

Product or feature is in a pre-release state and might change or have limited support. For more information, see the [product launch stages](#) (/products/#product-launch-stages).

This page explains how to view, understand, and apply recommendations made by the Cloud IAM recommender. The Cloud IAM recommender helps you enforce the principle of least privilege by ensuring that members have only the permissions that they actually use.

Before you read this page, you should be familiar with the [overview of the Cloud IAM recommender](#) (/iam/docs/recommender-overview). Also, make sure you have the [Cloud IAM permissions](#) (/iam/docs/recommender-overview#required-permissions) that you need in order to work with the Cloud IAM recommender.

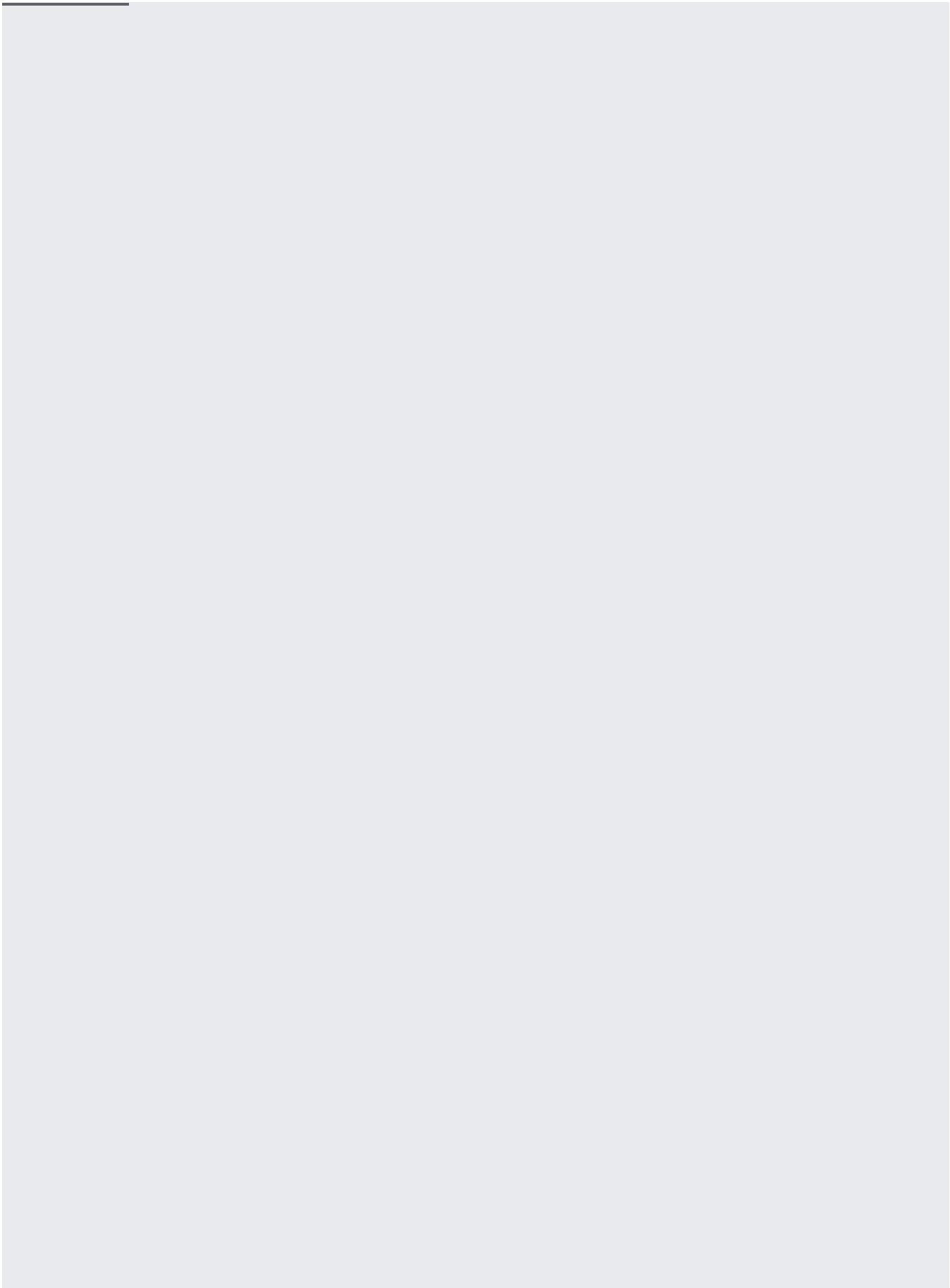
The easiest way to review and apply your recommendations is to use the Google Cloud Console. To get details about why you received a recommendation, and to dismiss recommendations, you must use the Cloud Console.

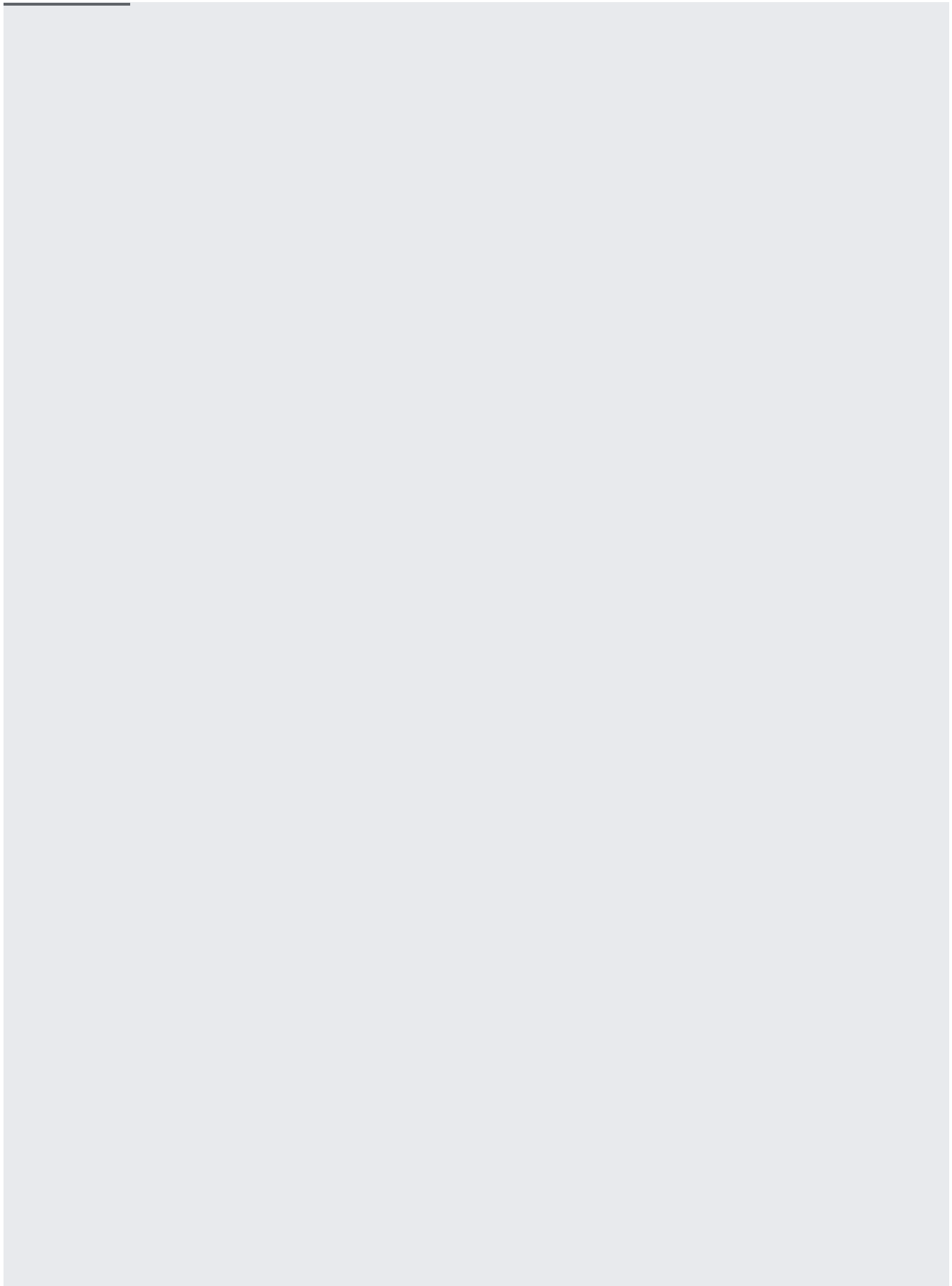
You can also review and apply recommendations with the `gcloud` command-line tool and the Recommender API.

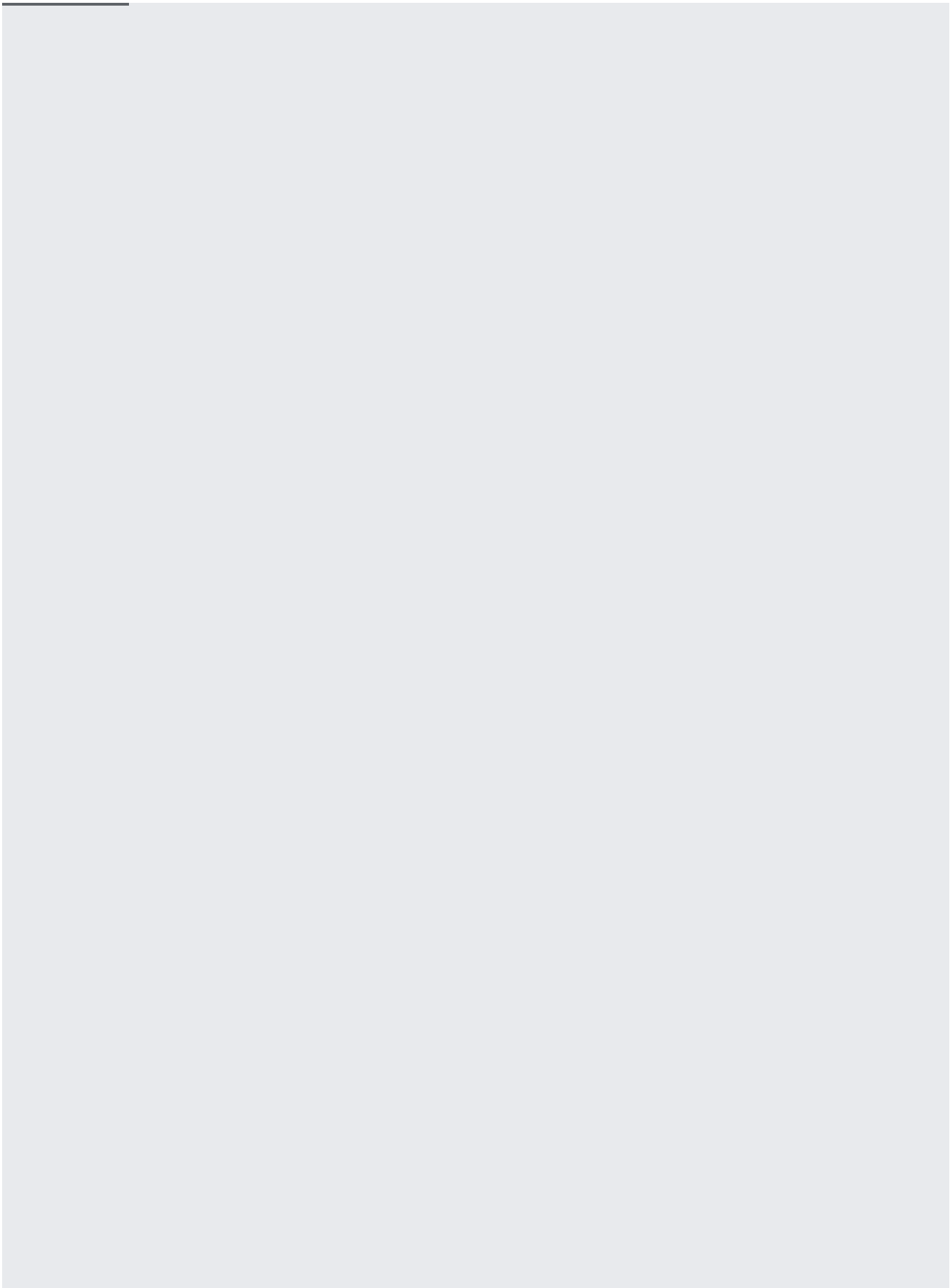
Warning: If the Cloud IAM recommender suggests that you revoke a [primitive role](#) (/docs/understanding-roles#primitive_roles), take special care before you act on the recommendation:

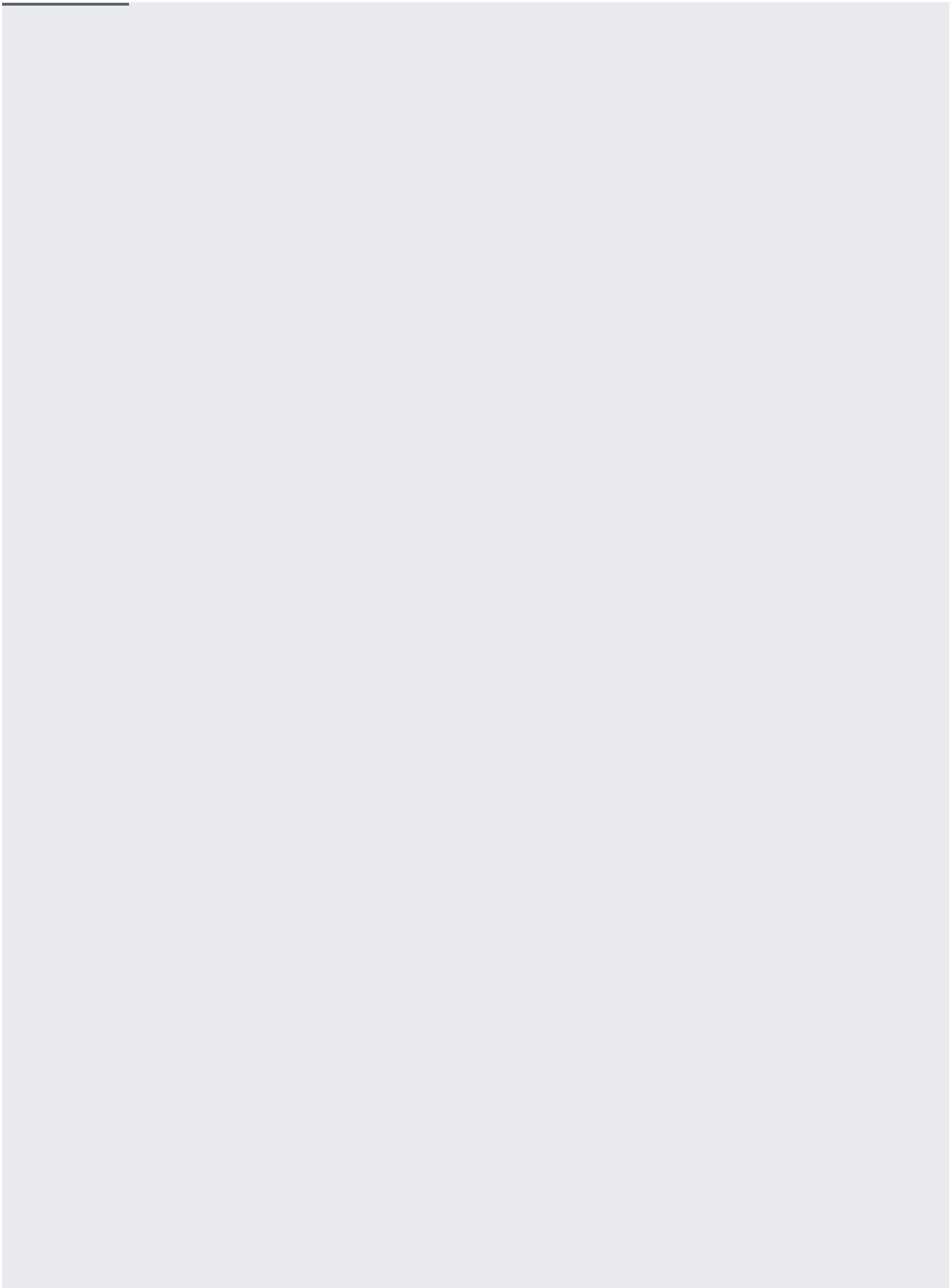
At least one member of your project must have the Owner role ([roles/owner](#)). If you revoke the Owner role from all members, you might not be able to manage the project.

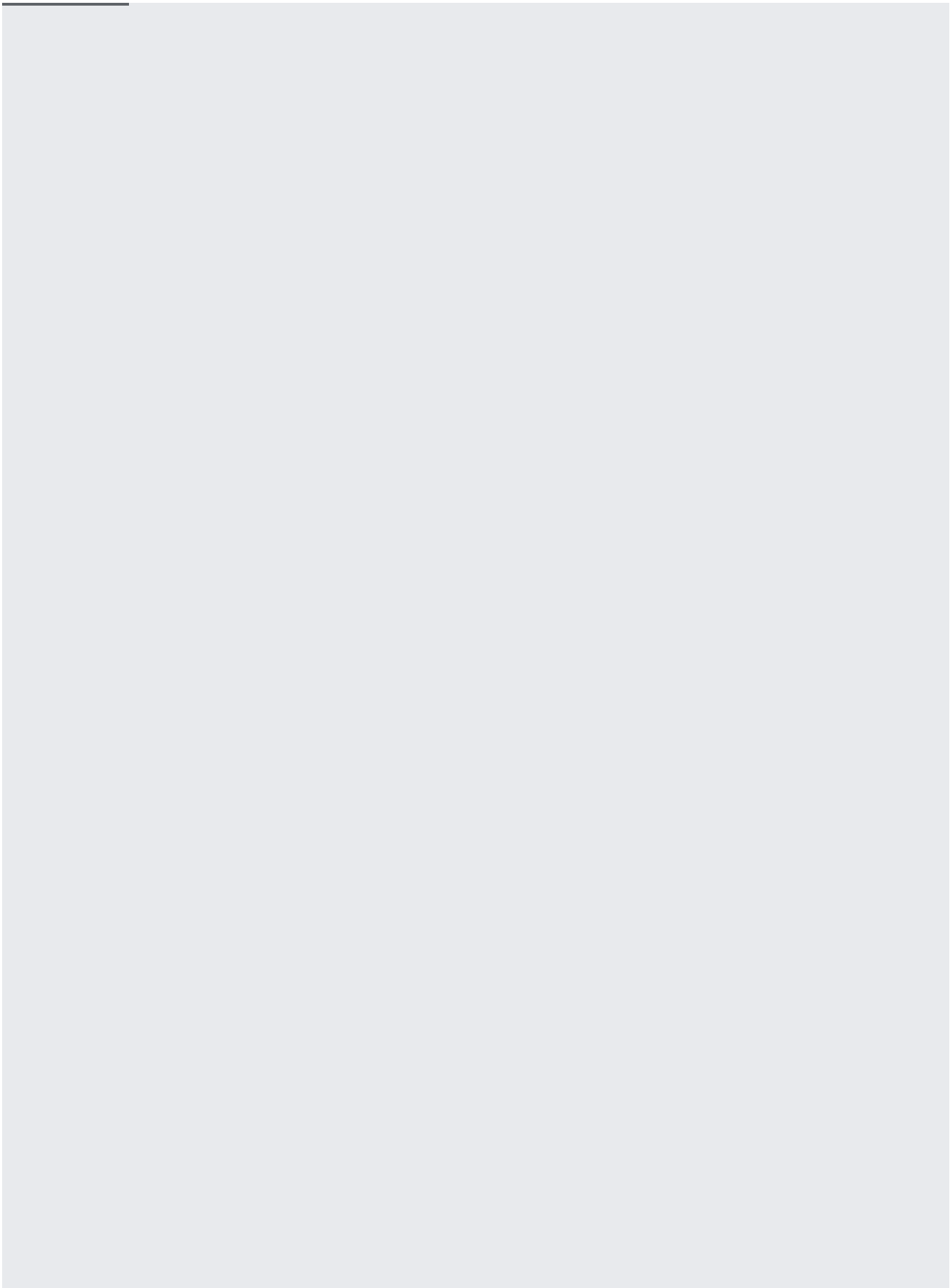
If your project use Access Control Lists (ACLs) in Cloud Storage, and you have changed the ACLs for *any* individual objects, do not apply any recommendation that revokes a primitive role.

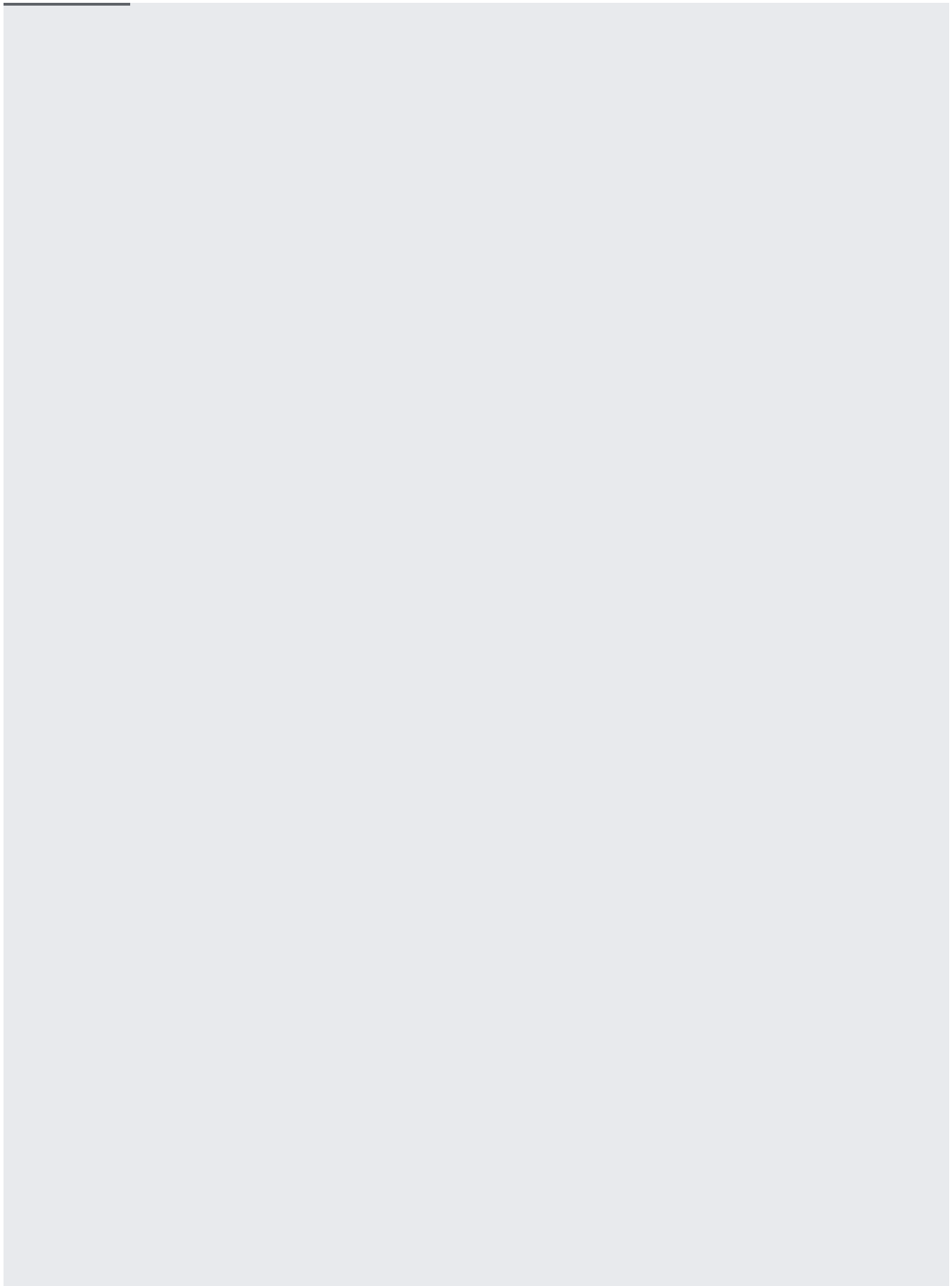


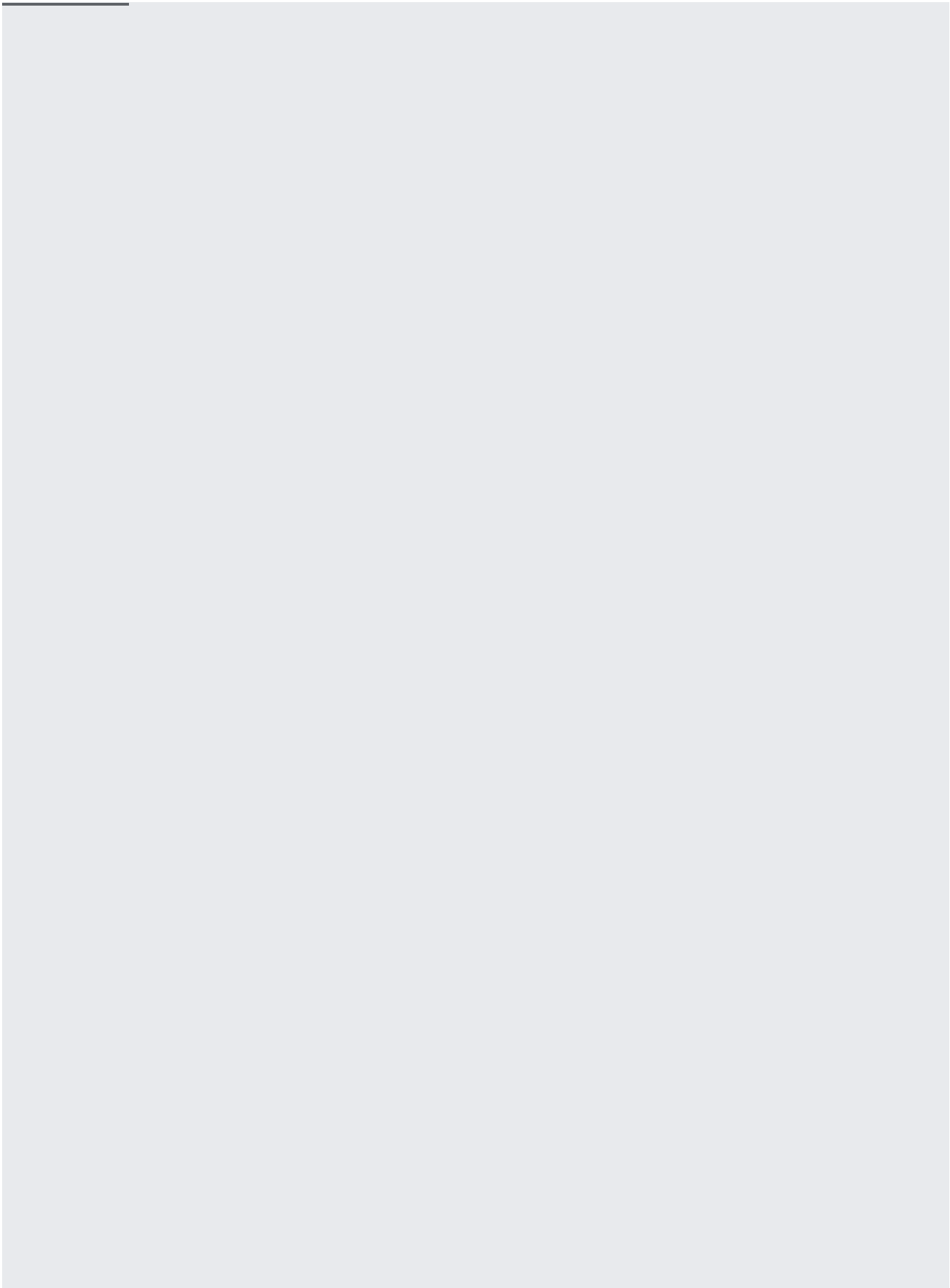


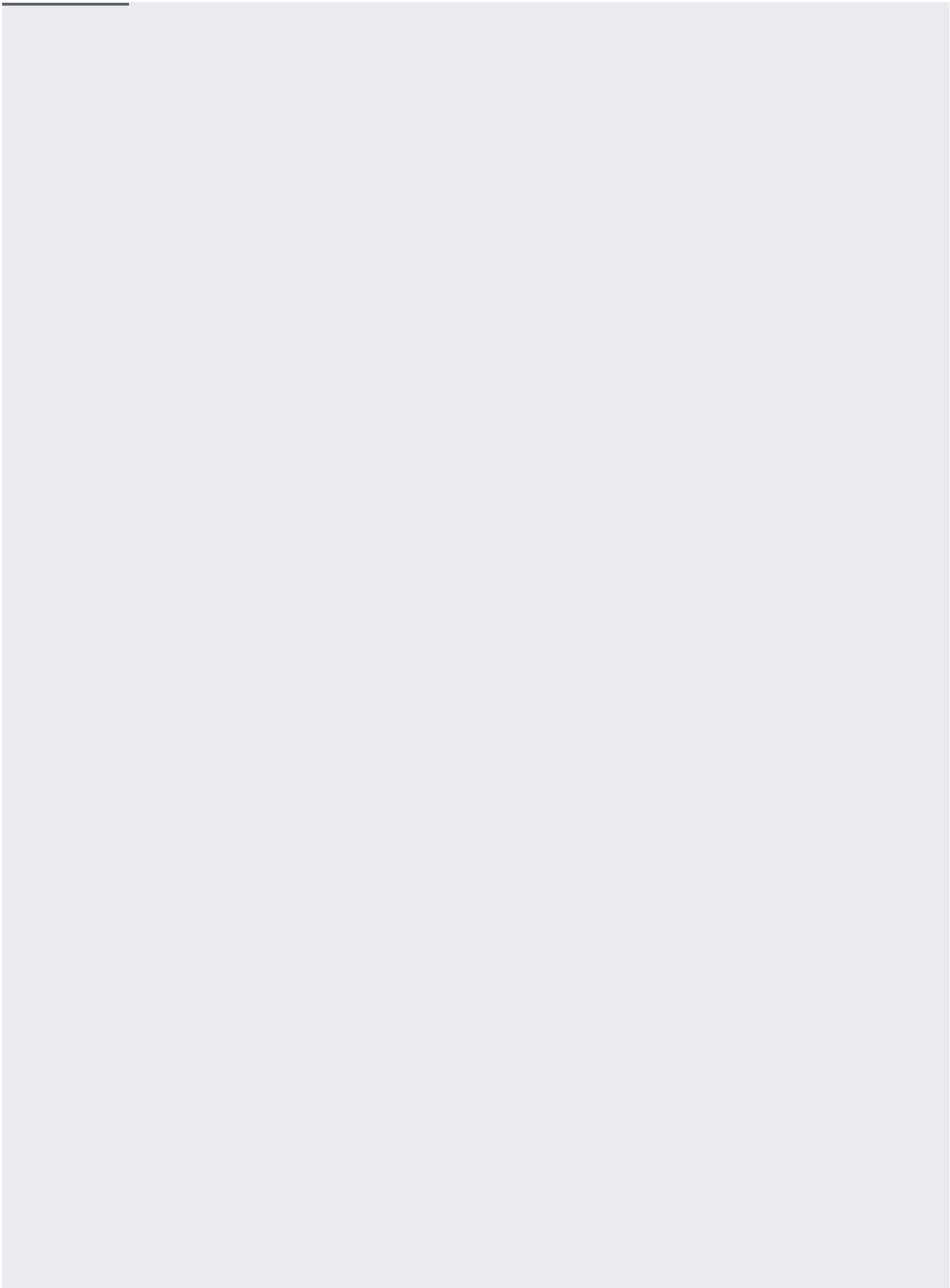












After you apply or dismiss a recommendation, that action appears in the recommendations log. To view the recommendations log:

1. Go to the **IAM** page in the Cloud Console.

[Go to the IAM page \(https://console.cloud.google.com/iam-admin/iam\)](https://console.cloud.google.com/iam-admin/iam)


2. Near the top of the screen, click **Recommendations log**.

The Cloud Console shows a list of previous actions on your Cloud IAM recommendations.

3. To view details about a recommendation, click the **▼** expander arrow.


The Cloud Console shows details about the action that was taken, including the member that took the action:

1/16/20

 gregory@example.com applied the recommendation 

User	fuyo@example.com
Applied by	gregory@example.com
Date	Jan 16, 2020, 3:31:28 PM
Recommendation	Remove fuyo@example.com from "projects/my-project/roles/iam_svc_accts_actas"
Status	Applied

 Remove iam.serviceAccounts.actAs role role recommendation

Last Analyzed  - iam.serviceAccounts.actAs
1/17/20

REVERT **CANCEL**

4. (Optional) If necessary, you can revert the recommendation, which undoes the changes in the recommendation, or restore a recommendation that you dismissed.

To revert a previously applied change for a recommendation, click **Revert**. The Cloud Console reverts the changes to the member's roles. The recommendation no longer appears in the Cloud Console.

To restore a recommendation that was dismissed, click **Restore**. The recommendation becomes visible on the **IAM** page in the Cloud Console. No roles or permissions are changed.

- Read the [Cloud IAM recommender overview](/iam/docs/recommender-overview) (/iam/docs/recommender-overview).
- Learn more about [Recommender](/recommender/docs/overview) (/recommender/docs/overview).
- Understand [predefined roles](/iam/docs/understanding-roles) (/iam/docs/understanding-roles) and [custom roles](/iam/docs/understanding-custom-roles) (/iam/docs/understanding-custom-roles) in Cloud IAM.