

Appendixes A: LLM Outputs Used in This Decision-Making Project as Referenced in the ‘Comparison with LLM Outputs’ Section

1. Generating Alternatives

Considering the decision maker's preferences, here are six Norwegian cities that align with her objectives for career prospects, quality of life, environment, and social life. Each city balances opportunities for professional growth with appealing living conditions and ample recreational options.

1. **Oslo:** Largest job market in Norway with high salaries and international opportunities, though higher living costs. The city offers vibrant social and cultural scenes, bike-friendly infrastructure, and extensive public transportation.
2. **Bergen:** Known for technology and energy sectors, Bergen offers PhD opportunities and a strong research environment. It's lively with cultural events and outdoor activities, although rainier than other cities.
3. **Trondheim:** Norway's technology hub and home to NTNU, with ample job and research opportunities. It has a large student population, a moderate cost of living, and many social activities, all in a bike-friendly environment.
4. **Stavanger:** The oil and energy capital of Norway, offering high salaries and engineering opportunities. It's a green and moderate-weather city with a lively social life and excellent outdoor activities, along with affordable transport options.
5. **Tromsø:** Offers niche career opportunities, pristine environment, and unique experiences like the midnight sun and polar nights. It's a smaller but vibrant city, with strong community events and outdoor activities like skiing.
6. **Kristiansand:** Growing tech and engineering sector with lower living costs and excellent transportation. Known for its mild coastal climate, it offers a relaxed social scene, beach access, and ample outdoor activities.

These six cities offer diverse benefits in career opportunities, lifestyle, and recreation, aligning well with her criteria for making a data-driven choice based on career, environment, and social life.

2. Subcategories of Recreational Activities

The term activities in the city refers to a wide range of recreational, cultural, social, and outdoor opportunities available to residents and visitors. These activities can enhance the quality of life and provide a balanced lifestyle outside of work. Here's a breakdown of what can be considered under this term:

1. Sports and Fitness:
 - a. Gyms and Fitness Centers: Availability of gyms, fitness clubs, and wellness centers.
 - b. Indoor Sports Facilities: Places for basketball, swimming, tennis, badminton, etc.
 - c. Organized Sports Classes: Group fitness programs, such as yoga, martial arts, or pilates.
2. Cultural Activities:
 - a. Museums and Art Galleries: Opportunities for exploring history, art, and science.

- b. Theaters: Access to live performances, including plays, musicals, and concerts.
- c. Cinemas: Movie theaters for film enthusiasts.
- d. Cultural Festivals: City-hosted cultural or arts festivals.
- 3. Outdoor and Recreational Activities:
 - a. Parks and Green Spaces: Public parks, nature reserves, botanical gardens, etc.
 - b. Beaches and Waterfronts: Coastal areas or lakes for swimming, sunbathing, and water sports.
 - c. Fishing Spots and Camping Areas: Places for outdoor leisure like fishing or camping.
 - d. Hiking Trails: Paths or trails for hiking and nature walks.
 - e. Ski Resorts: Winter sports areas for skiing, snowboarding, etc.
- 4. Social and Nightlife Activities:
 - a. Bars, Clubs, and Restaurants: Venues for socializing, dining, and nightlife entertainment.
 - b. Shopping Malls: Shopping centers that offer leisure, dining, and social spaces.
 - Cafes and Coffee Shops: Gathering spots for more casual socializing.

3. Assigning Importance

Here's the list of indicators ranked from the highest to the lowest importance:

1. Job Prospect
2. Earnings
3. Rent Prices
4. Crime Rate
5. PhD Opportunities
6. Outdoor Activity
7. PM2.5
8. NO2
9. Transportation Cost
10. Food Cost
11. Weather