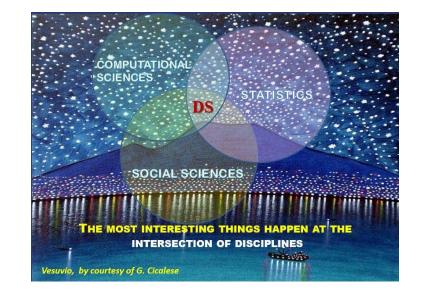
The definition of sustainability for Italian stakeholders: evidences from a survey

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Agenda

- The Sustainability concept
- Objectives, data collection and analysis process
- The Main results

- The Decision tree output
- Conclusions

What is Sustainability?

- Sustainability consists of fulfilling the needs of current generations without compromising the
 needs of future generations, while ensuring a balance between economic growth,
 environmental care and social well-being.
- Sustainability is a broad concept that goes beyond environment embracing:
 - **Environmental sustainability** focuses on the conservation of biodiversity without foregoing economic and social progress.
 - <u>Economic sustainability</u> refers to the organization's ability to manage its resources and responsibly generate profits in the long term.
 - <u>Social sustainability</u> has the goal of strengthening the cohesion and stability of specific social groups.

Agenda 2030- The Sustainable Development Goals





NO





ZERO HUNGER



GOOD HEALTH AND WELL-BEING



QUALITY **EDUCATION**



GENDER **EQUALITY**



CLEAN WATER AND SANITATION



AFFORDABLE AND **CLEAN ENERGY**



DECENT WORK AND ECONOMIC GROWTH



INDUSTRY, INNOVATION AND INFRASTRUCTURE



REDUCED **INEQUALITIES**



SUSTAINABLE CITIES AND COMMUNITIES



RESPONSIBLE CONSUMPTION AND PRODUCTION



CLIMATE ACTION



LIFE **BELOW WATER**



LIFE ON LAND



PEACE, JUSTICE AND STRONG INSTITUTIONS



PARTNERSHIPS FOR THE GOALS

The Survey Background

- During the latest years, the concept of sustainability has been one of the most cited and discussed topic in the public debate linked to personal commitments and public and private initiatives to be taken to achieve the goals of the 2030 Agenda
- In this context, the industry has undertaken a series of investments in production and communication in recent years

 The survey has the objective to monitor over time the level of understanding of the sustainability concept level and the perception of the role played by the industry in this field among the Italian population

Data collection and analysis

- Two waves survey on the Italian population carried out on a quota sample of about 1000 individuals per wave, representative of the adult population (18+ years old)
 - First wave in July 2022
 - Second wave in July 2023
- The interview was administered through a 10-minutes CAWI questionnaire.
- Analyses were performed by combining the data set from the two surveys. Data was weighted to
 perfectly replicate the pattern of the Italian population by gender, age and geographic area
- Total sample for the analysis presented today is 2007 individuals
- Segments were identified applying the Decision Tree method. The decisional rule used to obtain the nodes was the CHAID (Chi-squared Automatic Interaction Detection) method

Why The Decision Trees

- They are widely used as prediction tools or simply as exploratory tools
- Their interest lies mainly in the capacity to detect and account for nonlinear effect on the response variable.
- Their primary objective is to gain better knowledge about how the outcome variable is linked to explanatory factors
- They represent an alternative to the restriction of the linear model in which the effects of the explanatory variables are basically additive
- Social sciences is one of the best field of application as normally interactions between variables are very complex and not additive

Classification trees with categorical variables

- For constructing the decision tree, we used the Kass method (1980) for categorized dependent and independent variables based on a chi-square test statistic (CHAID)
- Kass's algorithm is like sequential cross-tabulation. For each predictor:
 - 1. cross tabulate the m categories of the predictor with the k categories of the dependent variable
 - 2. find the pair of categories of the predictor whose 2xk sub-table is least significantly different on a chisquare test and merge these two categories
 - 3. if the chi-square test statistic is not "significant" according to a preset critical value, repeat this merging process for the selected predictor until significant chi-square is found for a sub-table
 - 4. pick the predictor variable whose chi-square is largest and split the sample into subsets, where I is the number of categories resulting from the merging process on that predictor
 - 5. continue splitting until "significant" chi-squares result.

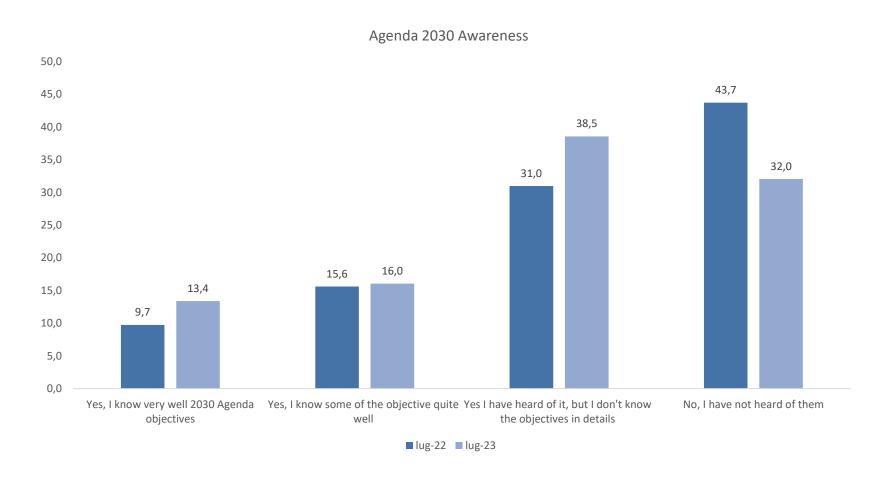
What did we learn from the first survey?

For the majority of the Italian population, the concept of sustainability appears not yet fully defined. The study returns the image of Italians with:

- Low level of information on the 2030 Agenda SDGs and action taken by companies about sustainability
- an idea of sustainability linked mainly to climate impact and very little to economic development or ethical principles and social responsibility
- with an open attitude to support companies that are committed to sustainability, but at the same time skeptical in considering their commitment

Still limited, but growing knowledge of 2030 Agenda and its SDGs

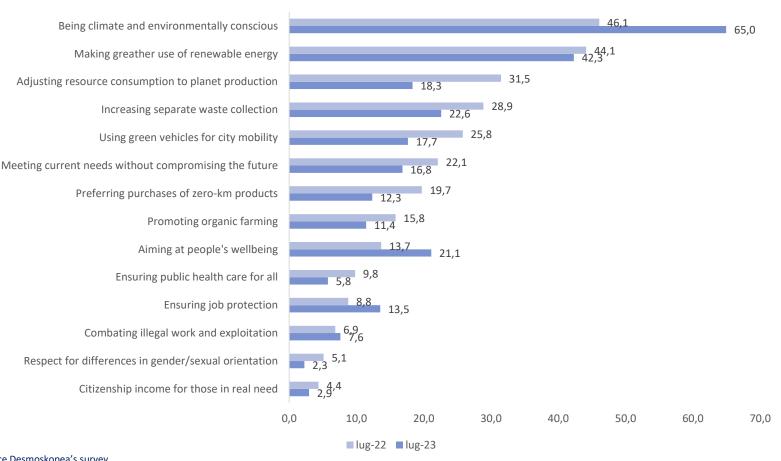
Only 29% of Italians declare to know the 2023 agenda and at least part of its objectives



The broad concept of sustainability is not well defined for a large part of Italian population

 The subject is mainly reduced to the topics most discussed in the public debate such as climate consciousness and renewable energy

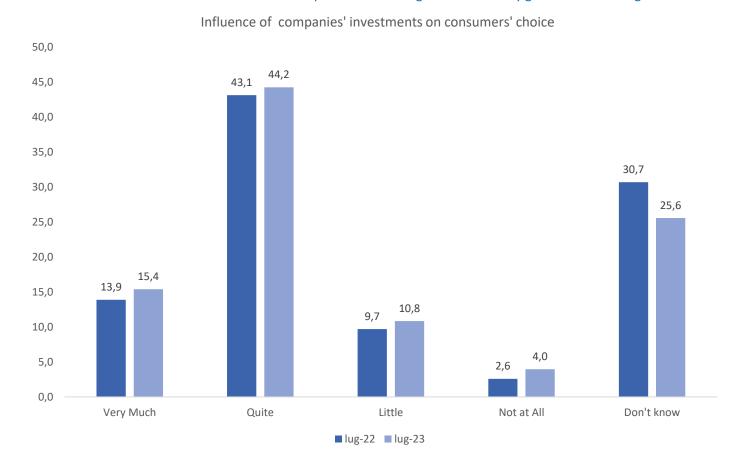




Italians believe that firms' commitment may have an effect on consumers' choice

About 60% of respondents say their choices could be influenced by the behavior of companies

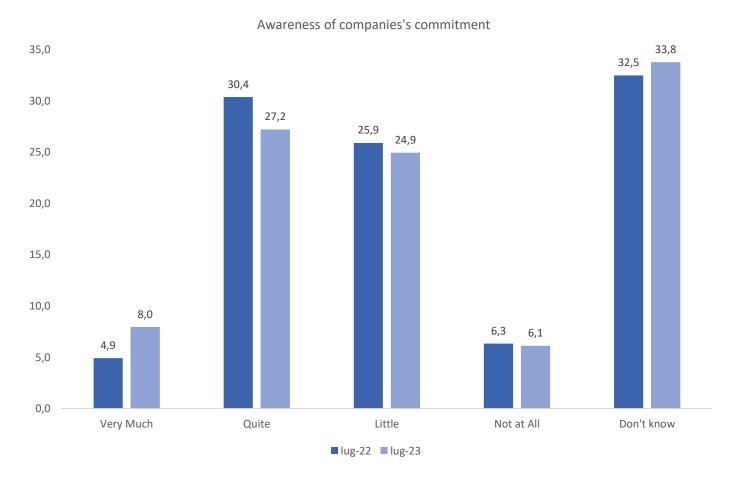
To what extent will the concrete commitment of companies to achieving the sustainability goals of the 2030 Agenda influence future consumer choices?



Little awareness and limited recognition of firm's commitment

About 40% is not informed about corporates' initiatives

To what extent do you think Italian companies are committing to sustainability and achieving these goals with investments, concrete actions and targeted initiatives?



The Decision Tree: The considered variables

The predicted variable

How much are the Italian companies making an effort for the sustainability with investment, tangible actions ...?

The predictor variables

to what extent will the concrete commitment of companies to achieving the sustainability goals set out in the 2030 Agenda influence the future choices of consumers?

5 -points scale

Have you ever heard about Agenda 2023 SDGs
4-points scale

If a company that offers products or services that are attractive to you were to engage in sustainable development projects in a concrete and transparent manner, would you be willing to prefer it over others that do not?

4-points scale

How much more would you be willing to spend on the products and services of a company committed to sustainable development?

6-points scale

Have you ever chosen a product or service because the company offering it is committed to sustainable development projects?

Yes/No Question

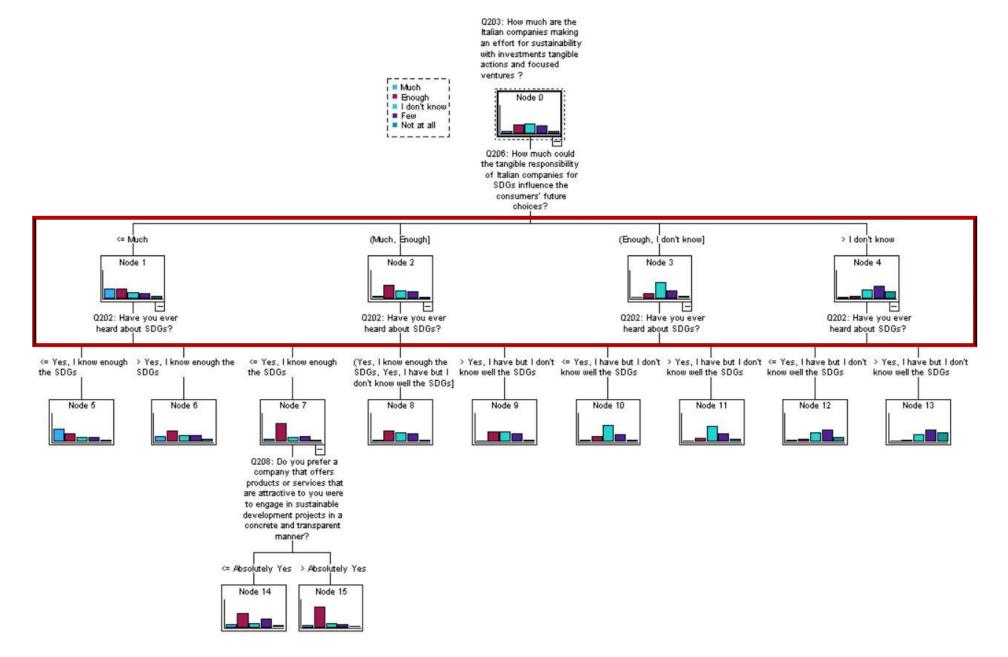
The discriminant variables

to what extent will the concrete commitment of companies to achieving the sustainability goals set out in the 2030 Agenda influence the future choices of consumers?

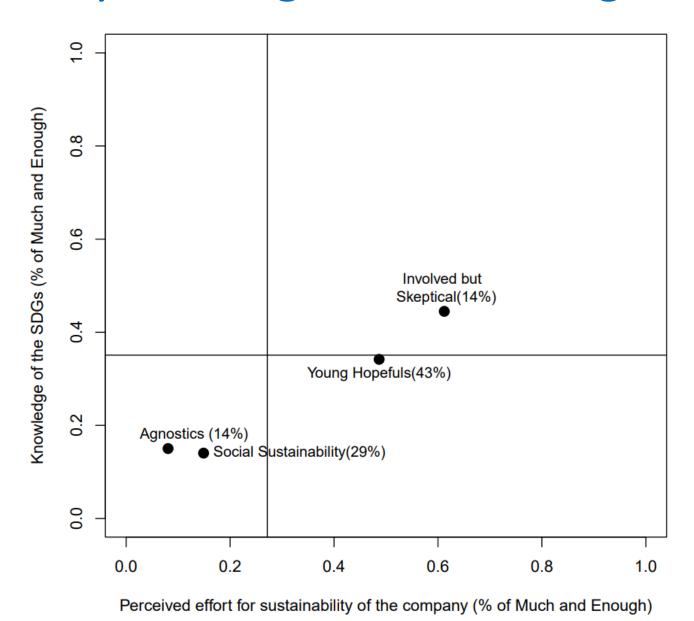
Have you ever heard about Agenda 2023 SDGs

If a company that offers products or services that are attractive to you were to engage in sustainable development projects in a concrete and transparent manner, would you be willing to prefer it over others that do not?

The Decision Tree



The Four Nodes by 2030 Agenda Knowledge





"The Skeptical Involved"

Planet
Future
Generations

Sostenibility
Sos

compromettere
bisogni danneggiare
future menoriduzione
sostenibilit assiculare rispettare
insparmio riciclo ambientale
energia senza ecologia sprecare
evitare sprechi risorse essere

ambiente
grado rispetto futuro
sviluppo pianeta green vivere

14% of Population

ABOUT

Age: 65+ y.o.

Area: S/I

Income: Medium/High

Marital Satus: Empty nester

SUSTAINABILITY

- Use green vehicles for city mobility
- Adjusting resources consumption to planet production
- Ensuring health care for all
- No: Citizenship income

THEIR APPROACH

They are well aware of the SDGs and willing to support "sustainable" companies even if they have to pay more. Towards companies they present a twofold attitude. On the one hand, they recognize their own commitment to sustainability and that this can have an effect on their choices. On the other, they are skeptical about whether this commitment is truthful. Expectations about companies' role are very high: they are expected to fight climate change, ensure a sustainable patterns of production and consumption, protect the ecosystem and reduce inequalities.



"The Hopefuls Y

Attention to waste



43% of Population

ABOUT

Age: Up to 34 y.o.

Education: High

Income: Medium/High

SUSTAINABILITY

- Respect for differences in gender
- Use green vehicles for city mobility

THEIR APPROACH

They are fairly informed about the SDGs and the actions taken by companies that they consider to have impact on consumer choice. They are willing to sustain companies committed to sustainability even if they have to pay more. They expect companies to focus their efforts on the safeguard of water resources, to foster sustainable cities and communities and a sustainable industrialization, to ensure gender equality



"The not Involved"





29% of Population

ABOUT

Area: N/O

Education: Low

Marital Status: Married with children at home

SUSTAINABILITY

- No: Respect for differences in gender/sexual orientation
- No: Meet current needs w/o compromising the future
- No: Ensuring public health care for all
- Promoting organic farm

THEIR VALUES

They are poorly informed about the 2030 agenda, its goals and the actions taken by companies to achieve them. They have a poor understanding of the concept of sustainability centered around organic farm. They have limited awareness and trust about the companies' efforts for sustainability together with expectations regarding their limited role in providing decent jobs and economic growth and fostering inclusive communities



"Social Sustainability"

14% of Population



ABOUT

Age: 45-54 y.o.

Gender: Men

Education: Low

Income: Medium/Low

Area: N/E

SUSTAINABILITY

- Aiming at people's wellbeing
- Combact illegal work
- Citizen income
- Meeting current needs without compromising the future
- Ensuring job protection

THEIR APPROACH

They have little knowledge of the SDGs and for them sustainability is associated mainly with social protection measures such as citizen income and public health They tend to have little confidence in the sustainable behavior of companies and believe that their commitment in this field is very limited. Companies' commitment should mainly focus on providing economic growth, reducing inequalities, overcoming poverty, fostering peace and justice and quality education .They are the least interested in combating climate change.

Conclusions

- The results of the two surveys show the need to intensify the communication effort to create a widespread and deep culture on sustainability
 - Although awareness of the 2030 agenda and its SDGs appears to be growing, it is still low.
 - For many Italians, the concept of sustainability still seems vague and uninvolving, linked mainly to climate impact and very little to economic development or ethical principles and social responsibility
 - There is a large part of the population (43%) with a lukewarm but open attitude to sustainability and to the role that businesses can play in this area
- Businesses, so far, have failed to effectively communicate their commitment to sustainability and gain the confidence of a large proportion of the population about their real commitment
- Companies can play an important role in developing the sustainability culture, provided they are
 able to define a relevant message and communicate it clearly to consumers avoiding deceptively use
 of it. The "Hopeful Young" seem to be the target audience on which to focus communication efforts
 the most

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Q&A

Thanks!