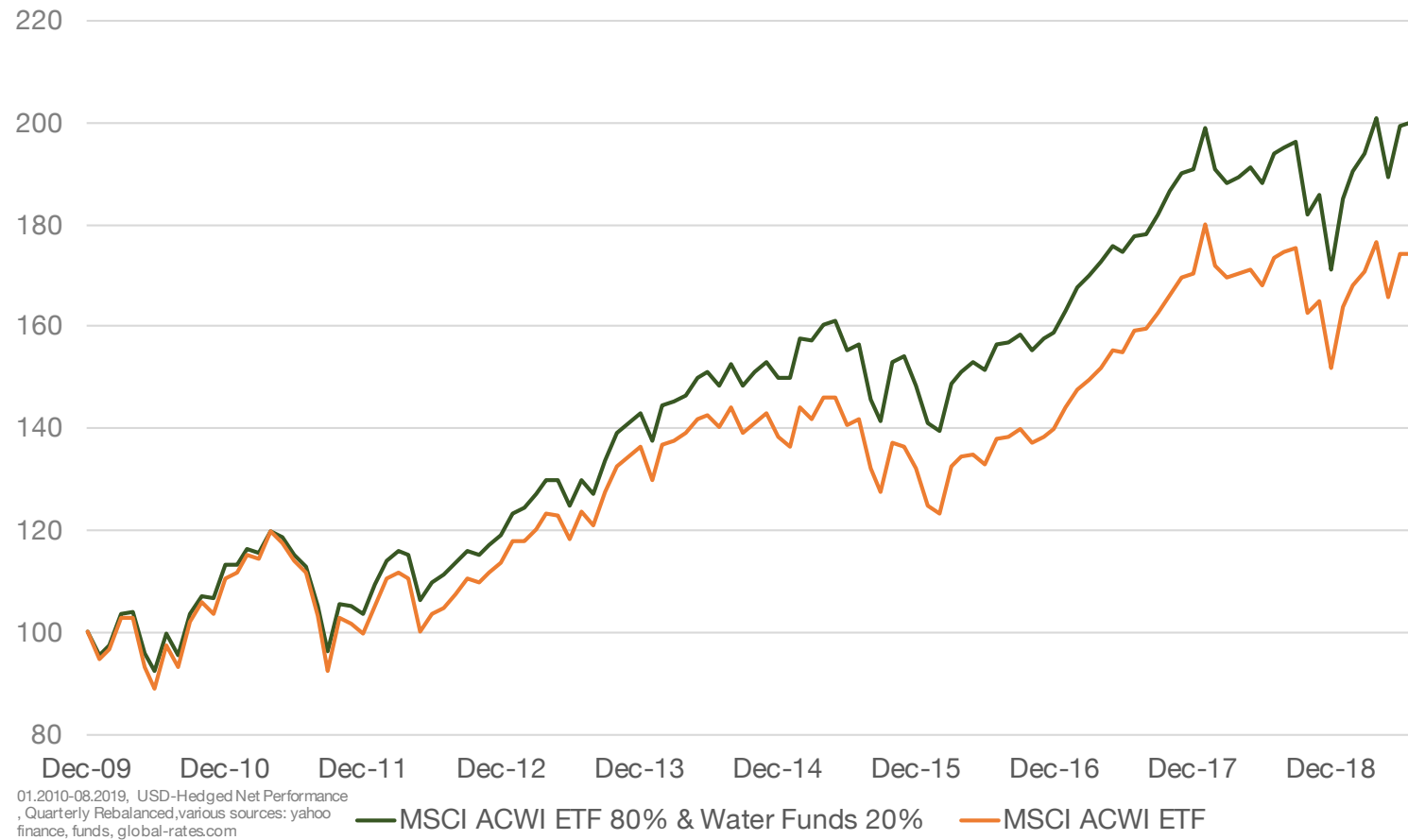
An Example of Strategic Allocation

Sustainable Fund Portfolio Allocation Tool				
#	Funds	Type	Inception Date	Weight
1	MSCI ACWI ETF	Equity	31.01.10	80%
2	Selected Fund A	Water	31.01.10	7%
3	Selected Fund B	Water	31.01.10	7%
4	Selected Fund C	Water	31.01.10	6%

- A proprietary *Portfolio Allocation Tool* derive sustainable portfolios.
- Here is a simple example how a water pocket allocation can affect an equity strategic allocation.
- An ETF of the global markets index is used as an implementable proxy (iShares MSCI ACWI UCITS ETF).
- A selection of three water funds based on the previous results is used for the thematic water allocation.

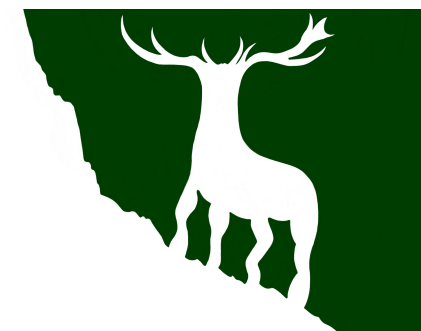
Improved Performance over Time

Water Allocation: Performance over Time



- The Thematic Water Allocation provides a sustainable overperformance over time.





Improved Portfolio Characteristics

Portfolio Characteristics	Sustainable	Classic
Total Return	97%	71%
Annualised Return	7.24%	5.68%
Annualised Volatility	7.7%	8.6%
Tracking Error	2.24%	
Correl Allocation To BM	72.9%	

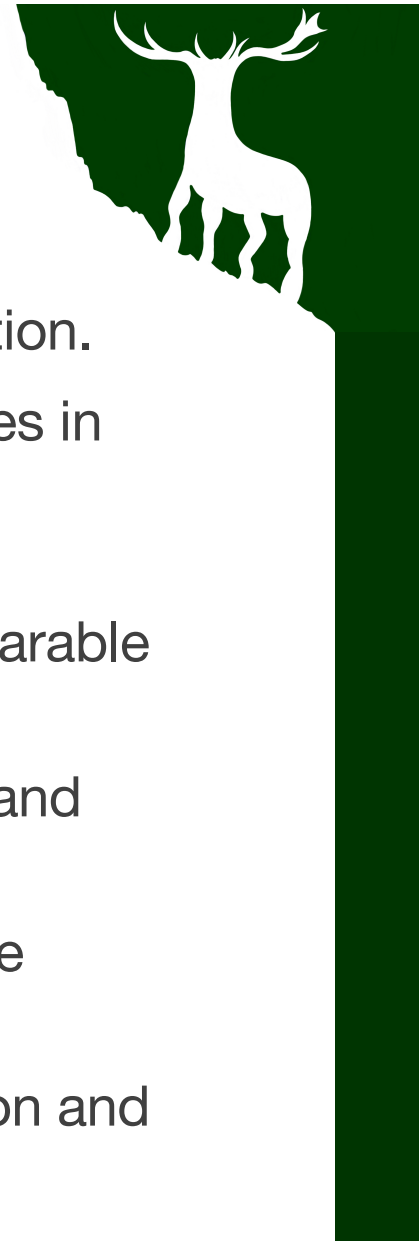
- This translates to an annual 1.56% overperformance for a 20% allocation in 10 years.
- The volatility of the portfolio is also reduced.
- The thematic allocation proved to be a diversification in the portfolio.

Remarks:

The Correlation Allocation to BM represents the correlation of a normalized (100%) portfolio of the three water funds to the index ETF.

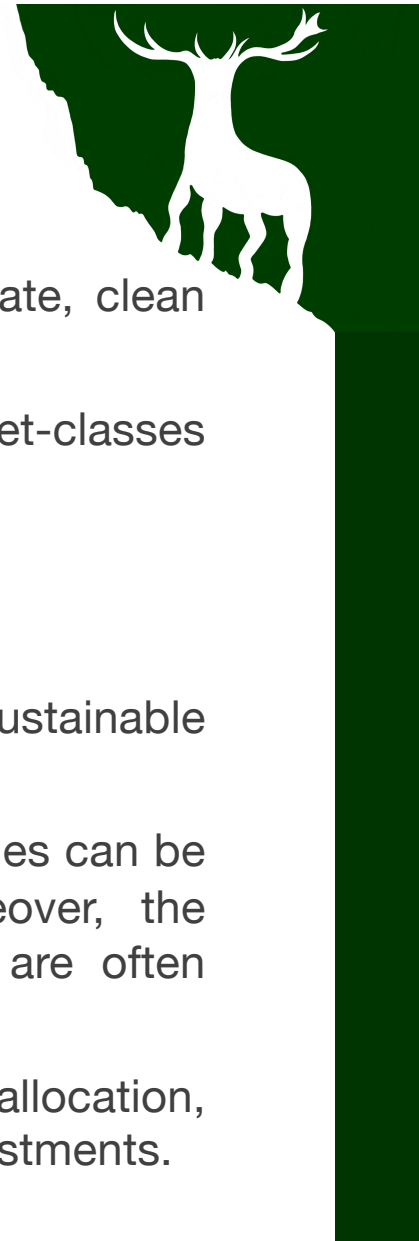
Conclusion

- Evidence shows an investment case for the water thematic allocation.
- The transition to a resource-efficient economy creates opportunities in various developments themes like Water.
- Water is often under-looked because common misconception of abundance. But its needs of investments and importance is comparable to the energy sector.
- The funds mainly invests in global public equities. They are liquid and hence can fit into a traditional equity allocation.
- Nonetheless, thematic investing can be a new source of alternative investments.
- This theme provide enhanced returns, lower volatility, diversification and also aligns on sustainable investment guidelines.



Remarks

- The *Portfolio Allocation Tool* allows other thematic allocations such as climate, clean energy, combinations thereof or with other ESG products.
- Tailored-made strategic asset allocation with sustainable products across asset-classes is also possible.
- This quantitative analysis is a basis for a deeper qualitative assessment.
- Similar analysis for underlying stocks is also possible.
- This is a financial performance analysis of funds that claim having a sustainable mandate. A deeper analysis under sustainable criterion is also recommended.
- Assessing the sustainability of a financial product is complex. Sustainable values can be measured on several dimensions and there are often trade-offs. Moreover, the measurements of such values come from non-standardized sources and are often subjective.
- That is why I would recommend a thoughtful approach of the strategy and allocation, making sure the needs and values of the investors are truly reflected in the investments.

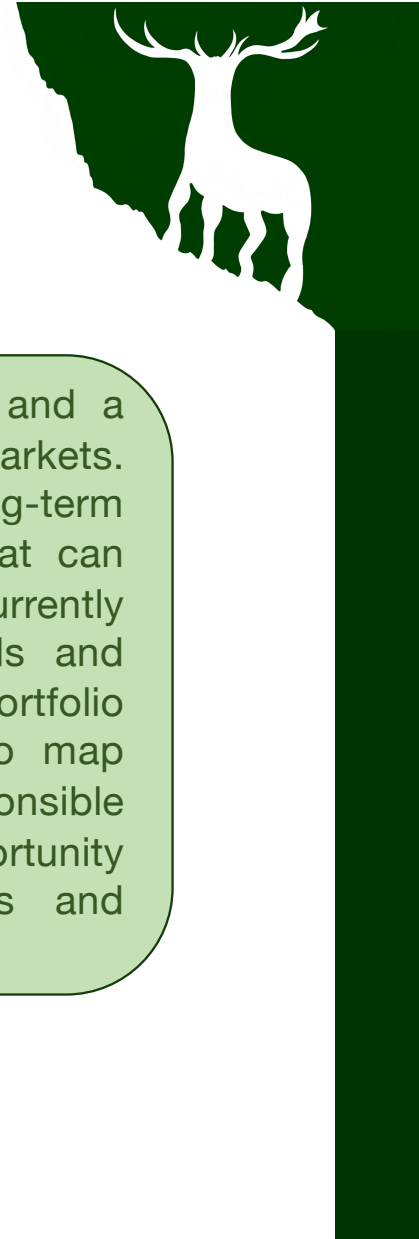


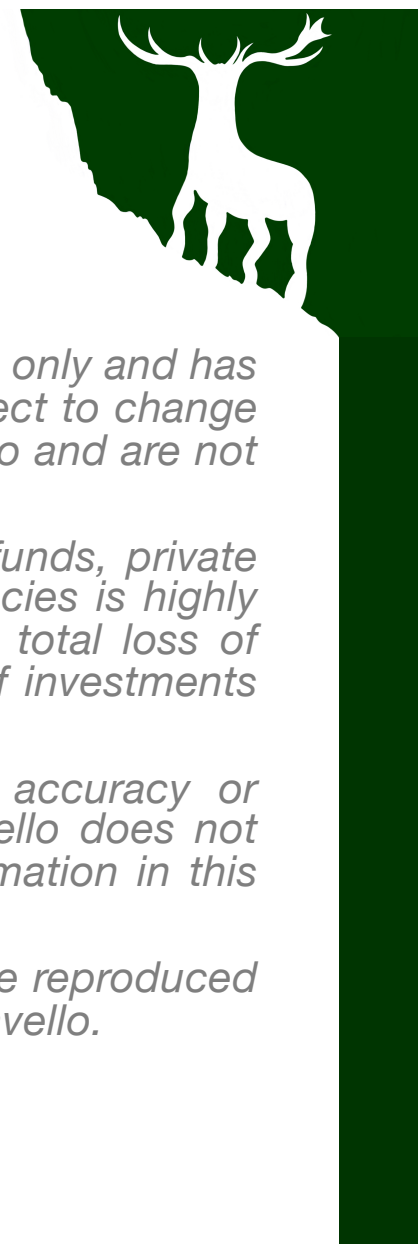
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Investment Analyst with a quantitative flair and a passion for sustainability and the financial markets. My work ethic is deeply committed to long-term quality. I strive to build robust solutions that can withstand volatile environments. I am currently screening over 300 ESG and Impact funds and researching how they can be used for portfolio construction. I am also researching how to map investors' various needs in terms of responsible investments to actual sustainable opportunity reflecting their risk-return appetite, values and constraints.

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